extension of the North America Great Plains and is separated from the Rolling Plains to the east by the Llano Estacado Escarpment. Topographically, the High Plains Vegetational Area is a relatively level plateau characterized by shallow, surface depressional playa lakes, which individually can encompass up to 40 acres. These ephemeral waterbodies are periodically filled by seasonal precipitation.

The historic vegetation of the High Plains region is described as predominantly mixed prairie and shortgrass prairie with tallgrass prairie occurring on deep, sandy soils. Typical native vegetation occurring on clay and clay loam sites include blue grama (*Bouteloua gracilis*), buffalograss (*Buchloe dactyloides*), and galleta (*Hillaria jamesii*), which are the principal plant species encountered in this region prior to widespread agricultural development. Historically, sandy loam soils of the region supported little bluestem (*Schizachyrium scoparium*), western wheatgrass (*Elytrigia smithii*), sideoats grama (*Bouteloua curtipendula*), and sand dropseed (*Sporobolus cryptandrus*). While the High Plains area in general was characteristically treeless and brush free, today, sand sagebrush (*Artemisia filifolia*), honey mesquite, pricklypear (*Opuntia* spp.), and yucca (*Yucca* spp.) have invaded many sandy and sandy loam sites (Hatch et al., 1990). Currently, most of the High Plains is in irrigated cropland. Major crops produced in the High Plains include cotton, corn, sorghum, wheat, vegetables, and sugar beets.

3.6.2 Vegetation Community Types in the Study Area

According to McMahan et al. (1984), the exclusive vegetation type at the plant association level in the study area is cropland. The crops vegetation type consists mostly of irrigated, cultivated cover crops or row crops providing food and/or fiber for either man or domestic animals. This vegetation type may also include grassland associated with crop rotations. Commercially important species within the study area include cotton, milo (grain sorghum), and wheat, as well as hay crops and other pasturage. Pecan (*Carya illinoinensis*) orchards are also present within the study area, as are isolated patches of shrubs and brushland where honey mesquite is the most prevalent species.

3.6.3 Waters of the U.S., Including Wetlands

Waters of the U.S. include, but are not limited to, territorial seas, lakes, rivers, streams, oceans, bays, ponds, and other special aquatic features, including wetlands. The USACE regulates waters of the U.S., including wetlands, under Section 404 of the CWA. The USACE and EPA jointly define wetlands as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include bogs, seeps, marshes, swamps, forested bottomland wetlands, and other similar areas (40 CFR 230.3[t]). Wetlands are defined in a broad

sense as transitional areas (ecotones) between terrestrial and aquatic systems where the water table is usually at or near the ground surface, or where shallow water covers the land (Cowardin et al., 1979).

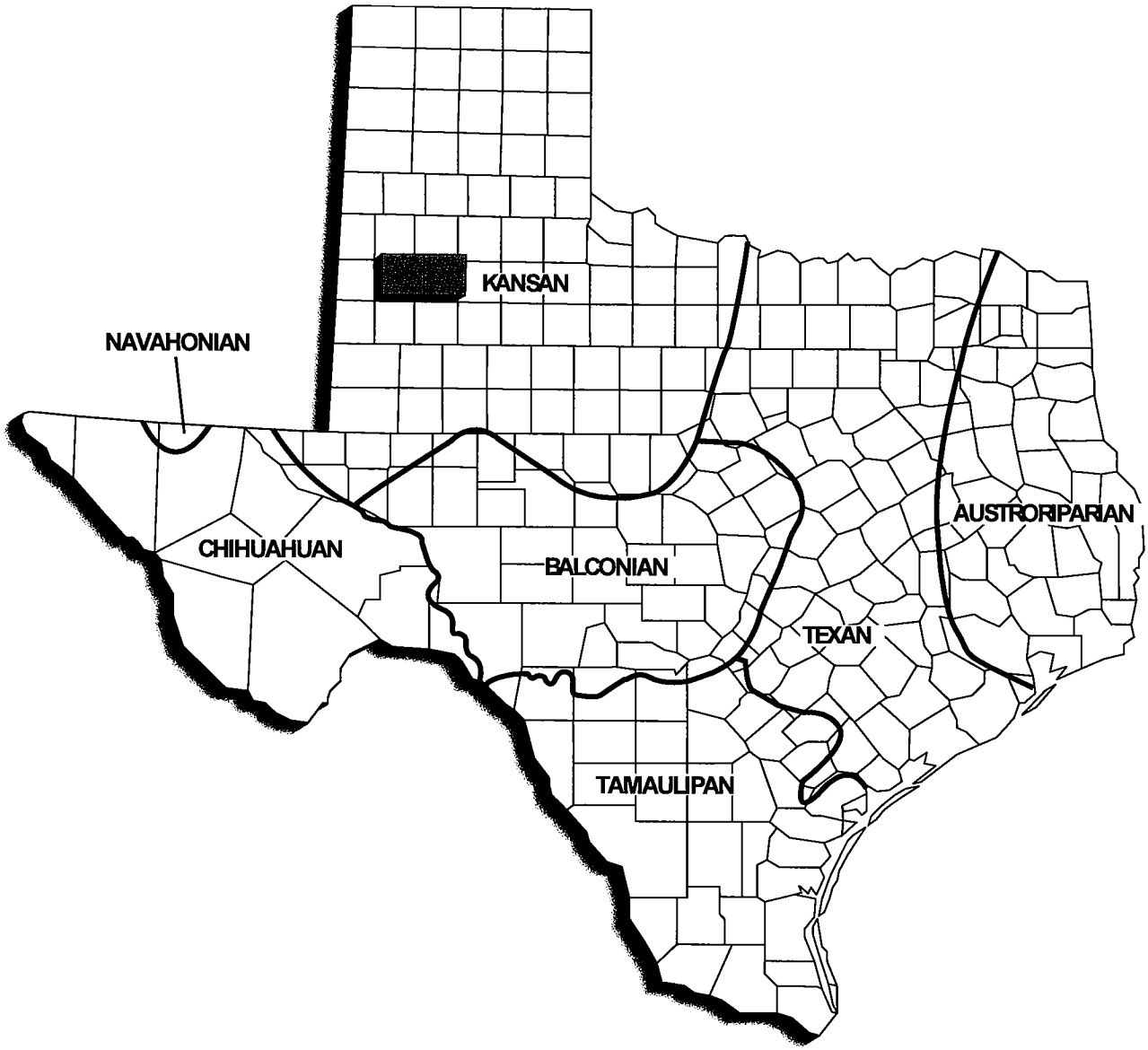
The FWS NWI maps encompassing the study area indicate the presence of wetland and open-water habitat features throughout the study area. Features in the study area are classified as palustrine and lacustrine systems. Palustrine systems include vegetated, freshwater wetlands and small (less than 20 acres), nonvegetated freshwater wetlands that are both shallow (deepest point less than 6.6 ft at low water) and lack an active wave-formed or bedrock shoreline (Cowardin et al., 1979). Mosaicked across the study area are mapped freshwater emergent wetlands, both intact and under cultivation, and freshwater ponds. Dependent on hydrologic regime, playa lakes are included in either or both categories. Lacustrine systems, or lakes, include wetlands and deepwater habitats greater than 20 acres in size that are situated in a topographic depression or a dammed river channel and lack trees, shrubs, persistent emergents, emergent mosses, or lichens with greater than 30% areal coverage (Cowardin et al., 1979). Lakes are common in the study area but less prevalent than palustrine systems. Wooded wetland features (forested or scrub/shrub) are uncommon but are mapped within the study area.

Playa lakes represent a hydric habitat of unique ecological value and sensitivity, exhibiting high levels of productivity, biodiversity, and high functional value as wetland, wildlife, or endangered/ threatened species habitat. Hydric and aquatic habitats may be considered regulatory wetlands by the USACE. Construction activities resulting in the discharge of dredged or fill materials within waters of the U.S. are subject to the regulations and restrictions outlined in Section 404 of the CWA and may require coordination with the USACE to ensure compliance.

3.7 Fish and Wildlife

3.7.1 Fish and Wildlife Habitats and Species

Blair (1950) delineated seven biotic provinces within Texas. The study area counties, as shown on Figure 3-3, are situated within the Kansan Biotic Province. The Kansan Biotic Province in Texas extends south and east from the Oklahoma and New Mexico borders, eventually transitioning to the Chihuahuan, Balconian, and Texan biotic provinces. The Kansan includes three distinct biotic districts, the Mixed-grass Plains, Short-grass Plains, and Mesquite Plains districts. The study area is within the Short-grass Plains District. Buffalo grass is the principal vegetational constituent and is the most important plant association within the Short-grass Plains District. Various species of grama grasses (*Bouteloua* spp.) are also important to this area (Blair, 1950). Characteristic faunal species of the area are discussed below. Because of extensive agricultural development in the study area, however, very little extant native



north

100 0 100 200

scale in miles

Source: Blair, 1950

ATKINS

Figure 3-3

LOCATION OF THE STUDY AREA COUNTIES IN RELATION TO THE BIOTIC PROVINCES OF TEXAS

WOLFFORTH TO CARLISLE 230-kV PROJECT

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grassland habitat remains. The vegetation of the area, as described previously, is predominantly irrigated cropland. Wildlife species that occur include species that have historically occurred in the area, as well as others that are particularly adapted to this agricultural environment.

Aquatic habitats within the study area include lakes, ponds, and wetlands, which provide habitat for various fish, water birds, and aquatic herpetofauna. Aquatic vegetation is limited by the ephemeral nature of some of these features. According to USGS 7.5-minute quadrangle maps and the Playa Lakes Digital Database (Fish et al., n.d.), mainly seasonal aquatic habitats such as the numerous playa lakes occur within the study area. Larger playa lakes are inundated for longer durations and noted as semi-permanently flooded in the NWI maps. NWI classified lakes in the study area exhibit varying hydroperiods that include temporary, seasonal, intermittent, and semipermanent inundation frequencies. Numerous small stock ponds occur throughout the study area and range likewise range in hydroperiod, including temporary, seasonal, intermittent, semipermanent, and permanent inundation frequencies. No streams designated by the TPWD as ecologically significant or stream features in general occur within the study area.

Playa lakes are arguably the most significant ecological feature in the Texas High Plains, although they only cover by area 2% of the region's landscape (TPWD, 2014a). Approximately 19,300 playa lakes are found in the Texas High Plains, which is the highest density for the occurrence of playas in North America (TPWD, 2014a). The Playa Lakes Digital Database (Fish et al., n.d.) indicates that Lubbock County contains 1,068 playa lakes and Hockley County contains 1,055 playa lakes. Playa lakes are circular-shaped, isolated wetlands primarily receive inflow from rainfall, although some playas found in cropland settings may also receive water from irrigation runoff (TPWD, 2014a).

Compared to other wetlands with more consistent hydrology, playa lakes go through frequent, unpredictable, wet/dry cycles. In wet years, they support the production of annual plants that produce a tremendous crop of seeds that are favored by dabbling ducks and other seed-eating birds. The wet/dry nature of playa lakes, along with their high plant production, means they produce an abundance of invertebrates. This productivity makes playa lakes a haven for birds and other wildlife throughout the year. Playa lakes provide aquatic habitat for spectacular numbers of resident and migratory cranes, waterfowl, and shorebirds (TPWD, 2014a). More than 115 bird species, including 20 species of waterfowl and 10 mammal species, have been documented in playa lakes. Waterfowl nesting in the Playa Lakes Region of Texas produce up to 250,000 ducklings in wetter years. Several million shorebirds and waterfowl migrate through the Playa Lakes Region of Texas each spring and fall (Haukos and Smith, 1992).

3.7.2 Fish

Fish species in the study area are restricted due to the limited abundance of waterbodies with permanent inundation. Fish species know to occur in playa lakes within or near the study area include the gizzard shad (*Dorosoma cepedianum*), common carp (*Cyprinus carpio*), black bullhead (*Ameiurus melas*), redbreast sunfish (*Lepomis auritus*), green sunfish (*Lepomis cyanellus*), orangespotted sunfish (*Lepomis humilis*), bluegill (*Lepomis macrochirus*), and white crappie (*Pomoxis annularis*) (Krebs, 2001). TPWD has stocked some of the playa lakes with fish, including the channel catfish (*Ictalurus punctatus*), rainbow trout (*Oncorhynchus mykiss*), largemouth bass (*Micropterus salmoides*), and bluegill. However, because the small size of the playa lakes in the Lubbock area are not conducive to developing sustainable populations, some of these species are no longer stocked (Krebs, 2001; Brickey, 2007).

3.7.3 Amphibians and Reptiles

A representative list of amphibian and reptile species of potential occurrence in the study area counties is included as Table 3-1.

3.7.4 Birds

Avian species of potential occurrence in the study area include many year-round residents, migrants/summer residents, and migrants/winter residents. Grassland species associated with agricultural lands are likely the most common in the general area throughout most of the year, while waterfowl and shorebirds associated with playa lakes are likely the most common during the winter migration months. A representative list of bird species of potential occurrence in the study area is included as Table 3-2.

3.7.5 Mammals

A representative list of common mammals known to occur in Hockley and Lubbock counties is included as Table 3-3.

3.8 Recreationally and Commercially Important Species

A species is considered important if one or more of the following criteria applies:

a. the species is recreationally or commercially valuable;
b. the species is endangered or threatened;
c. the species affects the well-being of some important species within criterion (a) or (b);
d. the species is critical to the structure and function of the ecological system; or
e. the species is a biological indicator.

Table 3-1: Representative List of Reptile and Amphibian Species of Potential Occurrence[1] in the Study Area

Common Name[2]	Scientific Name[2]
FROGS AND TOADS	
Eastern cricket frog	*Acris crepitans crepitans*
Great Plains toad	*Anaxyrus cognatus*
Texas toad	*Anaxyrus speciosus*
Great Plains narrow-mouthed toad	*Gastrophryne olivacea*
Plains leopard frog	*Lithobates blairi*
Spotted chorus frog	*Pseudacris clarkii*
Couch's spadefoot	*Scaphiopus couchii*
Plains spadefoot	*Spea bombifrons*
SALAMANDERS	
Barred tiger salamander	*Ambystoma mavortium mavortium*
LIZARDS	
Texas spotted whiptail	*Aspidoscelis gularis gularis*
Prairie racerunner	*Aspidoscelis sexlineatus viridis*
Eastern collared lizard	*Crotaphytus collaris*
Great Plains earless lizard	*Holbrookia maculate maculata*
Texas horned lizard	*Phrynosoma cornutum*
Round-tailed horned lizard	*Phrynosoma modestum*
Great Plains skink	*Plestiodon obsoletus*
Prairie lizard	*Sceloporus consobrinus*
SNAKES	
Kansas glossy snake	*Arizona elegans elegans*
Western coachwhip	*Coluber flagellum testaceus*
Prairie rattlesnake	*Crotalus viridis*
Plains hog-nosed snake	*Heterodon nasicus*
Desert kingsnake	*Lampropeltis getula splendida*
Central Plains milksnake	*Lampropeltis triangulum gentilis*
Bullsnake	*Pituophis catenifer sayi*
Long-nosed snake	*Rhinocheilus lecontei*
Desert massasauga	*Sistrurus catenatus edwardsii*
Plains black-headed snake	*Tantilla nigriceps*
Checkered gartersnake	*Thamnophis marcianus*

Table 3-1 (Cont'd)

Common Name[2]	Scientific Name[2]
TURTLES	
Yellow mud turtle	*Kinosternon flavescens*
Ornate box turtle	*Terrapene ornata ornata*
Red-eared slider	*Trachemys scripta elegans*

[1]According to Dixon (2000), Dixon and Werler (2005), and Bartlett and Bartlett (1999).

[2]Nomenclature follows Crother et al. (2008).

Table 3-2: Representative List of Avian Species of Potential Occurrence[1] in the Study Area

Common Name[2]	Scientific Name[2]	Likely Seasonal Occurrence[1, 3]
Canada goose	*Branta canadensis*	M, WR
Gadwall	*Anas strepera*	M, WR
American wigeon	*Anas americana*	M, WR
Mallard	*Anas platyrhynchos*	M, WR
Northern shoveler	*Anas clypeata*	M, WR
Northern pintail	*Anas acuta*	R
Green-winged teal	*Anas crecca*	M, WR
Redhead	*Aythya americana*	M, WR
Ring-necked duck	*Aythya collaris*	M, WR
Ring-necked pheasant	*Phasianus colchicus*	R
Scaled quail	*Callipepla squamata*	R
Northern bobwhite	*Colinus virginianus*	R
Great blue heron	*Ardea herodias*	R
Cattle egret	*Bubulcus ibis*	M, SR
Turkey vulture	*Cathartes aura*	M, SR
Mississippi kite	*Ictinia mississippiensis*	M, SR
Northern harrier	*Circus cyaneus*	M, WR
Swainson's hawk	*Buteo swainsoni*	M, SR
Red-tailed hawk	*Buteo jamaicensis*	R
American kestrel	*Falco sparverius*	R
American coot	*Fulica americana*	R
Sandhill crane	*Grus canadensis*	M, WR
Killdeer	*Charadrius vociferus*	R
Black-necked stilt	*Himantopus mexicanus*	M, SR
American avocet	*Recurvirostra americana*	M, SR
Lesser yellowlegs	*Tringa flavipes*	M
Western sandpiper	*Calidris mauri*	M
Rock pigeon	*Columba livia*	R
Mourning dove	*Zenaida macroura*	R
Yellow-billed cuckoo	*Coccyzus americanus*	M, SR
Greater roadrunner	*Geococcyx californianus*	R
Burrowing owl	*Athene cunicularia*	R
Common nighthawk	*Chordeiles minor*	M, SR

Table 3-2 (Cont'd)

Common Name[2]	Scientific Name[2]	Likely Seasonal Occurrence[1, 3]
Black-chinned hummingbird	*Archilochus alexandri*	M, SR
Yellow-bellied sapsucker	*Sphyrapicus varius*	M, WR
Ladder-backed woodpecker	*Picoides scalaris*	R
Western kingbird	*Tyrannus verticalis*	M, SR
Scissor-tailed flycatcher	*Tyrannus forficatus*	M, SR
American crow	*Corvus brachyrhynchos*	M, WR
Chihuahuan raven	*Corvus cryptoleucus*	R
Horned lark	*Eremophila alpestris*	R
Cliff swallow	*Petrochelidon pyrrhonota*	M, SR
Rock Wren	*Salpinctes obsoletus*	R
Bewick's wren	*Thryomanes bewickii*	R
Ruby-crowned kinglet	*Regulus calendula*	M, WR
American robin	*Turdus migratorius*	R
Northern mockingbird	*Mimus polyglottos*	R
Curve-billed thrasher	*Toxostoma curvirostre*	R
European starling	*Sturnus vulgaris*	R
Cedar waxwing	*Bombycilla cedrorum*	M, WR
Yellow-rumped warbler	*Setophaga coronata*	M, WR
Spotted towhee	*Pipilo maculatus*	M, WR
Cassin's sparrow	*Aimophila cassinii*	M, SR
Vesper sparrow	*Pooecetes gramineus*	M, WR
Lark sparrow	*Chondestes grammacus*	M, SR
Savannah sparrow	*Passerculus sandwichensis*	M, WR
Song sparrow	*Melospiza melodia*	M, WR
Lincoln's sparrow	*Melospiza lincolnii*	M, WR
White-crowned sparrow	*Zonotrichia leucophrys*	M, WR
McCown's longspur	*Calcarius mccownii*	M, WR
Northern cardinal	*Cardinalis cardinalis*	R
Painted bunting	*Passerina ciris*	M, SR
Red-winged blackbird	*Agelaius phoeniceus*	R
Western meadowlark	*Sturnella neglecta*	R
Brewer's blackbird	*Euphagus cyanocephalus*	M, WR
Great-tailed grackle	*Quiscalus mexicanus*	R
Brown-headed cowbird	*Molothrus ater*	R
Bullock's oriole	*Icterus bullockii*	M, SR

Table 3-2 (Cont'd)

Common Name[2]	Scientific Name[2]	Likely Seasonal Occurrence[1, 3]
House finch	*Carpodacus mexicanus*	R
House sparrow	*Passer domesticus*	R

[1]According to Seyffert (2001) and Lockwood and Freeman (2004).

[2]Nomenclature follows American Ornithologists' Union (AOU, 1998, 2000, 2002–2013).

[3]R – Resident: Occurring regularly in the same general area throughout the year. Implies breeding; SR – Summer Resident: Implies breeding but may include nonbreeders; WR – Winter Resident: Occurring during winter season; M – Migrant: Occurs as a transient passing through the area either in spring or fall or both.

Table 3-3: Representative List of Mammalian Species of Potential Occurrence[1] in the Study Area

Common Name[2]	Scientific Name[2]
XENARTHRANS	
Nine-banded armadillo	*Dasypus novemcinctus*
CHIROPTERA	
Big brown bat	*Eptesicus fuscus*
Brazilian free-tailed bat	*Tadarida brasiliensis*
CARNIVORES	
Coyote	*Canis latrans*
Swift fox	*Vulpes velox*
Red fox	*Vulpes vulpes*
Northern raccoon	*Procyon lotor*
Long-tailed weasel	*Mustela frenata*
American badger	*Taxidea taxus*
Striped skunk	*Mephitis mephitis*
Bobcat	*Lynx rufus*
ARTIODACTYLS	
Mule deer	*Odocoileus hemionus*
White-tailed deer	*Odocoileus virginianus*
RODENTS	
Thirteen-lined ground squirrel	*Spermophilus tridecemlineatus*
Black-tailed prairie dog	*Cynomys ludovicianus*
Jones' pocket gopher	*Geomys knoxjonesi*
Yellow-faced pocket gopher	*Cratogeomys castanops*
Plains pocket mouse	*Perognathus flavescens*
Hispid pocket mouse	*Chaetodipus hispidus*
Ord's kangaroo rat	*Dipodomys ordii*
Western harvest mouse	*Reithrodontomys megalotis*
Plains harvest mouse	*Reithrodontomys montanus*
White-footed mouse	*Peromyscus leucopus*
Deer mouse	*Peromyscus maniculatus*
Northern pygmy mouse	*Baiomys taylori*

Table 3-3 (Cont'd)

Common Name[2]	Scientific Name[2]
Northern grasshopper mouse	*Onychomys leucogaster*
Hispid cotton rat	*Sigmodon hispidus*
Eastern white-throated woodrat	*Neotoma leucodon*
Southern plains woodrat	*Neotoma micropus*
Porcupine	*Erethizon dorsatum*
LAGOMORPHS	
Desert cottontail	*Sylvilagus audubonii*
Eastern cottontail	*Sylvilagus floridanus*
Black-tailed jackrabbit	*Lepus californicus*

[1]According to Schmidly (2004).
[2]Nomenclature follows Manning et al. (2008).

Wildlife resources within the study area provide human benefits resulting from both consumptive and nonconsumptive uses. Nonconsumptive uses include activities such as observing and photographing wildlife, birdwatching, and other similar activities. These uses, although difficult to quantify, deserve consideration in the evaluation of the wildlife resources of the study area. Consumptive uses, such as hunting and trapping, are more easily quantifiable. Consumptive and nonconsumptive uses of wildlife are often enjoyed contemporaneously and are generally compatible. Many species occurring in the study area provide consumptive uses, and all provide the potential for nonconsumptive benefits.

The white-tailed deer (*Odocoileus virginianus*) is the most economically important big game mammal in Texas (Schmidly, 2004). The TPWD divides the state into ecological regions for white-tailed deer management. The study area counties fall within the High Plains Ecological Region and during the 2012–2013 hunting season, an estimated 1,161 deer were harvested within this ecological region (Purvis, 2013a).

Mule deer (*Odocoileus hemionus*) are one of the most valued game animals in the Panhandle due to limited distribution, low numbers, and their unique appearance and behavior (TPWD, 2000). The mule deer population in Texas ranges from 150,000 during dry conditions to about 250,000 during wet periods. Approximately 80 to 85% of the population inhabits the Trans-Pecos Ecological Region while the remaining population inhabits the Panhandle and western Edwards Plateau regions (TPWD, 2000). In the High Plains Ecological Region, mule deer primarily inhabit sandhill and draw habitats with some occurrence in mesquite flats. The majority of mule deer populations inhabit rough, broken land of the

Rolling Plains along the Canadian River and Caprock Escarpment. During the 2012–2013 hunting season an estimated 911 mule deer were harvested in the High Plains Ecological Region (Purvis, 2013a).

Waterfowl hunting on playa lakes and upland bird hunting on agricultural lands is of some economic importance in the region. Primary waterfowl species that are hunted in the study area vicinity include snow goose (*Chen caerulescens*), Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), gadwall (*Anas strepera*), green-winged teal (*Anas crecca*), American wigeon (*Anas americana*), northern shoveler (*Anas clypeata*), northern pintail (*Anas acuta*), redhead (*Aythya americana*), ring-necked duck (*Aythya collaris*), and sandhill crane (*Grus canadensis*). Primary upland game species include the mourning dove (*Zenaida macroura*), northern bobwhite (*Colinus virginianus*), scaled quail (*Callipepla squamata*), and ring-necked pheasant (*Phasianus colchicus*) (Seyffert 2001, 2002; Purvis, 2013b; TPWD, 2014a, 2014b).

This region historically supported one of the most impressive migrations of the American bison (*Bos bison*) in the nation. Today, bison no longer migrate, but bison ranching is becoming increasingly popular (TPWD, 2014c) and may be of some economic importance for some ranchers.

No commercial fishing occurs within the study area. Also, very limited public access to recreational fishing is available in the study area. Common recreational fisheries in the general area include largemouth bass, striped bass (*Morone saxatilis*), white crappie, channel catfish, flathead catfish (*Pylodictis olivaris*), and sunfish (*Lepomis* spp.).

According to TPWD (2014d), two recorded occurrences of black-tailed prairie dog (*Cynomys ludovicianus*) towns exist in the study area. Both are located in the southwest corner of the study area in Hockley County. Four additional black-tailed prairie dog towns were observed by Atkins staff during field reconnaissance of the study area. A large prairie dog town is located in the south-central portion of the study area east of CR 1300 between its intersection with CR 7100 and West 5th Street, to the northwest of the City of Wolfforth. A second prairie dog town was observed on the south side of US 62/82 between Alcove Avenue and Wausau Avenue. Two smaller prairie dog towns were also observed north of US 62/82 on the west side of CR 1500/Alcove Avenue. The first was immediately south of the existing 115-kV transmission line crossing, on the south side of 34th Street between CR 1500 and Upland Avenue, and the second was on the south side of FM 2255 between CR 1500 and CR 1600. The black-tailed prairie dog is a keystone species, and as such, is a critical part of the ecosystem within which it occurs (TPWD, 2014e). A keystone species is a species that other species depend upon for survival: their presence is critical for maintaining the organization and diversity of their ecological

community and their importance therein is exception in relation to other species of the community. Key functions and services provided by the species include the promotion of soil formation and aeration through digging; the maintenance of shortgrass prairie through clipping back brush; and the provision of food and shelter for as many as 170 different animals (TPWD, 2014e), including the ferruginous hawk (*Buteo regalis*) and the Western burrowing owl (*Athene cunicularia hypugaea*) which are listed as species of concern by TPWD (2014f).

Historically, millions of acres of Texas grassland were covered by black-tailed prairie dog towns. Prairie dog towns in Texas now occupy less than 1% of their historic range (TPWD, 2014e). Over the last 50 years, prairie dogs have been displaced by activities associated with livestock production and farming. Many people consider prairie dogs a destructive nuisance species, and control methods such as poisoning, trapping, and shooting have been popular practices. Other causes for decline have included the pet trade and sylvatic plague (TPWD, 2014e). Consequently, their former range and numbers have been considerably reduced (Schmidly, 2004). Although the black-tailed prairie dog is not currently listed as endangered or threatened, attempts were made in the past to list the species, and it is a former candidate for listing (protection for the black-tailed prairie dog under the ESA was determined "Not Warranted" in 2009). The TPWD has initiated "The Texas Black-tailed Prairie Dog Watch," which encourages the public to participate in monitoring efforts that help to better understand population trends and develop more-effective conservation and management methods.

3.9 Endangered and Threatened Species

An endangered species is one that is in danger of extinction throughout all or a significant portion of its natural range, while a threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Proposed species are those that have been formally submitted for official listing as endangered or threatened.

3.9.1 Endangered and Threatened Plant Species

Available information from the FWS, TPWD, and TPWD's NDD was reviewed to identify endangered or threatened plant species of potential occurrence within the study area. Currently, 32 plant species are listed by the FWS as endangered, threatened, or candidate species in Texas (FWS, 2014). However, no federal/state-listed plants have been recorded from Lubbock or Hockley County (FWS, 2014; TPWD 2014d, 2014f).

No sensitive plant communities have been specifically identified by either the FWS or TPWD. Within the study area, the only ecologically sensitive areas likely to be identified as such are communities associated with playa lakes.

3.9.2 Endangered and Threatened Fish and Wildlife Species

The FWS (2014) and TPWD (2014f) county lists of endangered and threatened species indicate that seven federally and/or state-listed endangered, threatened, or candidate fish and wildlife species may occur in the two study area counties (Table 3-4). It should be noted that inclusion in this table does not necessarily mean that a species is known to occur in the study area, but only acknowledges the potential for its occurrence, based on historic records, known ranges, and presence of potential habitat. Only those species that FWS lists as endangered or threatened have federal protection under the Endangered Species Act (ESA). Although not all state-listed species receive federal protection under the ESA, they do receive protection under state laws and other federal laws, such as the Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA), chapters 67, 68, and 88 of the TPWD Code, and sections 65.171–65.184 and 69.01–69.14 of Title 31 of the Texas Administrative Code.

Table 3-4: Endangered and Threatened Wildlife Species of Potential Occurrence in Hockley and Lubbock Counties[1]

		Status[3]	
Common Name[2]	**Scientific Name[2]**	**FWS**	**TPWD**
REPTILES			
Texas horned lizard	*Phrynosoma cornutum*	-	T
BIRDS			
Whooping crane	*Grus americana*	E	E
Lesser prairie-chicken	*Tympanuchus pallidicinctus*	T	T
Bald eagle	*Haliaeetus leucocephalus*	DL	T
Peregrine falcon	*Falco peregrinus*	DL	T
MAMMALS			
Gray wolf[4]	*Canis lupus*	E	E
Black-footed ferret[4]	*Mustela nigripes*	E	E

[1]According to FWS (2014) and TPWD (2014f).
[2]Nomenclature follows AOU (1998, 2000, 2002–2013), Crother et al. (2008), Manning et al. (2008), FWS (2014), and TPWD (2014f).
[3]E – Endangered; T – Threatened; DL – Federally delisted; C – Federal candidate species; - – Not listed.
[4]Extirpated in Texas.

The FWS and TPWD consider four of the taxa in Table 3-4 as federally endangered or threatened. These are the federally endangered whooping crane (*Grus americana*), gray wolf (*Canis lupus*), and black-

footed ferret (*Mustela nigripes*), and the federally threatened lesser prairie-chicken (*Tympanuchus pallidicinctus*).

The whooping crane is a large wading bird that, in the last 50 years, has returned from the brink of extinction. Only four wild populations of whooping crane exist, the largest of which is the Aransas–Wood Buffalo population (AWBP), which breeds in Wood Buffalo National Park in northern Canada and migrates annually to Aransas National Wildlife Refuge (NWR) and adjacent areas of the central Texas Coast in Aransas, Calhoun, and Refugio counties, where it winters (FWS, 1995, 2009; Lewis, 1995; Canadian Wildlife Service [CWS] and FWS, 2007). Three other smaller, wild populations also occur that include nonmigratory Florida and Louisiana populations, and another that migrates between Wisconsin and Florida. These are not self-sustaining populations, and each is designated as an "experimental population, non-essential."

During migration, whooping cranes travel during daylight hours and stop over at wetlands, fallow cropland, and pastures to roost and feed, spending a short period of time at any one location ranging from overnight to several days in inclement weather. Because of this, whooping cranes have an unpredictable pattern of stopover use and may not use the same stopover sites annually; however, some areas are used on a regular basis and would be considered traditional stopover sites. Federal and state efforts to record information on whooping cranes sighted in migration began in 1975 and have continued to the present day through the Cooperative Whooping Crane Tracking Project (CWCTP) in the U.S. and Canada (FWS, 2009). The database incorporates records dating as far back as 1943 and, as of fall of 2010, included 144 confirmed sightings of migrating whooping cranes in Texas, occurring from the fall of 1965 to the winter of 2010. Of these recorded occurrences, none are within the study area. Recorded occurrences to the north and south of the study area suggest that presence within the study area is nonetheless possible where suitable habitat occurs.

Efforts to spatially delineate the AWBP migration corridor using CWCTP data exclude Texas Panhandle sightings and outliers and define the primary migration corridor as occurring to the east of the study area (Austin and Richert, 2001; Tacha et al., 2010). The FWS (2014) and TPWD (2014f) include the species in their list of endangered migratory birds of potential occurrence in study area counties, though the study area is approximately 110 miles west of the traditional migration corridor of this species. As such, it is unlikely to occur in the study area. Nonetheless, it should be noted that more than 400,000 sandhill cranes (and snow geese) migrate through and winter in the Panhandle region (Haukos and Smith, 1992). Whooping cranes are often observed accompanying sandhill flocks in migration, sometimes making identification difficult.

The gray wolf historically inhabited the western two-thirds of the state, but has been extirpated in Texas (Schmidly, 2004), with the last authenticated reports being recorded in Texas in December 1970. The gray wolf is recovering in portions of its northern range, and experimental populations have been reintroduced in some locations throughout its historic range (NatureServe, 2014). Despite this recovery and reintroductions, this species does not occur in the study area.

The black-footed ferret is a large weasel that is associated primarily with prairie dogs (*Cynomys* spp.) and prairie dog towns. Historically, the species ranged throughout the Great Plains where it occurred in semi-arid grasslands and mountain basins in Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming (Campbell, 2003). In Texas, black-footed ferrets originally ranged throughout the northeastern third of the state, including the Panhandle, Trans-Pecos, and most of the Rolling Plains (Schmidly, 2004). The last Texas records of the species were from Bailey County in 1963 (Schmidly, 2004). Most authorities consider the black-footed ferret extirpated from Texas, and therefore, it is highly unlikely that the species is present in the study area.

The lesser prairie-chicken is a medium-sized grayish-brown grouse that inhabits rangelands dominated primarily by Havard's shin oak (*Quercus havardii*) or sand sagebrush (*Artemisia filifolia*). The species has one of the smallest population sizes and most restricted distributions of North American grouse and currently occurs in five states within the southern Great Plains, including southeastern Colorado, southwestern Kansas, southeastern New Mexico, the northwestern counties of Oklahoma, and the northeastern and southwestern portions of the Texas Panhandle (Hagan, 2005). In Texas, the species currently occurs in two disjunct populations in the Panhandle (Lockwood and Freeman, 2004). The population on the western edge of the Panhandle extends from Deaf Smith County southward to Gaines and possibly Andrews counties, while the eastern population ranges from Lipscomb County south to Collingsworth County (Lockwood and Freeman, 2004). Human activities, such as excessive grazing of rangelands by livestock and conversion of native rangelands to cropland, and recurrent droughts have significantly reduced the population and the distribution of the species since the early 1900s. No areas within the study area have been identified by the Lesser Prairie-Chicken Interstate Working Group (LPCIWG) as being within the estimated occupied range of the lesser prairie-chicken (LPCIWG, 2011). Additionally, according to TPWD (2014d) no documented records of the lesser prairie-chicken lie within the study area; however, numerous recent records from 2013 exist to the west of the study area, the closest being approximately 27 miles northwest of the study area.

The remaining three taxa in Table 3-4, while not federally listed, are state-listed as threatened. They are as follows: one reptile, the Texas horned lizard (*Phrynosoma cornutum*), and two birds, the bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus*).

The Texas horned lizard occurs throughout the western half of the state in a variety of habitats, but prefers arid and semi-arid environments in sandy loam or loamy sand soils that support patchy bunch-grasses, cacti, yucca, and various shrubs (Henke and Fair, 1998). It historically occurred throughout Texas, but over the past 25 years, has almost vanished from the eastern half of the state. Though, it still maintains relatively stable numbers in west Texas. The Texas horned lizard has been documented in Lubbock and Hockley counties (Dixon, 2000), and the TPWD (2014d) shows a documented record approximately 2.5 miles east of the study area. The Texas horned lizard may occur in small numbers in suitable habitat within the study area.

The bald eagle is present year-round in Texas, and individuals may include breeding, wintering, and migrating birds. In Texas, bald eagles breed along the Gulf Coast and on major inland lakes and reservoirs. Additional numbers of bald eagles winter in these habitats. Bald eagles prefer large bodies of water surrounded by tall trees or cliffs, which they use as nesting sites. In 2007, the FWS removed the bald eagle from the list of endangered and threatened wildlife species (72 Federal Register 130:37345–37372, July 9, 2007); however, the bald eagle still receives federal protection under provisions of the BGEPA and MBTA. According to TPWD (2014d), no documented bald eagle nests occur in the study area; however, the study area is within the general range of this species. This species may occur in the study area as a winter migrant, and may utilize the study area for foraging, but is not a likely permanent or seasonal resident either in the study area or in the immediate vicinity.

The peregrine falcon has been removed from the list of endangered and threatened species by the FWS. The TPWD also revised the status of the American peregrine falcon (*Falco peregrinus anatum*) from endangered to threatened, and dropped the Arctic peregrine falcon (*Falco peregrinus tundrius*) from the state endangered and threatened list altogether. American peregrine falcons are rare migrant statewide and nest in the mountains of Trans-Pecos in Texas. The Arctic peregrine falcon is an uncommon migrant statewide and an uncommon winter resident on the coastal prairies (Lockwood and Freeman, 2004). Since the two subspecies are difficult to differentiate in the field, TPWD will only reference to the species level (TPWD, 2014f). Seyffert (2001) indicates the peregrine falcon has been reported in 13 panhandle counties and identifies the species as a rare migrant/casual winter resident and summer visitor. Although the TPWD (2014d) has no records from the study area, this species probably occurs in the study area as a migrant or vagrant.

Critical Habitat

The FWS, in Section 3(5)(A) of the ESA, defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time that it is listed in accordance with the ESA, on which are found those physical or biological features that are (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination by the Secretary of the Interior that such areas are essential for the conservation of the species.

No critical habitat has been designated in the study area for any endangered or threatened species.

3.10 Socioeconomics

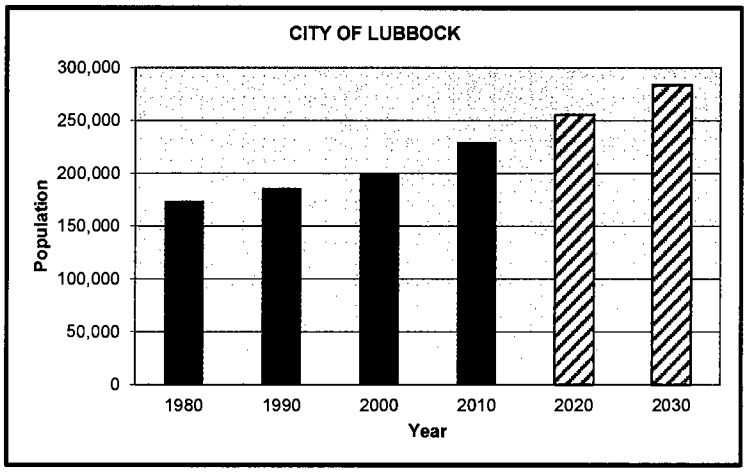
Because none of the primary routes would be constructed within Hockley County, this section presents a summary of the economic and demographic characteristics of Lubbock County and provides a brief comparison with the socioeconomic environment of the State of Texas, the cities of Lubbock and Wolfforth, and the region. Reviewed literature sources include publications of the U.S. Census Bureau, the Texas Workforce Commission (TWC), the U.S. Bureau of Labor Statistics (BLS), U.S. Department of Agriculture (USDA), the Texas State Data Center (TSDC), and the TWDB.

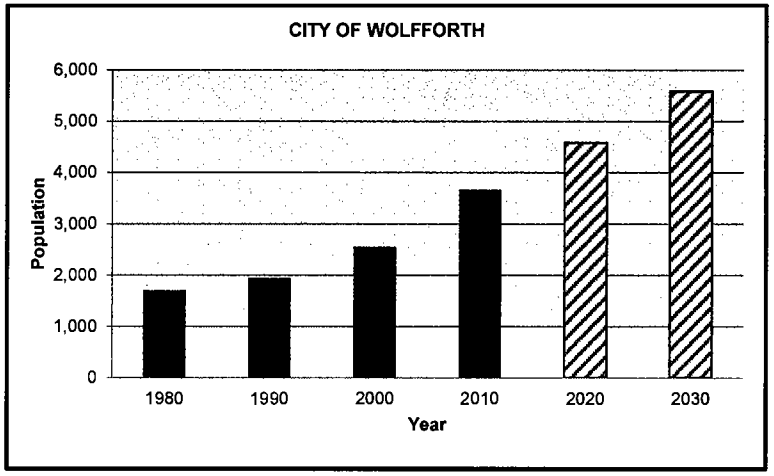
3.10.1 Population Trends

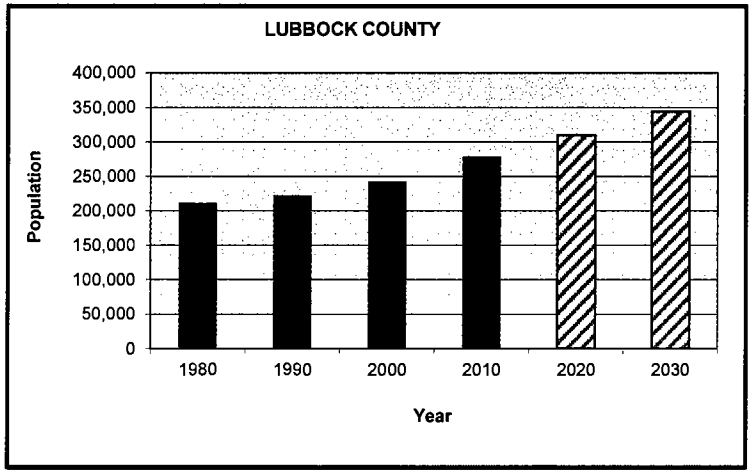
As shown on Figure 3-4, the populations within the cities of Lubbock and Wolfforth and Lubbock County have increased at steady rates since 1980, with a significant population increase since 2000. The City of Lubbock's population, recorded at 173,878 in 1980, increased by 12,328 (7.1%) during the 1980s, by 13,358 (7.2%) during the 1990s, and by 30,009 (15.04%) between 2000 and 2010. Similarly, Lubbock County's population, recorded at 211,651 in 1980, grew by 10,985 (5.2%) during the 1980s, 19,992 (8.9%) in the 1990s, and jumped by 36,203 (14.9%) between 2000 and 2010. The smaller city of Wolfforth has actually been the fastest growing community in the region based on percentage increase. Wolfforth's 1980 population was recorded at 1,701, and grew by 260 (14.1%) during the 1980s, by 613 (31.6%) during the 1990s, and 1,116 (43.7%) between 2000 and 2010. For comparison, the State of

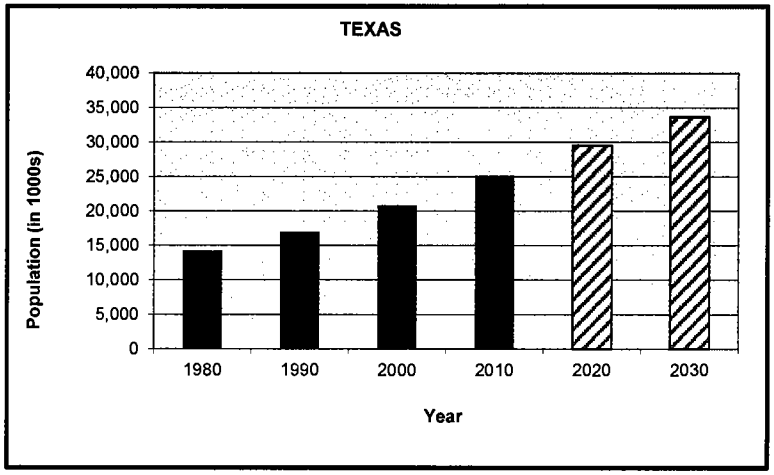
Texas's population grew by 19.4% in the 1980s, by 22.8% in the 1990s, and by 20.6% between 2000 and 2010 (U.S. Census Bureau, 1983, 1990, 2000, 2010; TSDC, 2013).

FIGURE 3-4
POPULATION TRENDS AND PROJECTIONS









Source: U.S. Census Bureau (1983, 1990, 2000, 2010); TWDB (2013).

The TWDB publishes population projections for Texas and its counties for the purpose of estimating future water demand. As shown on Figure 3-4, TWDB projects strong population growth within the study area counties between 2010 and 2030. Total population is expected to increase by approximately 23.4% in both the city of Lubbock and Lubbock County to reach 283,597 in the city and 343,977 in the county. The population of the city of Wolfforth is projected to increase by approximately 2,000 (51.9%) during this 20-year period. By comparison, the population of the State of Texas is projected to increase by 33.7% between 2010 and 2030 (TWDB, 2013).

3.10.2 Employment

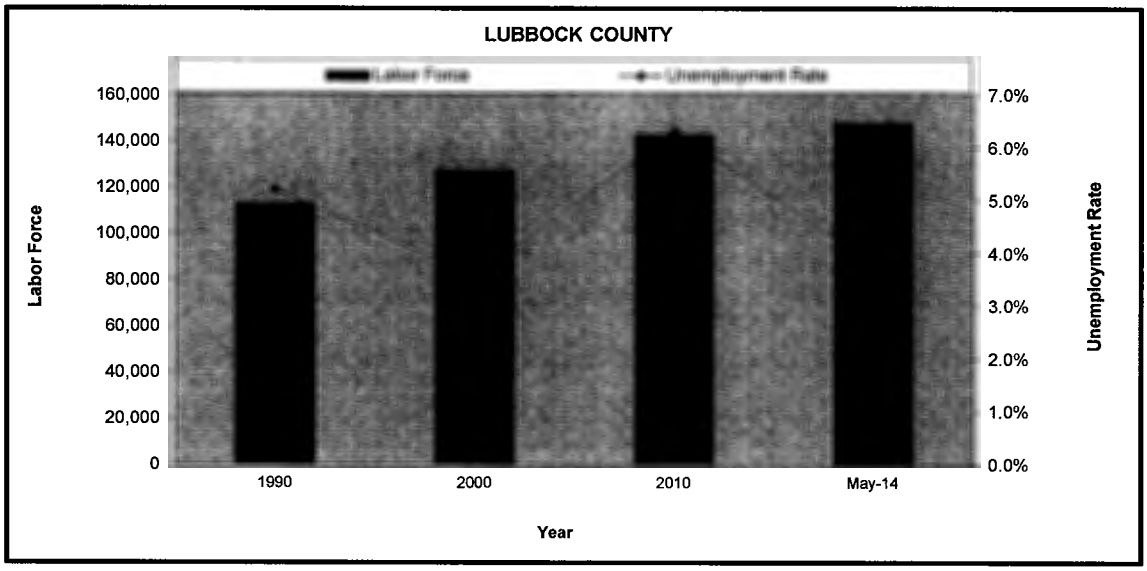
As shown on Figure 3-5, the labor force within Lubbock County has grown steadily with its population increase over the past few decades. The labor force within the county increased by 12.8% during the 1990s, 11.8% between 2000 and 2010, and had an overall increase of 30.7% between 1990 and May 2014. For comparison, the labor force for the State of Texas grew by 20.4% in the 1990s, 18.8% between 2000 and 2010, and shows an overall increase of 49.2% between 1990 and May 2014 (BLS, 2014; TWC, 2014a).

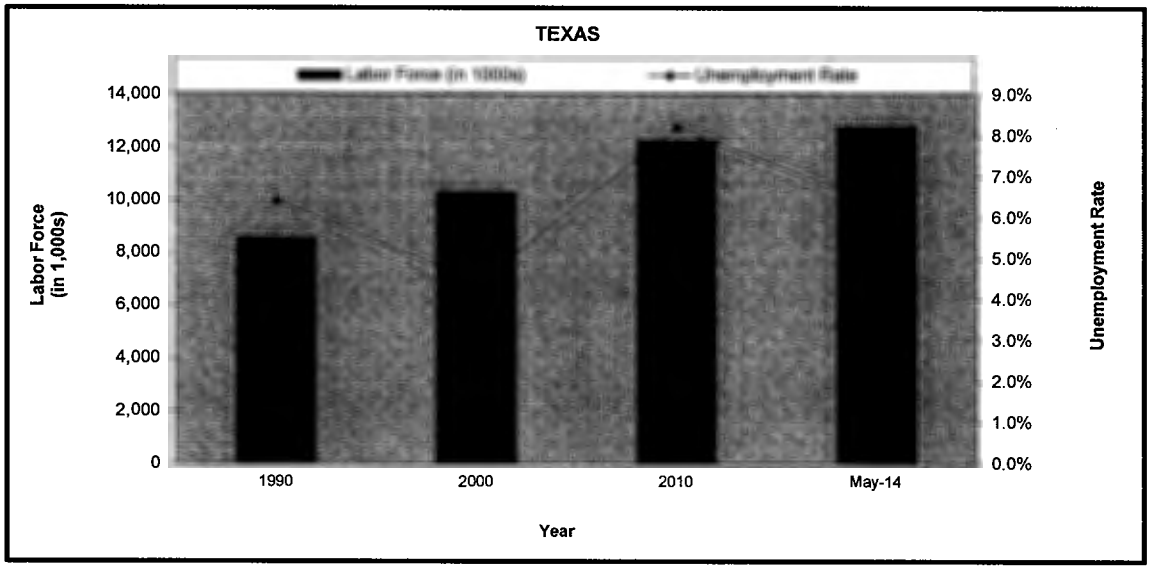
As shown on Figure 3-5, unemployment rates within Lubbock County have fluctuated over the past few decades, but have been recorded at rates lower than the state average during the period. Unemployment rates in Lubbock County were recorded at 5.2% in 1990, 3.6% in 2000, 6.3% in 2010, and 3.8% in May 2014. During this same period, unemployment rates within the State of Texas were recorded at 6.4% in 1990, 4.4% in 2000, 8.2% in 2010, and 6.3% in May 2014 (BLS, 2014; TWC, 2014a).

3.10.3 Leading Economic Sectors

The employment data studied and discussed below incorporates jobs that are located within the county and state. These data include workers who are covered by state unemployment insurance and most agricultural employees. Also included are all corporation officials, executives, supervisory personnel, clerical workers, wage earners, piece workers, and part-time workers. The data exclude employment covered by the Railroad Retirement Act, self-employed persons, and unpaid family workers. A comparison of fourth quarter TWC employment data over the five-year period between 2008 and 2013 revealed that covered employment in Lubbock County increased 4.6% (from 115,775 jobs to 121,121 jobs). For comparison, the total number of jobs statewide increased approximately 6.6% (from 10,490,592 jobs to 11,181,787 jobs) during the same 5-year period (TWC, 2014b).

FIGURE 3-5
LABOR FORCE AND UNEMPLOYMENT





BLS (2014); TWC (2014a).

As shown on Figure 3-6, Fourth Quarter 2013 leading employment sectors in Lubbock County included the Trade, Transportation, and Utilities sector (23%); the Education and Health Services sector (17%); the Leisure and Hospitality sector (14%); and the Government sector (14%). The leading employment sectors for the State of Texas for the fourth quarter of 2013 were the Trade, Transportation, and Utilities sector (20%); the Government sector (16%); the Professional and Business Services sector (13%); and the Education and Health Services sector (13%) (TWC, 2014b).

3.10.4 Community Values

The term "community values" is included as a factor for consideration of transmission line certification under PURA § 37.056(c)(4), although the term has not been specifically defined for regulatory purposes by the PUC. For the purpose of evaluating the effects of the proposed transmission line, the Environmental Consultants have defined the term community values as a "shared appreciation of an area or other natural or human resource by a national, regional, or local community."

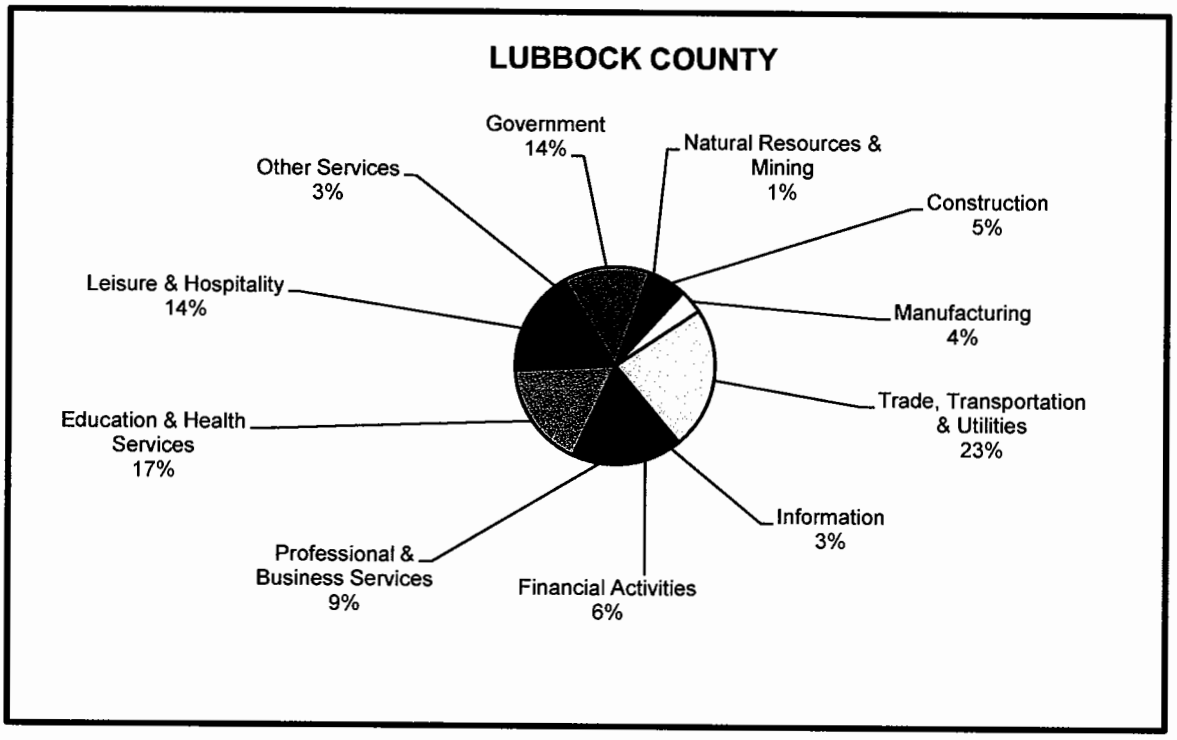
3.11 Human Resources

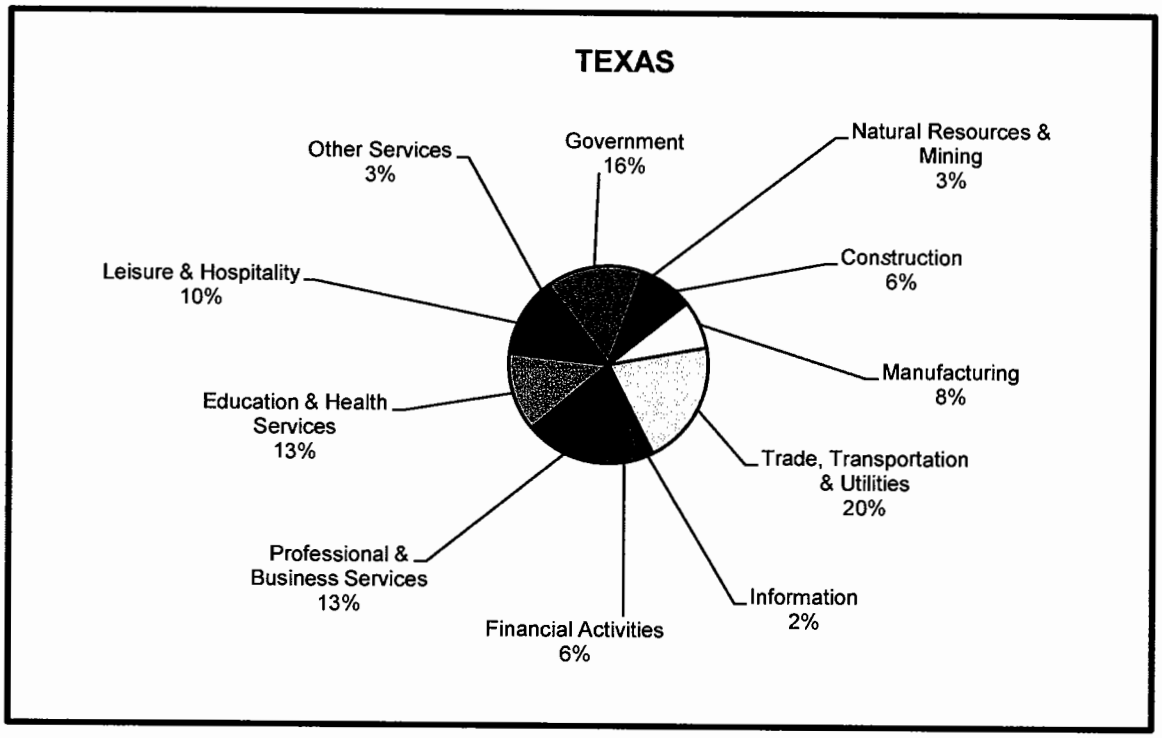
3.11.1 Land Use

The study area is located in the Southern High Plains region of northern Texas, in the western portion of Lubbock County, and the easternmost portion of Hockley County, and includes the City of Wolfforth and the western portion of the City of Lubbock. The City of Lubbock, which is the largest city on the South Plains, serves as the county seat for Lubbock County.

The study area counties are members of the South Plains State Planning Region (Region 2), which is represented by the South Plains Association of Governments (SPAG). The SPAG spans 15 counties and is responsible for a solid waste management plan and an aggressive program of regional economic development. In addition, the SPAG sponsors workshops and training for member governments, and operates a law enforcement training academy, a unique alternate dispute resolution center, a 9-1-1 emergency communication system, and services for senior citizens (Texas Association of Regional Councils [TARC], 2013).

FIGURE 3-6
MAJOR EMPLOYMENT SECTORS
FOURTH QUARTER 2013





Source: TWC (2014b).

Land use in the study area counties is predominately agricultural. A review of the most recently published NRCS land use (NRCS, 2000) provides the cropland and rangeland acreage and percentage of each study area county:

County	Cropland	Rangeland
Hockley	368,500 ac (63.4%)	72,900 ac (12.5%)
Lubbock	425,200 ac (73.8%)	23,600 ac (4.1%)

The remaining land uses were devoted to more minor land covers including urban land, roads, and small waterbodies (NRCS, 2000). In Lubbock County, however, urban land and roads constitute a somewhat significant land use, with over 67,400 acres (11.7%) of the county area. Over the last 15 years, agricultural use in Lubbock County has undoubtedly decreased at the expense of urban growth associated with the city of Lubbock.

Currently, the majority of the study area is dominated by agricultural use, consisting primarily of irrigated cropland and dry land farming. However, the eastern portion of the study area can be categorized as suburban and contains many areas of dense residential development, mainly single-family and multi-family structures. Rural ranch homes are scattered throughout the study area, and numerous mobile home and recreational vehicle developments are also located in various locations throughout the study area. Commercial development is generally located along study area's major roadways. Residential and commercial development has been strong within Lubbock County over the past few years. The number of new residential building permits recorded in Lubbock County between 2001 and 2013 has totaled 13,636, and the average value per dwelling unit has increased from $117,000.00 in 2001 to $223,600.00 in 2013 (Texas A&M University, 2014). Many new residential and commercial developments have broken ground and are currently under construction, or are planned throughout the study area. A significant amount of that development is occurring in the southeastern quadrant of the study area, where large tracts of cropland are being converted to residential and commercial uses.

Several independent school districts (ISDs) have jurisdictions within the study area, but only one of those districts, the Frenship ISD, operates schools within the study area boundaries (Texas Education Agency [TEA], 2013). Below is a list of the Frenship ISD schools located in the study area:

- Frenship High School
- Frenship Middle School
- Terra Vista Middle School

- Bennett Elementary School
- North Ridge Elementary School
- Oak Ridge Elementary School
- Westwind Elementary School
- Willow Bend Elementary School

The Reese Technology Center (RTC), located in the central portion of the study area on the north side of SH 114, constitutes a major land use in the study area. The RTC is a research and business park located on the grounds of the former Reese Air Force Base, which closed in 1997. The RTC is a campus dedicated to education, research, engineering, and technology with a special purpose political subdivision that provides facilities and an airfield as a center of economic development for West Texas. The RTC provides a core business center, areas of common enterprise between the public and private sectors, a state-of-the-art data center/fiber optic network and an educational environment for approximately 3,600 students from Texas Tech University and South Plains College. The RTC also provides 750 jobs in the public and private sectors (Reese Technology Center, 2013).

Oil is also a contributor to Lubbock County's economy that has also influenced the area's history and land use. Oil and gas transmission pipelines and wells exist within the study area, particularly in the northern portion. Oil and gas exploration activity within the northwest portion of the study area was observed during field reconnaissance surveys.

3.11.2 Recreation

A review of federal, state, and local maps, an internet search, and a limited field reconnaissance identified no national, state, or county parks, forests/grasslands, wildlife refuges, wildlife management areas, or preserves within the study area boundaries. However, several city-owned parks were found within the study area, as well as recreation areas associated with Frenship ISD (TPWD, 2013; National Park Service, 2013; City of Lubbock, 2013).

Five parks run by Lubbock Parks & Recreation were found within the study area, along the western fringes of the city of Lubbock in the eastern portion of the study area:

- Cooke Park, located at 18th Street and Kirby Avenue, features a multi-purpose court, picnic area, benches, playground, pavilion, and a 0.39-mile walking track.
- Lt. Col. George Andrew Davis, Jr. Field, located at 15th Street and Inler Avenue (FM 179), has a remote-controlled model airplane field, benches, and a picnic area.

- Duran Park, at 26th St and Kewanee Avenue, features a multi-use court, picnic area, and a 0.4-mile walking track.
- McAlister Park, found at Milwaukee Avenue and Marsha Sharp Freeway, features a BMX track, bird blinds, three baseball fields and a Little League field, snack concession, disc golf course, horseshoe pits, a playa, press box, restrooms, stands, skate park, an off-road/hummer track, and trails.
- Hinojosa Park, located at 22nd Street and Viola Avenue, features a basketball court, playground, picnic area, benches, pavilion, and volleyball court.

Three parks operated and maintained by the City of Wolfforth were identified in the southeastern portion of the study area:

- Frenship Mesa Park is approximately 3.7 acres and includes a playground, covered seating areas, open space, and a walking track.
- Preston Manor Neighborhood has developed numerous recreational facilities that include a tennis club, a recreation facility, hike and bike trails, pavilions, and a gazebo.
- Patterson Park is approximately 31 acres and included picnic area, numerous ball fields, play grounds, covered pavilion, picnic areas, and hike and bike trails.

In addition to these city parks, the privately owned Reese Golf Course, and the Shadow Hills Golf Course are also located in the study area.

- The Reese Golf Center is an 18-hole golf course, with a par of 72 over 6,367 yards. It is open to the public and features GPS tracking systems on the golf carts. Built in 1997, this course is located in The Reese Center, a new development in the central portion of the study area (Reese Golf Center, 2013).
- The Shadow Hills Golf Course, located on the fringes of the study area's eastern boundary, is a 6,777-yard, 18-hole golf course with contoured mounds, lakes, and irrigated roughs (Shadow Hills Golf Course, 2013).

3.11.3 Agriculture

As discussed in Section 3.11.1, agriculture is the most significant land use and a major component of the study area's economy. In 2000, nearly 78% of Lubbock County was devoted to agricultural use, of which approximately 74% was cultivated cropland (NRCS, 2000). Lubbock County is primarily known for cotton and cottonseed oil.

According to the USDA's 2012 Census of Agriculture, the amount of land in farms decreased 3% to 502,571 acres, from the 515,741 acres in 2007. The market value for agricultural products sold for Lubbock County in 2012 was $174,800,000. This was down approximately 16% when compared to 2007

($17,900,000). Crop sales accounted for approximately 55% ($95,860,000) of the total value for agricultural products, while livestock sales accounted for 45% ($78,941,000). Lubbock County, which ranked third in Texas for acres of cotton, lists the following as top crop items (in terms of acres): cotton (205,581 acres), sorghum for grain (28,614 acres), forage-land used for hay (6,633 acres), and wheat for grain (4,273 acres). Top livestock inventory items include layers, cattle and calves, quail, horses and ponies, and goats (USDA, 2012).

Numerous tracts within the study area are enrolled in the Conservation Reserve Program (CRP), which is a voluntary program where landowners contract to take highly erodible or environmentally sensitive lands out of agricultural production. This program is administered by the Farm Services Agency under the 2008 Farm Bill. These contracts last for a period of 10–15 years, and in order to be eligible, land must have been cropped in four of the last six years between 2002 and 2007, and enrollment periods are limited. Landowners receive financial compensation to participate in the CRP. Each county has an acreage cap of 25% of the total cropland in that county that can be enrolled in the program. Many of the counties in the Texas Panhandle have reached their CRP enrollment limit (TPWD, 2008).

3.11.4 Transportation/Aviation

According to TxDOT (2013a), the primary transportation corridors within the study area are:

- US 62/82 (crosses the southeast portion of the study area, connecting Lubbock to Ropesville);
- State Loop (SL) 327 (a highway spur that connects SL 289 to US 62/82, in the extreme eastern portion of the study area. At 2.1 miles, SL 327 is entirely within Lubbock city limits);
- SL 193 (also known as the Wolfforth Loop, extends a total of 2.2 miles from US 62 near the south edge of Wolfforth, to the north through Wolfforth to US 62); and
- SH 114 (traverses the study area from east to west, connecting Lubbock to Smyer in Hockley County).

Within Texas, US 62 runs from the Oklahoma-Texas border north of Childress, southwest to the Texas-New Mexico border near Hobbs, New Mexico. It reenters Texas near Frijole and runs to El Paso, for a total length of 403 miles within the state. US 82 runs from the Texas-Arkansas state line at Texarkana for 504 miles, westward to the Texas-New Mexico state line near Plains, Texas. SH 114 runs for 194 miles within Texas, from the Texas-New Mexico state line near Bledsoe, eastward across 15 counties to Dallas.

The study area also includes six FM roads and numerous county, city, private, and residential roads. Most of these roads in the study area form a grid-like network of north-south and east-west connectivity, with county roads running along section lines spaced 1 mile apart.

The Statewide Transportation Improvement Program for fiscal years 2013 to 2016 identified a number of local transportation improvement projects taking place within the study area boundaries.

- SL 327, at its junction with Milwaukee Road near the eastern boundary of the study area, will be adding a new interchange that is currently in design. Expectations for the extent of the linear footprint for this project are from 1,500 ft east of Milwaukee Road, to 1,500 ft west of Milwaukee Road. Additionally, a portion of Milwaukee Road between 94th and 104th streets will be widened to seven lanes (Lubbock Metropolitan Planning Organization [LMPO], 2012).
- The proposed Ports-to-Plains Corridor, an existing corridor of highways scheduled for major upgrades for expedited transportation, between Denver, Colorado, and Laredo, Texas, and runs through Lubbock (LMPO, 2003). The roadways utilized in this upgrade project are east of the study area and should not directly affect the roadways within the study area boundaries.
- According to the LMPO's Thoroughfare Plan, an outer loop around Lubbock is currently under study by TxDOT. This plan has three study area roadways included in the outer loop, all situated in the eastern half of the study area. The portion of the study area included in this preliminary loop involves FM 1585, along the southern edge of the study area, westward to FM 179, and northward to FM 2641, where the loop turns east and exits the study area. These roadways, if the outer loop comes to fruition, would be upgraded from existing FM roads to a freeway with a likely 300-ft ROW (LMPO, 2007, 2013).

A review of the Dallas-Ft. Worth (FAA, 2014a) and Albuquerque (FAA, 2014b) Sectional Aeronautical Charts, the Airport/Facility directory (FAA, 2014c), the TxDOT Airport Directory (TxDOT, 2013b), aerial photography, USGS maps, field reconnaissance, and internet sources identified one privately-owned, FAA-registered airport/landing strip and one heliport within the study area (AirNav, 2014). The Reese Airpark (FAA Identifier 8XS8) is owned by the Reese Redevelopment Authority and is located within the RTC campus (the former Reese Air Force Base). The Reese Airpark includes two asphalt runways: 10,500 ft x 150 ft and 6,500 ft x 150 ft. Additionally, the privately owned MDR 1 Heliport is located southeast of Wolfforth, east of the FM 1585 and CR 1500 intersection in the southeast corner of the study area.

3.11.5 Communication Towers

A search of the Federal Communications Commission (FCC) website found no AM transmitters, and identified two FM towers within the study area boundaries (FCC, 2013). Field reconnaissance and an internet search for cellular towers identified a total of 13 cellular or other electronic communications

towers within the study area boundaries. The towers are primarily concentrated in the eastern half of the study area (Mobiledia, 2013).

3.11.6 Aesthetic Values

Aesthetics is included as a factor for consideration in the evaluation of transmission facilities in PURA § 37.056(c)(4). The term aesthetics refers to the subjective perception of natural beauty in the landscape, and this section of the document attempts to define and measure the study area's scenic qualities. Consideration of the visual environment includes a determination of aesthetic values where the major potential effect of the project on the resource is considered aesthetic, or where the location of a transmission line could affect the scenic enjoyment of a recreation area.

The Environmental Consultants' aesthetic analysis deals primarily with potential visual impacts to the public. Areas visible from major roads and highways, or publicly owned or accessible lands (for example, parks or privately owned recreation areas open to the public) are analyzed. Several factors are taken into consideration when attempting to define the potential impact to a scenic resource that would result from the construction of the proposed transmission line. Among these are:

- topographical variation (hills, valleys, etc.);
- prominence of water in the landscape;
- vegetation variety (forests, pasture, etc.);
- diversity of scenic elements;
- degree of human development or alteration; and
- overall uniqueness of the scenic environment compared to the larger region.

Based on these criteria, the Environmental Consultants are of the opinion that the study area exhibits a generally low degree of aesthetic quality with respect to the region as a whole. The area is characterized by a flat topography, with little vegetation and few major water features. Furthermore, the landscape has experienced a high degree of alteration due to agricultural, residential, and commercial development and transportation corridors.

Urban development within the study area is mostly concentrated in and around the cities of Lubbock and Wolfforth, with the exception of scattered residential communities, developments, and the Reese Center. Land use within the urbanized areas includes a variety of residential neighborhoods, commercial developments, transportation systems (highways, railways, airports), civic uses, parks, and schools. Other human features which dominate the local viewshed include circle-pivot irrigation systems, highways,

railways, cell tower poles, and existing electrical transmission and distribution lines. This high degree of human impact on the existing landscape is considered to limit the overall aesthetic quality.

The THC operates the Texas Heritage Trails Program, a statewide heritage tourism program based on 10 scenic driving trails originally created by TxDOT. This program operates throughout 10 regions of Texas and enables people to learn about, and be surrounded by, local customs, traditions, history, and culture of the different regions. The study area is located within the Texas Plains Region, which contains the Texas Plains Trail. This trail region stretches across 52 counties in the Panhandle of Texas and highlights the canyons, lakes, prairies, historic towns, and cultural and recreational opportunities of the region. The Texas Plains Trail runs through Lubbock and several adjacent counties, although none of the featured locations of the trail are within the study area boundaries (THC, 2013).

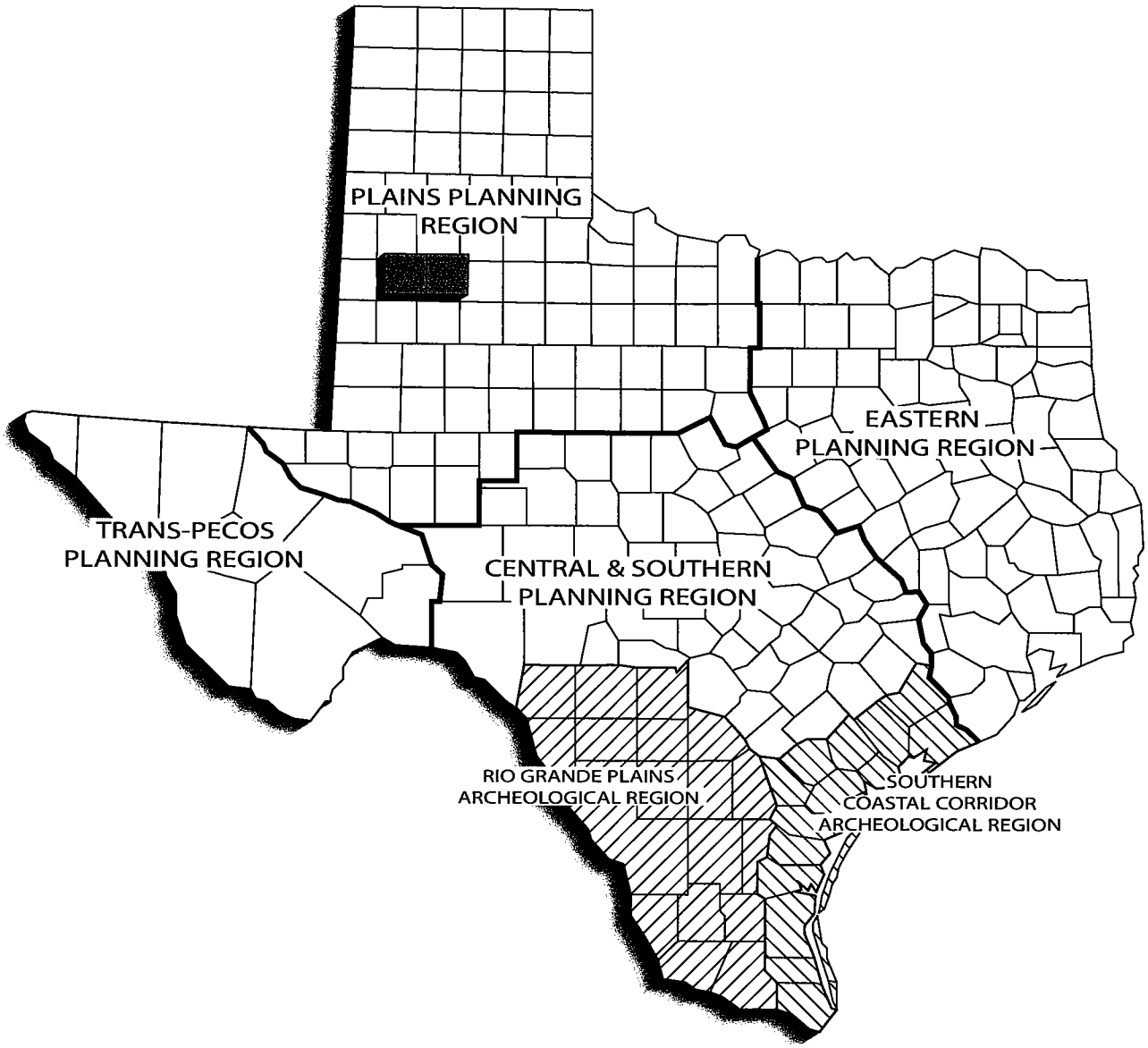
In 1998, TxDOT published a list of some of the best "Scenic Overlooks and Rest Areas" in Texas, each of which presented particularly strong aesthetic views or settings. A review of this list revealed that none of these locations are located within the study area (TxDOT, 1998).

3.12 Cultural Resources

3.12.1 Cultural Overview

Hockley and Lubbock counties are in the Plains Planning Region as delineated by the THC (Mercado-Allinger et al., 1996). The geographic region is described as the High Plains and the vegetation as Plains Grassland (Biesaart et al., 1985) (Figure 3-7). The topography is generally very flat, showing little vertical relief. Playa lakes, shallow depressions that collect runoff water into ponds, are scattered throughout the region. A brief description of the cultural chronology and major cultural developments of the region are presented below.

The generalized cultural chronology recognized for the Texas Panhandle Plains region is divided into four cultural stages or periods that go by various names. The cultural history of the study area, known from recovered archeological material, can be assigned to one of four developmental periods: Paleoindian, Archaic, Late Prehistoric, and Protohistoric (Boyd, 1997). These divisions primarily reflect changes in subsistence as indicated by material remains and settlement patterns. The following sections present an overview of major prehistoric and historic resources that may be found within the study area.



north

100 0 100 200

scale in miles

Source: Mercado-Allinger, et al. (1996)

ATKINS

Figure 3-7

LOCATION OF THE STUDY AREA COUNTIES IN RELATION TO THE CULTURAL RESOURCES PLANNING REGIONS OF TEXAS

WOLFFORTH TO CARLISLE 230-kV PROJECT

File: N:\Clients\U_Z\XCel_Energy\Wolfforth_to_Carlisle\geo\figs\figure3-7.ai

3.12.2 Prehistoric Overview

The Paleoindian period refers to prehistoric populations that inhabited North America from the end of the Pleistocene epoch until the early Holocene epoch. The earliest well-defined period of human habitation in the New World began about 11,000 B.C. These populations are believed to have been composed of small nomadic bands of hunters and gatherers who exploited herds of megafauna, such as mammoth, and now-extinct bison, as well as smaller mammals. Plants were almost certainly consumed, but data regarding this aspect of subsistence are rare.

The Paleoindian period on the Southern High Plains is subdivided into a sequence of four main cultures (Holliday, 1987). From earliest to latest, these are the Clovis, Folsom, Plainview, and Firstview cultures (Turner and Hester, 1985). Distinctive projectile points and economic activities differentiate one from the next.

The primary marker of the Clovis culture is the Clovis fluted point. Clovis hunters commonly hunted now-extinct megafauna such as mammoths. A number of Clovis sites occur in the region. These include the Clovis type site at Blackwater Draw Locality #1 near Clovis, New Mexico (Hester, 1972) and the Roberts County Miami site on the northern edge of the Llano Estacado (Sellards, 1938). Johnson and Holliday (1985) also report Clovis material at the Lubbock Lake site near Lubbock, Texas.

Following Clovis is the Folsom culture. The Folsom culture is characterized by the hunting of Bison antiquus using a more-refined fluted point than Clovis. Regional Folsom sites include the type site near Folsom, New Mexico (Figgins, 1927), the Lipscomb site in Lipscomb County (Wormington, 1957) the Lubbock Lake site, the Adair-Steadman site in Fisher County (Tunnell, 1977), and the Lake Theo site (41BI70) (Harrison and Killen, 1978; Harrison and Smith, 1975).

The Plainview culture was similar to the Folsom culture in its use of Bison antiquus. The Plainview point, however, was unfluted and parallel flaked. Plainview sites in the region include the Hale County type sites (Sellards et al., 1947), and the San Jon (Wormington, 1957) and Milnesand sites in eastern New Mexico (Sellards, 1955).

The terminal Paleoindian Firstview culture hunted both extinct and modern bison with unfluted, parallel-flaked points similar to Plainview points. Sites in the region with Firstview components include Blackwater Draw Locality #1 and Lubbock Lake.

Environmental changes and the resultant adaptation by later cultural groups define the end of the Paleoindian period. By about 6500 B.C., the wet and cool conditions of the Anathermal gave way to much

warmer and drier conditions. Most megafauna species, including mammoth, mastodon, and Bison antiquus, as well as Anathermal plants, were then extinct.

The Archaic period follows the Paleoindian and spans the period between 6500 B.C. to approximately A.D. 500. It is divided into the Early Archaic (6500 B.C. to 2000 B.C.) and Late Archaic (2000 B.C. to A.D. 500). The Early Archaic substage in the High Plains is characterized by a pattern of localized foraging for wild plant foods and small game. There is a notable absence of bison remains in area sites, and Dillehay (1974) surmises this as the first period of bison scarcity on the Southern Plains. Lithic artifacts that are common during the Early Archaic include stemmed dart points, gouges, grinding implements, hearthstones, and boiling pebbles (Hughes, 1991).

By about 2000 B.C., the Late Archaic substage is identified based largely on climatic changes to a more modern climate (Medithermal). The Late Archaic is represented by thousands of archeological sites, in sharp contrast to the few sites identified to date to the Early Archaic substage. During the Late Archaic, the primary mode of subsistence was bison hunting, even though assemblages dating to this substage indicate exploitation of both large and small game animals as well as exploitation of wild plants. Nomadic groups of people followed the ever-increasing bison herds redeveloping bison-hunting skills reminiscent of their Paleoindian predecessors (Boyd, 1997; Hughes 1991). Late Archaic site types include bison kill/butchering sites, campsites, and rockshelters. The predominant types of projectile points during this time are various kinds of barbed dart points (Hughes, 1991). Other types of lithic tools in Late Archaic assemblages include knives, key-shaped drills, bifacial and unifacial choppers, various types of scrapers, gravers, and denticulates. Bison kill sites have been the most common site investigated from this time period.

Beginning about A.D. 500, a wetter climate in the region ushered in the Late Prehistoric period. The Late Prehistoric period is subdivided into Late Prehistoric I and Late Prehistoric II. The introduction of several new ideas to the cultural inventory began the change from nomadic hunter-gatherers toward a more sedentary villager-gardener lifestyle (Hughes, 1991). These new innovations included the bow and arrow, pottery, pithouses, and more than likely, some gardening or horticulture (Boyd, 1997; Hughes, 1991). Settlements typically are located near active or abandoned river and stream channels. Late Prehistoric occupations typically occur in the same location as those of the preceding Archaic period. Hunting and gathering was still the primary mode of subsistence for people in the area. Diagnostic artifacts from this period include contracting-stem Perdiz arrow points and triangular Harrell points (Collins, 1969; Runkles, 1964; Suhm and Jelks, 1962; Turner and Hester, 1985).

Hughes (1991) defines this period as starting about A.D. 200 with the appearance of barbed arrow points and Woodland cordmarked and/or Mogollon brownware pottery. The terminal date of about A.D. 1100 splits the difference between about A.D. 1000, when a Woodland/Village transition was taking place in the northern part of the Panhandle Plains, and about A.D. 1200, when a pit-to-surface-house transition was taking place on the southwestern part of the South Plains (Cruse, 1992). This transition also includes changes in house type as well as a shift from barbed points to side-notched triangular points.

Three Late Prehistoric cultures occur on the Llano Estacado: Lake Creek on the northern edge, Palo Duro on the eastern edge, and Eastern Jornada on the southwest margins. The latter consists of the Querecho and Maljamar phases.

The Lake Creek complex is a Plains Woodland culture that was first identified on the basis of excavations conducted at the Lake Creek site in Hutchinson County (Hughes, 1962). The identifying characteristics of this complex include cordmarked ceramics, Scallorn-like arrow points, and a lithic assemblage consisting of scrapers, retouched flakes, and a high frequency of one-handed cobble manos and basin-type slab metates. Features usually found at Lake Creek sites include storage pits and rock-lined hearths. These sites tend to be located on lesser tributaries, rather than along primary waterways in areas that appear to have been frequently flooded (Couzzourt, 1982; Cruse, 1992).

The Palo Duro complex, dating from about A.D. 200 to 1000, was initially recognized as a separate cultural complex by Hughes and Willey in 1978. The type site for the Palo Duro complex is the Deadman's Shelter site located in Tule Canyon below the juncture of Deadman's and Barber's creeks, now in McKenzie Reservoir (Hughes and Willey, 1978). Other sites that have been identified as Palo Duro complex sites include the Canyon City Club Cave in Randall County (Hughes, 1969), the Blue Clay site (Hughes and Willey, 1978), the Chalk Hollow site (Wedel, 1975), and the Kent Creek site (41HL66) (Cruse, 1992).

The artifact assemblage for Palo Duro sites consists primarily of Deadman's and Scallorn arrow points and Mogollon Brownware ceramics. Also included in the assemblage are small numbers of corner-notched dart points, high concentrations of slab metates and cobble manos, ovate-shaped knives, scrapers, and some bone tools. The lithic material used is predominantly local, but a few flakes of materials such as obsidian have been recovered at these sites. Sites dating to the Palo Duro complex are small open camps, rockshelters, or pithouses located along the eastern margins of the Texas Panhandle (Cruse, 1992).

Based on test excavations at sites on the southwestern Llano Estacado in New Mexico, Corley (1965) proposed an eastern extension of the Jornada branch of the Mogollon culture with a sequence of Querecho

and Maljamar phases. Since 1965, Collins reported components of the Eastern Jornada phases at several other sites in southeastern New Mexico and Texas (Collins, 1966, 1968).

According to Corley (1965) and Collins (1966, 1968, 1971), the Querecho phase evolved out of the local Late Archaic Jornada-wide Hueco phase. It dates from A.D. 950 to 1100. It is characterized by a lack of houses. Locally made plain brownware, corner-notched arrow points, and small dart points are common artifacts at such sites. The Maljamar phase (A.D. 1100–1300) is characterized by pithouses, locally made plain and corrugated brownwares, several kinds of intrusive wares, and corner-notched and side-notched arrow points.

Beginning around A.D. 1100 or 1200 and coinciding with the appearance of side-notched triangular arrow points, the Late Prehistoric II marks the transition from a Woodland to a Village cultural lifestyle. This period marks the transition from pithouses to surface houses and subsistence regimes with a heavy reliance on horticulture (Hughes, 1991). The Plains Village culture developed out of the Plains Woodland cultures in the region and is often referred to as the Early Plains Village period (Baugh et al., 1984; Hofman, 1984). In the Texas Panhandle, the transition from a Woodland to a Plains Village cultural lifestyle occurred about A.D. 1200 with the Antelope Creek phase (A.D. 1200–1500) located principally along the Canadian River, and the Washita River phase (A.D. 1250–1450) located in western and central Oklahoma (Cruse, 1992). Characteristics of the Antelope Creek phase include Borger Cordmarked ceramics, Washita and Fresno arrow points, and rectangular structures with rock slab foundations. The economy during the Antelope Creek phase was based on bison hunting and horticulture.

The Washita River phase is characterized by a ceramic assemblage that is primarily plain wares and houses that are not slab lined. Some of the characteristics that it does share with the Antelope Creek phase are the use of Washita and Fresno arrow points and subsistence activities revolving around bison procurement and horticulture (Cruse, 1992; Hughes, 1991).

On the southern Llano Estacado the Ochoa phase dates between A.D. 1300 and 1450. It is characterized by jacal-like surface houses with rock and adobe foundations, side-notched triangular points, and locally made Ochoa Indented Brownware.

The Late Prehistoric II pattern of seasonal hunting and gathering and limited horticulture probably would have remained unchanged until well into the historic stage had it not been for Athapaskan and Shoshonean speakers, bison, and the horse. By at least A.D. 1200, Athapaskan speakers began to move south along the eastern slope of the Rocky Mountains from the Great Slave Area of Canada (Cruse et al., 1993).

The Athapaskans split into two prongs. The Western Athapaskans gradually evolved into the Navajo, San Carlos, Chiricahua, and Mescalero Apache. The Eastern Athapaskans included Jicarilla, Paloma, Carlana, and Lipan Apache. The latter assumed control of the Llano Estacado and its bison herds by about A.D. 1500. The Lipan Apaches also engaged in limited agriculture with techniques learned from the Pueblos.

Spanish explorer Francisco Vázquez de Coronado crossed the northern Llano Estacado and Panhandle Plains between 1540 and 1542. The Eastern Apaches by then had a well-defined seasonal round including communal hunts and raids and limited agriculture. Apache camps of this time are identified by the presence of Garza and Lot projectile points, Tierra Blanca plain ceramics, and Rio Grande glaze wares (Cruse et al., 1993). At the time of European contact, the area was inhabited by indigenous groups that had extensive trading networks with the Caddo in east Texas and the Trans-Pecos groups to the southwest (Suhm, 1958). The Lipan Apache entered the area from the Plains in pursuit of food in the seventeenth century. Trade items such as glass beads, European-made ceramics, gun parts, and metal arrow points indicate contact with Europeans. The widespread adoption after 1598 of the Spanish mustang by the Plains cultures resulted in the removal of the eastern Apache from the Llano Estacado.

Historically, the project area lies in the Comancheria, the regions of Comanche dominance in the eighteenth and nineteenth century (Thurmond et al., 1981). From approximately A.D. 1700, the region's population grew to include Lipan Apache, various bands of Comanches and, it is supposed, remnants of the original bands of the indigenous hunters and gatherers. The introduction of the horse and European firearms allowed the Comanche to function as the dominant cultural group until the late 1870s. Unlike previous occupants of the area, the Comanche lived in seasonal encampments and did not construct permanent dwellings. Their mobile society followed the plains herd animals on seasonal migrations. This is not to imply that the Comanche did not come together in large groups. By necessity, multiple bands would gather in the summer and fall for large-scale bison hunts (Cruse et al., 1993).

3.12.3 Historic Overview

The Texas Panhandle was the Indians' domain until the Red River War of 1874 (Cruse, 2008). During this military campaign, the United States Army was commanded to drive the Indians in the Texas Panhandle to the Indian Territory. Comanche, Kiowa, and Southern Cheyenne Indians joined forces to fight against the army, but in the end they were forcibly removed from Texas. The result of the Indians' removal was that the buffalo hunters moved in and exterminated the great herds on which the Indians had depended, and the Anglo ranchers moved into the area (Cruse, 2008).

From the mid-1870s to the early 1880s, pastores (sheepmen) from New Mexico began moving into this portion of Texas in search of grazing land and water for their sheep. Most pastores herded their flock on a seasonal basis along the upper Canadian River (Anderson, 2013). The pastores and their flocks followed old Indian trails and utilized the old Cibolero and Comanchero campsites on which they erected crude rockshelters. After the Red River War, an increasing number of pastores began entering the area. The pastores' yearly migration into the region contributed significantly to the population and economy of the Texas Panhandle in the early 1880s. However, shortly thereafter cattlemen began moving in the region in large numbers and began forcing the pastores out of the area by buying them out or restricting their grazing lands by fencing the previously free range (Rathjen, 2013).

3.12.3.1 Hockley County

Development of Hockley County did not begin until the last quarter of the nineteenth century with the removal of local Native American tribes to reservations in Oklahoma. Hockley County, named for George W Hockley, Chief of staff of the Texas Revolutionary Army, was officially created from Bexar County in 1876 (Leffler, 2013). John and Thomas Causey were the first settlers in the county. The brothers hunted buffalo in the panhandle region and established a homestead in Yellow House Canyon in 1877.

The establishment of large industrial cattle ranches in the mid-1880s drove out the smaller cattle ranchers and other herders. By 1900, nearly all of Hockley County was controlled by just five ranches. These ranches comprised some 354,000 acres with 15,700 head of cattle (Leffler, 2013). Census records for that year indicate only 44 persons in the entire county. The only area of the county not under control of the large ranches was a small strip along the county's southern border where small-scale farming and ranching took hold. Continued growth was hampered until the 1920s when the big ranches began to be sold.

In 1920, there were 137 people living in Hockley County. The following year the county was organized and Hockley City, later renamed Levelland, was elected as the new county seat. Two branch lines of the Santa Fe Railroad, constructed through the county in the 1920s, stimulated growth. As the old ranches were sold off new settlers arrived to establish farms. The number of farms increased from 18 in 1920, to 279 in 1925, and 1,344 in 1929 (Leffler, 2013). Land under cultivation in 1929 totaled 175,000 acres with cotton as the predominant crop. Census records also indicate that the county's population increased to over 9,000 by the end of the decade.

Although the Great Depression negatively impacted many, the number of farms in the county actually increased during the 1930s. Furthermore, the region's economy was stabilized with the discovery of oil in

1937. In 1938, a total of 68,000 barrels of oils was produced from county wells (Leffler, 2013). Six years later that number increased to over 14 million barrels. By the late 1950s, Hockley County was ranked third in the state in cotton production and in the top 10 in total agricultural production. Population during this period has averaged between 20,000 to 22,000. At the end of the twentieth century agriculture and oil production still comprised the economic mainstays of the county.

3.12.3.2 Lubbock County

The area that is now Lubbock County was first explored by Europeans in the sixteenth century. In 1540, Francisco Vásquez de Coronado visited the Lubbock Lake area while exploring the Panhandle region. This and other Spanish explorations during the seventeenth century provided the first maps of the Lubbock County area. Despite these early forays the region remained "Indian Territory," first under control of the Apaches and later the Comanches. By the mid-1870s, buffalo hunters were exterminating the herds, and U.S. Army's Red River Campaigns were forcing the Comanche onto reservations paving the way toward permanent settlement. In 1876, Lubbock County, named for Col. Thomas S. Lubbock, Confederate officer and former Texas Ranger, was officially created from Bexar County (Graves, 2013). In the 1880 census the county was listed as inhabited by 25 persons, most of which were reported as sheep herders.

The region's fertile soil and state land laws favoring agricultural production induced a wave of settlers in the county in 1890. The population quickly grew to approximately 100 individuals. In March of the following year the county was organized and the town of Lubbock selected as its county seat. Though ranching and farming formed the core of the early economy, a drop in cattle prices caused a gradual shift to agriculture as the economic mainstay for the county. Sorghum was the primary crop, with wheat and millet also being cultivated.

Lubbock County began to expand dramatically with the arrival of the railroads in the early decades of the twentieth century. In 1911, the Atchison, Topeka, and Santa Fe Railway's line from Coleman, Texas, to Clovis, New Mexico, reached Lubbock. Other lines served the county including the Pecos and Northern Texas (a subsidiary of the Santa Fe line), the Crosbyton-South Plains Railway, and the Fort Worth and Denver South Plains Railway. These lines tapped the region's agricultural and cattle industries with Lubbock serving as the transportation hub for shipping these commodities. The county's economy was further stimulated with the establishment of Texas Technological College (now Texas Tech University) in 1925. The economic boost created by the railroads and college resulted in an increase in the county's population, from 3,624 in 1910 to 39,104 by 1930 (Graves, 2013).

Agricultural production remained the county's principal endeavor during the twentieth century. During the 1930s, cotton production had risen to become the dominant crop with wheat and sorghum also being important. The county was also produced cottonseed oil, livestock, sheep, hogs, and poultry. By 1948, Lubbock was ranked first in the South Plains in agriculture and third overall in the state (Graves, 2013). At mid-century, Lubbock County was one of the fastest growing counties in the state, its population increasing from 101,048 in 1950 to 211,651 in 1980. Today the county serves as the wholesale trade center for much of western Texas and nearby areas of New Mexico, and the county constitutes 1 of the 28 metropolitan statistical areas in the state (Graves, 2013).

Within the study area, the towns of Wolfforth and Carlisle were founded in the early twentieth century largely as a result of the building of the Panhandle and Santa Fe Railway and were named after local ranchers George and Eastin Wolffarth and W.A. Carlisle, respectively (Davis, 2013a, 2013b). Construction on Reese Air Force Base began in 1941 as center for undergraduate pilot training. Following World War II, the base closed briefly from 1945–1949 when it was reactivated as a multi-engine pilot training base. It was also during this time that Reese Village was developed as off-base housing for military personnel (Odintz. 2013). In 1959, the base was converted to a single-engine jet training center and operated until it was again closed in the 1990s and renamed the Reese Technology Center (Gamble and Turner, 2013).

3.12.4 Previous Investigations

The knowledge of the archeology of the region housing the study area owes much to Eileen Johnson and the staff of the Museum of Texas Tech University at Lubbock, who have conducted or cosponsored numerous surveys and excavations from the 1970s on into the modern day. Concentrated on the heavily dissected uplands and canyons of various branches of and feeders to the Brazos River, these investigations have resulted in the recording of hundreds of cultural resources sites of all ages, primarily in Lubbock and Garza counties. Historical related regional investigations include that of the New Mexican Pastores in the Texas Panhandle (including Deaf Smith, Floyd, Hall, Hartley, Lubbock, Oldham, and Potter counties) by A.J. Taylor (1980).

Extensive work has been performed off and on since the 1930s at the Lubbock Lake site (41LU1) in Lubbock County (northeast of the northeastern corner of the study area). Site 41LU1, an NRHP property and State Archeological Landmark (SAL), produced stratified evidence of occupation from the Paleoindian to Historic periods, along with corresponding radiocarbon dates (Black, 1974; Johnson, 1987; Johnson and Holliday, 2013). The 3,000-acre preserve is located north of Lubbock in and around Yellowhouse Canyon; subsequent investigations in the surrounding area by the Museum of Texas Tech

University have identified almost 30 additional sites (Johnson, 2006). An area of 1,300 acres within Lubbock County was surveyed for the Criminal Justice Lubbock Facility. Seven prehistoric and two historic sites were recorded, two of which were recommended for testing. Site 41LU102 consisted of a scatter of burned caliche and one obsidian biface fragment in soils to a depth of 30 centimeters below ground surface. Site 41LU109 was similar, comprising a surface scatter of burned caliche, four chert flakes, a single mano, and bone fragments (Schroeder and Rader, 1995).

Northeast of the northeastern corner of the study area and immediately southeast of the Lubbock Lake site is the Canyon Lakes Archeological District. Listed in the NRHP, the district includes 10 known sites within a protected area of 5,250 acres. Further to the southeast within Yellowhouse Canyon are two dense clusters of recorded archeological sites, 16 west of Buffalo Springs Lake and 7 southeast of Ransom Lake along a fork of the Brazos River.

One of the largest and of the few archeological investigations within the study area was conducted at Reese Airforce Base as well as an auxiliary airfield in Terry County in the early 1990s. The investigation covered approximately 325 hectares resulted in the identification four archeological sites: 41LU111, 41TY113, 41TY114 and 41TY115 (Johnson, 1995). Additionally, in 2001 an investigation was undertaken for the proposed Bill McAllister Park, a portion of which is within the current project area. The survey revisited previously recorded archeological site 41LU80 and identified newly recorded sites 41LU120–41LU124, one historic locality and two extant buildings (Hunt and Belew, 2001).

There has been a relative paucity of recorded cultural resources surveys in Hockley County. These include one in 1980 for the EPA and one in 1985 for the Federal Highway Administration, both in the vicinity of Levelland. The third is located in the far northwestern corner of the county and was conducted by the Federal Energy Regulatory Commission in 1983. Site 41HQ1 was identified in 1983 by artifacts eroding from a sand dune on the edge of a large playa. Materials observed during its recording included a single Clovis point, both unifacial and bifacial tools, lithic debitage, burned caliche, and the scattered remains of mammoth. These suggest the site functioned as an open campsite, possibly where large game was killed and butchered. Again, none of these investigations occurred within the current study area.

3.12.5 Results of Literature and Records Review

Research of available records and literature was conducted at the Texas Archeological Research Laboratory (TARL), J.J. Pickle Research Campus, The University of Texas at Austin with the purpose of determining the location of previously recorded archeological sites (sites issued a trinomial/recorded at TARL) within the proposed study area. The THC's on-line Restricted Archeological Sites Atlas files were

also used to identify listed and eligible NRHP properties and sites, NRHP districts, cemeteries (including Historic Texas Cemeteries), Official Texas Historical Markers (OTHMs) (including Recorded Texas Historic Landmarks), SALs, as well as any other potential cultural resources such as National Historic Landmarks (NHLs), National Monuments, National Memorials, National Historic Sites, and National Historical Parks to ensure the completeness of the study. As a secondary source of NRHP-listed properties and NHLs, the National Park Service's NRHP GIS Spatial Data and database as well as the NHL program were consulted. Additionally, TxDOT's database of NRHP listed and eligible bridges was also reviewed.

The literature and records review identified five previously recorded archeological sites, one OTHM, and one cemetery within the study area. The cemetery is the Carlisle Cemetery. The OTHM is affiliated with the cemetery and the settlement of the town of Carlisle during the early twentieth century. Additionally, a review of the 1985 Wolfforth USGS topographic map identified a second cemetery, the Wolfforth Cemetery, within the study area. However, the Wolfforth Cemetery does not appear listed in the THC's on-line Restricted Archeological Sites Atlas. The five previously recorded archeological sites (41LU75, 41LU81, 41LU111, 41LU120, and 41LU140) include both prehistoric and historic-age sites. None of the sites were determined to be eligible for inclusion in the NRHP. Sites 41LU75 and 41LU111 are both open campsites of unknown prehistoric affiliation that reportedly contain lithic materials and possible hearth features. Site 41LU81 is recorded as an isolated stone tool of unknown cultural affiliation, and site 41LU140 appears to be a quarry that was used as a procurement source for chert cobbles. Site 41LU120 is described as a late-nineteenth to early-twentieth-century farmstead that has been subject to more recent disturbance. Table 3-5 provides additional site information below.

Table 3-5: Previously Recorded Archeological Sites Located Within the Study Area

Site Number	Type	Affiliation	NRHP Designation
41LU75	Open Campsite	Unknown Prehistoric – Possibly Late Archaic	Not Eligible
41LU81	Isolated Find	Unknown Prehistoric	Not Eligible
41LU111	Open Campsite	Multicomponent – Unknown Prehistoric and Historic	Not Eligible
41LU120	Possible Farmstead	Historic: Late Nineteenth to Early Twentieth Century	Not Eligible
41LU140	Lithic Scatter/Quarry	Unknown Prehistoric	Not Eligible

4.0 ENVIRONMENTAL IMPACTS OF THE ALTERNATIVE ROUTES

The potential/anticipated impacts to natural, human, and cultural resources resulting from the proposed project are discussed below by discipline/subject area.

4.1 Impact to Natural Resources

4.1.1 Impact on Physiography/Geology

Construction of the proposed transmission line will have no significant effect on the physiographic or geologic features/resources of the area. Erection of the structures would require the removal and/or minor disturbance of small amounts of near-surface materials but would have no measurable impact on the geologic resources or features along any of the alternative routes. The project will have no significant impact on mineral resources in the study area.

4.1.2 Impact on Soils

The construction and operation of transmission lines normally create very few long-term adverse impacts on soils. Transmission lines are not normally considered to cause a conversion of farmland because the site can still be used in this capacity after construction. The major potential impact upon soils from any transmission line construction would be erosion and soil compaction. The potential for soil erosion is generally greatest during the initial clearing of the ROW; however, SPS does employ erosion control measures during the clearing and construction process. Where existing land cover includes woody vegetation within the ROW, much of this vegetation will be removed to provide adequate space for construction activities and to minimize corridor maintenance and operational problems. In these areas, only the leaf litter and a small amount of herbaceous vegetation would remain and both would be disturbed by the necessary movement of heavy equipment.

Construction of the transmission line would require minimal amounts of clearing in areas that have already been cleared for crops, pastures, and existing road, transmission line, and pipeline ROW. The most important factor in controlling soil erosion associated with construction activity is to revegetate areas that have potential erosion problems immediately following construction. Natural succession would revegetate the majority of the ROW. Impacts from soil erosion caused by construction activity should be minimized due to the implementation of best management practices (BMPs) designed in the SWPPP.

Prime farmland soils, as defined by the NRCS, are soils that are best suited for producing food, feed, forage, or fiber crops. The USDA recognizes the importance and vulnerability of prime farmlands throughout the nation and encourages the wise use and conservation of these soils where possible. The

project would likely cross prime farmland soils. In addition to construction-related impacts described above, the major impact of the project on prime farmland soils would be the physical occupation of small areas by the actual support structures. These areas would not be available for agricultural production and could potentially become obstacles to farm machinery. However, the majority of the ROW would be available for agricultural use once construction of the transmission line is completed.

4.1.3 Impact on Water Resources

4.1.3.1 Surface Water

Construction and operation of the transmission line would have minimal adverse impact on the surface water resources of the area. The majority of the playa lakes and ponds that could be crossed by the proposed project would be spanned, with only a minimal number of supporting structures being placed within these features where necessary. Potential impacts from any major construction project include short-term disturbances resulting from construction activities, which would result primarily from increased siltation from erosion and decreased water quality from accidental spillage of petroleum and other chemical products. Additionally, activities such as clearing of vegetation may temporarily increase local stormwater runoff volumes and sediment loading. Potential impacts would be avoided whenever possible by spanning surface waters, diverting construction traffic around water resources via existing roads, and eliminating unnecessary clearing of vegetation.

Although impacts would be avoided to the extent possible, some unavoidable impacts could occur. Paralleling existing ROW would minimize these impacts, as would reducing vegetation removal around surface water features and minimizing ground disturbance. The use of erosion control measures, such as silt fencing and selective clearing, and BMPs regarding the use of chemicals would also minimize potential impacts. As such, impacts occurring from construction of the proposed transmission line would be short term and minor because of the relatively small area that would be disturbed at any particular time, the short duration of the construction activities, the preservation of vegetation adjacent to surface water features, and the implementation by SPS of BMPs designed in the SWPPP.

The measurement of the various criteria used in the environmental analysis of the primary alternative routes for this project is tabulated in Table 6-1 in Section 6.0 of this report. No named stream or river is crossed by any alternative route, and none of the alternative routes parallel any streams within 100 ft.

All of the alternative routes cross open water (playa lakes, ponds, etc.). Route C crosses the greatest length of mapped open water (0.63 mile). In contrast, Route F crosses the shortest length of mapped open water (0.05 mile) followed by Route G (0.14 mile). Field reconnaissances in the study area indicated that

several mapped playa lakes along proposed routes had been or currently are under cultivation, or had experienced other hydrologic modification so as to preclude these features from functioning as playa lakes. In part, this may likely suggest an overestimate of distances crossing open water in regards to playa lakes and the potential impacts of these crossings.

4.1.3.2 Floodplains

Proposed construction could result in locating some transmission line structures within floodplains, particularly in the vicinity of playa lakes. Where possible, placement of structures within FEMA-designated 100-year floodplains will be avoided. Construction activity within or near floodplains could result in erosion and sedimentation impacts, especially if flooding occurred during the construction period. If it becomes necessary to locate transmission line structures within floodplains, these structures would be designed and constructed so as not to impede the flow of any waterway or create any hazard during a flood event. Construction activities within floodplains would be limited to the project ROW. Some scour could occur around structures if flood-flow depths and velocities become great enough. Support structures and maintenance access routes in the floodplain would not be located in obvious flood channels and thus should not significantly affect flooding. Careful siting of structures should eliminate the possibility of significant scour. The project should have no significant impact on the function of the floodplain, nor adversely affect adjacent property.

Although each of the alternative routes crosses some 100-year floodplain, impacts would be minor. These crossings range from 0.80 mile crossed by Route F to 2.74 miles crossed by Route H. Generally, surface water resources do not present a major constraint to transmission line construction, unless navigable river crossings and/or impacts to wetlands occur that would warrant USACE permitting occur, or areas that would require extensive woodland clearing near streams, which would present potential erosion control problems. However, navigable river crossings, extensive contiguous wetland systems, and areas requiring extensive woodland clearing near streams do not exist in the study area.

4.1.3.3 Groundwater

No adverse impacts to groundwater are expected to occur from the construction and operation of the proposed transmission line. The amount of recharge area that would be disturbed by construction is minimal when compared with the total amount of recharge area available for the aquifer systems in the region. Additionally, if there were accidental spillage of fuel, lubricants, or other petroleum products from normal operation of heavy equipment during construction activities, it would be unlikely to result in any groundwater contamination. Any accidental spills would be promptly handled in accordance with state

and federal regulations. SPS will take necessary precautions to avoid and minimize the occurrence of such spills.

4.1.4 Impact on Ecosystem

4.1.4.1 Vegetation

Impacts to vegetation resulting from the construction and operation of transmission lines are primarily associated with the removal of existing woody vegetation within the ROW. The amount of vegetation cleared from the transmission line ROW would be dependent upon the type of vegetation present and whether the ROW will be completely new or involve widening existing ROW. For example, the greatest amount of vegetation clearing would occur in wooded areas, whereas cropland and grassland would require little to no removal of vegetation.

Cropland dominates the study area with limited rangeland consisting mostly of grasses and other herbaceous vegetation, and only scarce amounts of woody vegetation. Minimal clearing would be necessary for construction throughout cropland and rangeland. Sensitive plant communities, such as those found along riparian corridors and in wetlands, can often be spanned without the need for clearing. Vegetation community types intersected by alternative routes were verified in the field, where possible. The linear extent of plant communities crossed by the proposed alternative routes was determined using digital aerial photograph; the length across potential wetlands was determined by FWS NWI maps (see Table 6-1 in Section 6.0.).

Regarding woody vegetational communities, none of the 14 alternative routes cross any upland woodland that would require removal. Additionally, no measurable amount of bottomland woodland is crossed by any alternative route.

Removal of vegetation in wetlands increases the potential for erosion and sedimentation, which can be detrimental to downstream aquatic life and plant communities. Any placement of fill material within waters of the U.S. would represent a permit action that may require notification to the USACE. More-detailed field studies would be required to verify the location and amount of jurisdictional wetlands that may be within the ROW of a preferred route. Precautions would be taken throughout the construction process to avoid and minimize impacts to wetlands. Depending on the size and vegetation type (shrub/scrub, or herbaceous), these areas can be spanned in many instances, although they cannot always be avoided by construction equipment. Placement of rock berms, siltation fences, or brush downstream of disturbed areas would help dissipate the flow of runoff. Placement of silt fences or hay-bale dikes

between streams and disturbed areas would also help prevent siltation into the waterway. After construction is complete, impacted herbaceous wetlands are likely to recover relatively quickly.

Areas that potentially support wetlands (excluding playa lakes) are crossed by 8 of the 14 alternative routes. Of the alternative routes that cross potential wetlands, routes G and N cross the least amount of wetlands (0.09 mile). Routes C and D cross the greatest amount of potential wetlands with a total length of 0.20 mile; however, the majority of wetland areas are small enough to be spanned. Of the 14 alternatives, routes F, H, I, J, K, and L do not cross any woodland or wetlands. Routes C and D are the least desirable from a vegetation standpoint because they cross the greatest length wetlands.

Construction of the facility within the ROW would be performed to minimize adverse impacts to vegetation and to retain existing ground cover whenever practicable. Additionally, SPS will minimize damage to local vegetation and retain native ground cover wherever practicable. Clearing will occur only where necessary to provide access and working space and to protect conductors. Where necessary, soil conservation practices will be undertaken to protect local vegetation and ensure successful revegetation for areas disturbed during construction. Activities associated with electrical transmission facilities in jurisdictional wetlands are regulated by the USACE under the CWA. If necessary, SPS will coordinate with the USACE prior to clearing and construction to ensure compliance with Section 404 of the CWA in order to avoid, minimize, or mitigate for unavoidable impacts to waters of the U.S., including wetlands.

4.1.4.2 Aquatic Resources

Impacts to aquatic ecosystems from transmission line construction are generally minor. Aquatic features within the study area, such as playa lakes, streams, and ponds, can generally be spanned, and the implementation of sedimentation controls (an SWPPP will be in place) during construction will help to minimize erosion and sedimentation into area streams. Potential impacts include physical habitat loss or modification; increased runoff; erosion, and sedimentation; turbidity; and spillage of petroleum or other chemical products. All of these tend to be short-term effects, however, and will vary with the intensity and timing of the construction and location of the preferred route.

Physical habitat loss or modification could result whenever access road crossings intercept a drainage system or playa lake, or through sedimentation due to erosion, increased suspended solids loading, or accidental petroleum spills directly into a creek, playa lake, or other aquatic feature. Erosion results in siltation and increased suspended solids entering streams/creeks or playa lakes, which in turn may negatively affect many aquatic organisms, notably game fish, which require relatively clear water for feeding and reproduction. Since area aquatic features typically exhibit relatively high turbidities during

and following rainfall/runoff events, small increases in suspended solids during the construction phase are unlikely to have any discernible adverse impact.

The main considerations regarding potential impacts to aquatic systems include the number of playa lakes and streams crossed, length across open water, and length of ROW paralleling (within 100 ft) of streams. All of the alternative routes cross one or more types of aquatic habitat, as previously discussed in Section 4.1.3.1 (Surface Water) and Section 4.1.4.1 (Vegetation). None of the alternative routes cross streams and none of the alternative routes parallel any streams within 100 ft. Route C crosses the most mapped playa lakes (six). In contrast, routes B and F cross the fewest playa lakes (one) followed by routes G, I, J, K, L, and M (two). Routes F, H, I, J, K, and L cross no potential wetlands, whereas, Routes C and D cross the greatest amount of potential wetlands (0.20 mile), followed by Route M (0.18 mile) and routes A, B, and E (0.13 mile).

Route F has the least impact on aquatic resources because it crosses no streams, crosses the shortest distance of open water (0.05 mile), intersects the least amount of playa lakes (one), and exhibits no ROW length across potential wetlands. Conversely, Route C has the greatest impact on aquatic resources of the alternative routes because it has the longest length across potential wetlands (0.2 mile) and open water (0.63 mile), and crosses the highest number of mapped playa lakes (six).

4.1.4.3 Wildlife

The impacts of transmission lines on wildlife include short-term effects resulting from physical disturbance during construction, as well as long-term effects resulting from habitat modification, fragmentation, or loss. The net effect from transmission line construction on local wildlife is typically minor. The following section provides a general discussion of the effects of transmission line construction and operation on terrestrial wildlife, followed by a discussion of the possible impact of the alternative routes.

Any required clearing or other construction-related activities would directly and/or indirectly affect most animals that reside within or traverse the transmission line ROW. Heavy machinery may adversely affect smaller, low-mobility species, particularly amphibians, reptiles, and small mammals.

If construction occurs during the breeding season (generally spring to fall), construction activities may adversely affect the young of some species. Heavy machinery may cause soil compaction, which may adversely affect fossorial animals (i.e., those that live underground). Mobile species, such as birds and larger mammals, may avoid initial clearing and construction activities and move into adjacent areas outside the ROW. Construction activities may temporarily deprive some animals of cover and therefore

potentially subject them to increased natural predation. Wildlife in the immediate area may experience a slight loss of browse or forage material during construction; however, the prevalence of similar habitats in adjacent areas and vegetational succession in the ROW following construction would minimize the effects of these losses.

The increased noise and activity levels during construction could potentially disturb the daily activities (e.g., breeding, foraging, etc.) of species inhabiting the areas adjacent to the ROW. Dust and gaseous emissions should minimally affect wildlife. Although construction activities may disrupt the normal behavior of many wildlife species, little permanent damage to these populations should result. Periodic clearing along the ROW, while producing temporary negative impacts to wildlife, can improve the habitat for ecotonal or edge species through the increased production of small shrubs, perennial forbs, and grasses.

Transmission line structures could benefit some bird species, particularly raptors, by providing resting and hunting perches, particularly in open, treeless habitats (Olendorff et al., 1981; Avian Power Line Interaction Committee [APLIC], 1994, 1996). Raptor species, particularly the red-tailed hawk (*Buteo jamaicensis*), and corvids (ravens and crows) often use the support structures as nesting sites. Vultures and corvids commonly use the structures as roosting sites, and the wires and structures often serve as hunting or resting perches for species such as the red-tailed hawk, American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), loggerhead shrike (*Lanius ludovicianus*), and meadowlarks (*Sturnella* spp.). As a result, transmission lines have significantly increased raptor populations in several areas of the U.S. (APLIC, 1994). Additionally, edge-adapted species (e.g., blue jay [*Cyanocitta cristata*], some flycatchers, northern cardinal [*Cardinalis cardinalis*], northern bobwhite [*Colinus virginianus*], Cooper's hawk [*Accipiter cooperii*], brown-headed cowbird [*Molothrus ater*], and northern mockingbird [*Mimus polyglottos*]) may flourish along changed vegetation areas adjacent to the transmission ROW (Rochelle et al., 1999). The danger of electrocution to birds from this project will be insignificant because the distance between conductors or conductor and structure or ground wire on 230-kV transmission lines is greater than the wingspan of any bird in the area.

The transmission line (both structures and wires) could present a hazard to flying birds, particularly migrants. Collision may result in disorientation, crippling, or mortality (New York Power Authority, 2005). Mortality is directly related to an increase in structure height; number of guy wires, conductors, and ground wires; and/or use of solid or pulsating red lights (an FAA requirement on some structures) (Erickson et al., 2005). Collision hazards are greatest near habitat "magnets" (e.g., wetlands, open water, edges, and riparian zones) and during the fall when flight altitudes of dense migrating flocks are lower in

association with cold air masses, fog, and inclement weather. The greatest danger of mortality exists during periods of low ceiling, poor visibility, and drizzle when birds are flying low, perhaps commencing or terminating a flight, when they may have difficulty seeing obstructions (Electric Power Research Institute, 1993). Most migrant species known to occur in the study area, including passerines, should be minimally affected during migration, since their normal flying altitudes are much greater than the heights of the proposed transmission structures (Willard, 1978; Gauthreaux, 1978). However, sandhill cranes and waterfowl utilizing playa lakes may be more at risk.

For resident birds or for birds during periods of nonmigration, those most prone to collision are often the largest and most common in a given area (Rusz et al., 1986; APLIC, 1994); however, over time, these birds learn the location of transmission lines and become less susceptible to wire strikes (Avery, 1978). Raptors, typically, are uncommon victims of transmission line collisions, because of their great visual acuity (Thompson, 1978). In addition, many raptors only become active after sufficient thermal currents develop, which is usually late in the morning when poor light is not a factor (Avery, 1978).

Power lines within daily use areas are responsible for most bird collisions. Waterfowl species are vulnerable because of their low-altitude flight and high speed. Species that travel in large flocks, such as blackbirds and many shorebirds, are also vulnerable, because dense flocking makes movement around obstacles more difficult for individuals in the flock (APLIC, 1994).

Utility companies can employ several means to minimize transmission line impacts on birds in flight. The initial placement of a transmission line is the most important consideration (Avery, 1978; APLIC, 1994, 2006). The proximity of a transmission line to areas of frequent bird use (such as communal foraging or roosting areas, rookeries, wetlands, etc.) is crucial. This is especially true for daily use areas, such as feeding areas or other areas where birds may be taking off or landing regularly (APLIC, 1994, 2006). The position of the individual structures can also help reduce collisions. Faanes (1987), in an in-depth study in North Dakota, found that birds in flight tend to avoid the transmission line structures, presumably because such structures are visible from a distance. Instead, most appear to fly over the lines in the mid-span region. In areas where the transmission line passes between roosting and foraging areas, the structures can be placed in the center of the flyway (i.e., where the birds are more likely to fly) to increase their visibility, in addition to marking the wires.

Other considerations during the initial transmission line routing include the height of the surrounding vegetation and the topography of the area (APLIC, 1994). The height of transmission lines relative to the surrounding vegetation can help reduce the probability of collisions. Lines built at the height of the

surrounding trees seldom are a problem for forest-dwelling birds, and large birds will avoid the tree line, thus avoiding the transmission line (Thompson, 1978; APLIC, 1994, 2006). Consideration of topographical features such as valleys, ridges, and mountain passes, can also help avoid important flight paths.

Faanes (1987) reported that 97% of birds observed colliding with a power line did so with the ground (static) wire, largely because of attempts to avoid the conductors. Beaulaurier (1981) found that removal of the ground wire at two study sites in Oregon resulted in a reduction in collisions of 35% and 69%. However, since overhead static wires are installed on transmission lines for safety and reliability reasons, increasing the visibility of the static wire would be a better alternative, when necessary. Increasing the visibility of the wires by using markers such as orange aviation balls, black-and-white ribbons, or spiral vibration dampers, particularly at mid-span, can reduce the number of collisions. Beaulaurier (1981) reviewed 17 studies involving marking ground wires or conductors and found an average reduction in collisions of 45% when compared to unmarked lines.

Negative edge effects can be reduced through native revegetation of disturbed construction areas where necessary and appropriate for safe and reliable operation. Additionally, where lighting is required due to aviation concerns, use of white strobe lighting is preferred over other options in order to reduce avian collision potential with taller facilities (Erickson et al., 2005). Lastly, nest management through platform design, equipment protection, and other physical disincentives to bird use and nesting can avoid negative impacts to birds and power reliability (APLIC, 2006).

In general, the greatest potential impact to wildlife typically results from the loss and fragmentation of woodland and wetland habitats. Woodlands, particularly, are relatively static environments that require greater regenerative time compared with cropland or emergent wetlands. In most cases, wetlands and small waterbodies can be spanned with little or no resulting impact to wildlife. Because vegetation provides habitat for wildlife, the preferred route from a vegetation standpoint is generally also the preferred route from a wildlife standpoint. However, as previously stated, there are no alternatives that cross any measureable length of upland brushland or bottomland/ riparian woodland. Therefore, the greatest potential to impact wildlife would be crossing wetlands and open waters (including playa lakes), which would present the potential for wire strikes by migrating waterfowl and shorebirds. All of the potential individual wetlands (not counting playa lakes) and the majority of the open-water (including playa lakes) crossings should be able to be spanned. Additionally, consideration was given to alternative routes crossing prairie dog towns for potential impacts of wire strikes by the ferruginous hawk and Western burrowing owl, which are listed by TPWD as species of concern.

From a wildlife perspective, Route G has the least impact of the alternate routes because it does not cross woodland/brushland, only 0.9 mile of potential wetlands, intersects no streams/rivers, crosses the second-shortest distance of open water (0.14 mile) and crosses the second-least number of mapped playa lakes (2), and is the third-shortest alternative route (11.66 miles). Generally, the shorter the line the less potential for bird mortality through collision with the structures or wires. Additionally, Route G does not cross any documented prairie dog towns. Route C is the least desirable from a wildlife standpoint because it crosses the most playa lakes (six), the greatest distance across potential wetlands (0.20 mile), and open water (0.63 mile), and is the longest alternative route (22.94 miles).

4.1.4.4 Recreationally and Commercially Important Species

Construction of the proposed transmission line is not expected to have significant impacts on terrestrial recreationally and commercially important species in the study area. Furbearers such as the northern raccoon (*Procyon lotor*), swift fox (*Vulpes velox*), red fox (*Vulpes vulpes*), bobcat (*Lynx rufus*), and striped skunk (*Mephitis mephitis*), and game species such as the white-tailed deer, mule deer, eastern cottontail, mourning dove, and northern bobwhite are very mobile and will leave the immediate vicinity during the initial construction phase. Wildlife in the immediate area may experience a temporary loss of browse or forage vegetation during construction; however, the prevalence of similar habitats in adjacent areas will minimize the effect of the loss. The proposed project would have little or no impact on waterfowl hunting or recreational fishing, and as noted previously, no commercial fishing occurs in the study area.

Construction of the proposed transmission line is not expected to have a significant impact on any of the recorded occurrences of black-tailed prairie dog towns within the study area. Considerations during the initial transmission line routing were made to avoid previously recorded prairie dog towns, and additional field reviews of potential routes were able to identify and avoid the majority of the prairie dog towns discovered during these visits.

4.1.4.5 Endangered and Threatened Species

No endangered or threatened plant species have been recorded from either of the study area counties; thus, no listed plant species will be impacted by the proposed project. Similarly, no endangered or threatened aquatic species occur in the study area; therefore, no impacts to endangered and/or threatened aquatic species are anticipated.

Of the endangered or threatened terrestrial wildlife of potential occurrence in the study area, only the state-listed (threatened) Texas horned lizard is likely to occur as a permanent resident where potential

habitat is present. The study area is not located within the known occupied range of the lesser prairie-chicken. The whooping crane, bald eagle, and peregrine falcon are not expected to occur in the study area except as migrants or vagrants, and would not be expected to stay for any extended periods. The black-footed ferret and gray wolf are considered extirpated in Texas and would therefore not be affected by the project.

The Texas horned lizard could experience minor temporal disturbance during construction efforts; however, "take" as defined in Section 1.101(5) of the TPWD code is not anticipated. In many instances, potential habitat may be completely avoided, or otherwise spanned to avoid impacts. Overall, the proposed transmission line project should not adversely affect this species.

Endangered or threatened avian species that may migrate through the study area, such as the whooping crane, bald eagle, peregrine falcon, and other bird species that receive protection under provisions of the BGEPA and the MBTA, may be affected by the presence of transmission lines. Larger birds are more prone to transmission line collisions because their large wingspans and lack of maneuverability make avoiding obstacles more difficult (APLIC, 1994). However, the normal flying altitudes of most migrant species are greater than the heights of the proposed transmission structures (Gauthreaux, 1978; Willard, 1978). Birds with keen eyesight, such as the bald eagle and peregrine falcon, are likely to see obstructions such as transmission lines and avoid collisions (Thompson, 1978).

Critical Habitat

No critical habitat has been designated in the study area for any endangered or threatened species. Therefore, no impact to critical habitat as a result of the proposed project will occur.

4.1.4.6 Summary of Impact on Natural Resources

Route G hast the least impact from an ecological perspective because it crosses no woodland/brushland, only 0.9 mile of potential wetlands, intersects no streams/rivers, crosses the second-shortest distance of open water (0.14 mile) and the second-least amount of mapped playa lakes (two), and is the third-shortest alternative route (11.66 miles). Additionally, it does not cross any documented prairie dog towns. Route N is ranked second from an ecological standpoint, followed by Route F. Route N traverses no woodland/brushland, crosses no streams/rivers, crosses 0.9 mile of wetlands, and is the shortest proposed route (11.01 miles); however, Route N crosses 0.42 mile of open water. Route C is the least desirable from an ecological standpoint because it crosses the most playa lakes (six), the greatest distance across potential wetlands (0.20 mile), and open water (0.63 mile), and is the longest alternative route (22.94 miles).

4.2 Socioeconomic Impact

4.2.1 Impact on Social and Economic Factors

For this project, some short-term local employment would be generated. A portion of the project wages would find their way into the local economy through purchases such as fuel, food, lodging, and possibly construction materials. One-time ROW payments for the acquisition of easements will be made to individuals whose lands are crossed by the transmission line, based on the land value.

Potential long-term economic benefits to the region and the state resulting from construction of this project are based on the requirement that electric utilities provide an adequate and reliable level of power throughout their service areas. Economic growth and development rely heavily on adequate public utilities, including a reliable electrical power supply. Without this basic infrastructure, an area's potential for economic growth is constrained.

4.2.2 Impact on Community Values

Adverse effects upon community values are defined as aspects of the proposed project that would significantly and negatively alter the use, enjoyment, or intrinsic value attached to an important area or resource by a community. This definition assumes that community concerns are identified with the location and specific characteristics of the proposed transmission line and do not include possible objections to electric transmission lines per se.

Impacts on community values can be classified into two areas: (1) direct effects, or those effects that would occur if the location and construction of a transmission line results in the removal or loss of public access to a valued resource; and (2) indirect effects, or those effects which would result from a loss in the enjoyment or use of a resource due to the characteristics (primarily aesthetic) of the proposed line, structures, or ROW. Impacts on community values, whether direct or indirect, can be more accurately gauged as they affect recreational areas or resources and the visual environment of an area (aesthetics). Impacts in these areas are discussed in detail in sections 4.3.2 and 4.3.6 of this report.

4.3 Impacts to Human Resources

4.3.1 Impact to Land Use

Land-use impacts from transmission line construction are determined by the amount of land (of varying use) displaced by the actual ROW and by the compatibility of electric transmission line ROW with adjacent land uses. During construction, temporary impacts to land uses within the ROW could occur due to the movement of workers and materials through the area. Construction noise and dust, as well as

temporary disruption of traffic flow, may also temporarily affect residents and businesses in the area immediately adjacent to the ROW. Coordination between SPS, their contractors, and landowners regarding access to the ROW and construction scheduling should minimize these disruptions.

The primary criteria considered to measure potential land use impacts for this project included proximity to habitable structures (e.g., residences, businesses, schools, churches, hospitals, nursing homes, etc.), length parallel to existing transmission line ROW, length parallel to other compatible ROW, overall length of each alternative route, length parallel to property lines (not following existing ROW), and ROW across agricultural land.

Habitable Structures

Generally, one of the most important measures of potential land use impact is the number of habitable structures located within a specified distance of a route centerline. Habitable structures are defined by the PUC Subst. R. 25.101(a)(3) as: Structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis. Habitable structures include, but are not limited to, single-family and multifamily dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, and schools. The habitable structures were identified by field reconnaissance where possible and review of aerial photography. Distances were derived based on computer calculations using aerial imagery. Due to the degree of development within portions of the study area and the locations of the substations, routing near habitable structures was inevitable. Of the 14 alternative routes being evaluated, Route L has the fewest number of habitable structures located within 300 ft of its centerline (41), followed by Route M (44). By comparison, routes F and H have the greatest number of habitable structures within 300 ft of their centerlines (158 and 153, respectively). Table 6-1 presents the number of habitable structures located within 300 ft, of each alternative route. Tables 6-3 through 6-16 provide the distance and direction of each habitable structure identified within 300 ft of the primary alternative routes. The locations of habitable structures listed in tables 6-3 through 6-16 are shown on figures 6-1a–6-1c.

Because the proposed alternative routes were developed to parallel existing transmission line ROW where practical, consideration was also given to the number of habitable structures currently located within 300 ft of existing transmission lines paralleled by the 14 primary alternative routes. Generally, the sum of all impacts is less when existing transmission line ROW is utilized or paralleled, as compared to the extent of impacts associated with the establishment of transmission line ROW that is not adjacent to an existing transmission line ROW. Therefore, for this project, an additional method to evaluate impacts in

this category is to account for the number of habitable structures currently located within 300 ft of existing transmission lines, and then consider the number of newly affected habitable structures located along each of the alternative routes separately. The consideration of habitable structures currently located within 300 ft of existing transmission lines was focused on segments 33, 38, 58, and 61, which are located near the Carlisle Substation and have areas of dense residential development located to the east. However, these segments parallel the west side of the existing transmission line ROWs, which would have less of an impact than the establishment of entirely new ROW corridor in this area. Of the 14 primary alternative routes being evaluated, Route L lies within 300 ft of the fewest newly affected habitable structures (15), followed by routes K and J (26 and 27, respectively). Routes H and F have the greatest number of newly affected habitable structures located within 300 ft of their centerlines (87 and 92, respectively), while all of the habitable structures located within 300 ft of routes D (77), E (73), and M (44) are newly affected. Table 6-1 presents detailed information pertaining to the number of newly affected habitable structures located within 300 ft of each alternative route.

Utilizing/Paralleling Existing Transmission Line ROW

The least impact to land use generally results from building within existing transmission line ROW, followed by building parallel to existing transmission line ROW. Utilizing existing transmission line ROW of sufficient width usually eliminates the need for additional clearing. Additionally, building parallel to existing transmission line ROW, when compared to establishing a new ROW corridor can also minimize the amount of ROW to be cleared, which generally results in the least amount of impact to landowners, the environment, and the overall aesthetic quality of that particular area. In fact, the factors listed by PUC Subst. R. 25.101(b)(3)(B) to be considered in the selection of alternative routes include:

- Whether the routes utilize existing compatible ROW, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the routes parallel existing compatible ROW; and
- Whether the routes parallel property lines or other natural or cultural features.

None of the primary alternative routes utilize existing transmission line ROW for this project, primarily due to reliability and/or engineering constraints. Route N parallels the greatest amount of existing transmission line ROW with approximately 3.55 miles, followed by Route H (1.76 miles), and routes A and C (1.61 miles). By comparison, Route E parallels the least, with 0.11 mile, followed closely by routes D and M, with 0.17 mile.

Paralleling Other Existing Compatible ROW

Paralleling other existing compatible ROW (roads, highways, pipelines, etc.) is also generally considered to be a positive routing criterion, one that usually results in fewer impacts than establishing a new ROW corridor within an area, and is included in the PUC's transmission line certification criterion. In this respect, Route A parallels the greatest amount of compatible ROW with approximately 14.59 miles of its total length, followed by Route C with approximately 13.92 miles, and Route D with approximately 13.27 miles. Route N parallels the least amount of other compatible ROW with approximately 5.43 miles, followed by Route F with 5.72 miles.

Paralleling Property Lines

Another important land use criterion is the length of property lines paralleled. In the absence of existing ROW to follow, paralleling property or fencelines minimizes disruption to agricultural activities and creates less of a constraint to future development of a tract of land. Each alternative route was developed to parallel property lines where feasible. For this project, the length of property lines paralleled (not paralleling existing ROW) ranges from a high of approximately 7.94 miles on Route B, to a low of approximately 0.96 mile on Route H.

Combined Total Length of Paralleling Existing ROW and Property Lines

As discussed above, each alternative route was developed to parallel existing transmission line ROW, other compatible ROW, and property lines where feasible. For this project, the combined total length of all existing ROW and property lines paralleled ranges from a high of approximately 21.68 miles (96% of its total route length) on Route A, to a low of approximately 9.59 miles (86% of its total route length) on Route F. Table 6-1 in Section 6.0 presents the combined total length of paralleling existing ROW and property lines for each alternative route.

Overall Length of Routes

Finally, the overall length of a particular alternative route can be an indicator of the relative level of land use impacts. Generally, all other things being approximately equal, the shorter the route, the less land is crossed, which would usually result in fewer potential impacts. For this project, however, the two shortest alternatives, routes F (11.10 miles) and N (11.01 miles,) extend through areas of dense development. In an effort to avoid some of the densely developed areas, some alternatives were routed west. However, these options became the longest alternatives due to consideration given to routing around the Reese Airpark. In this regard, Route N is the shortest alternative (11.01 miles), while Route C (approximately

22.94 miles) is the longest route. Table 6-1 in Section 6.0 presents the overall length for each alternative route.

4.3.2 Impact on Recreation

Potential impacts to recreational land would include the disruption or preemption of recreational activities. Although numerous recreational sites are located within the study area, attempts were made to avoid these lands when developing the alternative routes, thereby minimizing the amount of such land crossed. Route F is the only alternative route that crosses recreational land within the study area. It would cross approximately 55 ft of the Bennett Elementary playground along Segment 13. In addition, Route F is also located within 1,000 ft of four additional parks/recreation areas. Routes I and J are each located within 1,000 ft of one park/recreation area, and routes E, K, and L are each located within 1,000 ft of one park/recreation area. Routes A, B, C, D, G, H, M, and N do not have any parks or recreation areas located within 1,000 ft. Any potential impacts to the facilities located within 1,000 ft of an alternative route would be indirect and more likely to be visual in nature.

4.3.3 Impact on Agriculture

Agricultural activities constitute a significant land use throughout the study area. Potential impacts to agricultural land uses include the disruption or preemption of farming activities. Disruption may include the time lost going around or backing up to structures in order to cultivate as much area as possible, and the general loss of efficiency compared to plowing or planting unimpeded in straight rows. Preemption of agricultural activities refers to the actual amount of land lost to production directly under the structures. Structures (and routes) located along field edges (property lines, roads, drainage ditches, etc.) generally present fewer problems for farming operations than structures and routes located across open fields. Construction-related activities could slightly impact agricultural production, depending upon the timing of construction related to the local planting and harvesting schedule. Impacts to agricultural land uses can generally be ranked by degree of potential impact; forested land has the highest degree of impact, followed by cultivated cropland, and the least-potential impact occurring in areas where cultivation is not the primary use (pastureland/ rangeland).

In this regard, Route F crosses the least amount of cropland with approximately 5.52 miles, followed by Route M with 9.18 miles. In contrast, Route A would cross the greatest amount of cropland with approximately 17.90 miles. Due to the relatively small area affected (beneath the structures), and the short duration of construction activities at any one location, such impacts should be both temporary and minor. Length across pastureland ranges from a low of approximately 0.63 mile on Route I, to a high of approximately 6.50 miles on Route E. Since the ROW for this project will not be fenced or otherwise

separated from adjacent lands, there will be no significant long-term displacement of farming or grazing activities. Most existing agricultural land uses may be resumed following construction.

All of the alternative routes cross portions of cropland irrigated by center-pivot or other aboveground mechanical means. Route F crosses the least amount of center-pivot or aboveground irrigation systems with approximately 0.30 mile, while Route A has the greatest length of ROW that crosses cropland irrigated by mechanical systems with approximately 2.23 miles. However, the alternative routes were developed to have minimal impact on center-pivot mobile irrigation systems. Consideration was given to locating the routes along field edges in order to span the traveling arc of the mobile systems, and thereby minimizing any potential impact.

4.3.4 Impacts to Transportation/Aviation

Potential impacts to transportation could include temporary disruption of traffic and conflicts with proposed roadway and/or utility improvements and may include increased traffic during construction of the proposed project. However, the project would generate only minor construction traffic at any given time or location. This traffic would consist of construction employees' personal vehicles, truck traffic for material deliveries, trucks for structure foundation work, and mobile cranes for structure erection. Such impacts, however, are usually temporary and short term. SPS will obtain road crossing and access permits from TxDOT for any state-maintained roads or highways crossed by the eventual approved route. Each of the primary alternative routes cross State Highway (SH) 114 once. In addition, routes A, B, C, D, and E have four FM road crossings, routes F, G, and M have three FM road crossings, and routes H, I, J, K, L, and N each have one FM road crossing.

The proposed transmission line should have no significant effect on aviation operations within the study area. According to Federal Aviation Regulations (FAR), Part 77, notification of the construction of the proposed transmission line will be required if structure heights exceed the height of an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 ft from the nearest point of the nearest runway of a public or military airport having at least one runway longer than 3,200 ft (FAA, 1975). If a runway is less than 3,200 ft, notification would be required if structure heights exceed the height of an imaginary surface extending at a slope of 50 to 1 for a distance of 10,000 ft. Notification is also required for structure heights exceeding the height of an imaginary surface extending outward and upward at a slope of 25 to 1 for a horizontal distance of 5,000 ft from the nearest point of the nearest landing and takeoff area for heliports. Typical structure heights for this project will range from approximately 80 to 140 ft, depending on location and design.

One FAA-registered airport, the Reese Airpark, is located within 20,000 ft of each alternative route. According to the Environmental Consultants' preliminary calculations, construction of the proposed transmission line would require FAA notification. Following PUC approval of a route for the proposed transmission line project, SPS will make a final determination of the need for FAA notification, based on specific route location and structure design. The result of this notification and any subsequent coordination with the FAA could include changes in the line design and/or potential requirements to mark and/or light some structures. No private landing strips were identified within 10,000 ft of any of the alternative routes, and no heliports were identified within 5,000 ft of any of the alternative routes. Figures 2-2 and 6-1a–6-1c show the location of the Reese Airpark, and tables 6-1 and 6-3 through 6-16 present detailed information.

4.3.5 Impact on Communication Towers

The proposed transmission line would not be expected to have a significant impact on electronic communications in the study area. There are no AM radio transmitters located within 10,000 ft of any of the 14 primary alternative routes. The number of FM radio transmitters and other electronic communication/cellular towers located within 2,000 ft of the alternative routes ranges from a low of one (routes A, B, C, D, I, J, K, L, and M) to a high of four (Route F). Figures 2-2 and 6-1a–6-1c show the locations of these facilities, and tables 6-1 and 6-3 through 6-16 present more-detailed information for each electronic communication tower.

4.3.6 Aesthetic Impacts

Aesthetic impacts, or impacts upon visual resources, exist when the ROW, lines, and/or structures of a transmission line system create an intrusion into, or substantially alter the character of, an existing scenic view. The significance of the impact is directly related to the quality of the view, in the case of natural scenic areas, or to the importance of the existing setting in the use and/or enjoyment of an area, in the case of valued community resources and recreational areas.

In order to evaluate aesthetic impacts, field surveys were conducted to determine the general aesthetic character of the area and the degree to which the proposed transmission line would be visible from selected areas. These areas generally include those of potential community value, parks and recreational areas, particular scenic vistas that were encountered during the field survey, and U.S. and state highways that traverse the study area. Measurements were made to estimate the length of each alternative route that would fall within recreational or major highway foreground visual zones (FVZ) (one-half mile, unobstructed). The determination of the visibility of the transmission line from various points was calculated from USGS maps and aerial photographs.

It is virtually impossible for a new transmission line not to have some visual impacts, and construction of the proposed 230-kV transmission line could have both temporary and permanent aesthetic effects. Temporary impacts would include views of the actual construction (assembly and erection of the structures) and any clearing of the ROW. Where limited clearing is required, the brush and wood debris could have a temporary negative impact on the local visual environment. Permanent impacts from the project would include the views of the structures and lines themselves as well as views of cleared ROW.

A transmission line (structures and wires) is considered to be within the FVZ if it is visible (i.e., not obstructed by terrain, trees, buildings, etc.) within 0.5 mile of an observer. Portions of each primary alternative route would be within the FVZ of U.S. and state highways. The estimated length of ROW within the FVZ of either a U.S. or state highway ranges from a low of 1.04 miles (routes A, B, C, D, and E) to a high of 5.81 miles (Route F). In addition, portions of each alternative route are located within the FVZ of FM roads. Route N would have the least amount of ROW within the FVZ of FM roads with approximately 2.05 miles, while Route B would have the greatest amount of ROW within the FVZ of FM roads with 8.79 miles.

Portions of each primary alternative route would also be located within the FVZ of parks/ recreational areas as well. Routes A, B, and C would have the least amount of ROW located within the FVZ of recreation areas with approximately 0.27 mile. By comparison, Route F would have the greatest length of ROW within the FVZ of recreation areas, with an estimated 4.89 miles.

Aesthetic impacts along portions of the alternative routes would be somewhat mitigated by the fact that numerous transmission lines exist within the study area. Existing transmission line ROWs could be paralleled for the construction of the proposed transmission line. As such, alternatives that involve paralleling existing lines would be most preferred in terms of aesthetic impacts because they would not create an intrusion into or substantially alter the character of the existing view. The significance of the impact would thus be qualitative rather than quantitative, and the degree of the impact would be less severe.

4.3.7 Summary of Impact on Human Resources

Particular criteria considered important in the evaluation of potential impacts to land use included the total number of habitable structures located within 300 ft, the number of newly affected habitable structures within 300 ft, length parallel to existing transmission line ROW, length parallel to other compatible ROW, the overall length of the alternative routes, and potential impacts to recreational resources. Consideration was also given to the sensitivity of routing in close proximity to the Frenship

ISD campuses and facilities and other community values. In aggregate, the best route from a land use perspective is Route L. Although it ranks 7th for overall length (1.92 miles longer than Route N), it ranked first for the number of habitable structures located within 300 ft (41), and first for the number of newly affected habitable structures within 300 ft (15). Route L parallels existing transmission line ROW and other compatible ROW for a combined length of approximately 8.42 miles (65% of its total length), and parallels property lines for approximately 3.24 miles (25% of its total length). By comparison, although Route F is the second-shortest alternative (11.10 miles), it has the greatest number of habitable structures located within 300 ft of its centerline (158), 92 of which are newly affected. Route N is the shortest alternative route, but has 134 habitable structures located within 300 ft of its centerline, 68 of which are newly affected.

4.4 Impact to Cultural Resources

Any construction activity has the potential to adversely impact cultural resources. The proposed transmission line project is currently being conducted without the need for federal funding, permitting, or assistance; however, federal guidelines established under Section 106 of the National Historic Preservation Act of 1966, as amended, provide a set of standards for considering the potential direct and indirect impacts that a construction activity may have on cultural resources. According to the Secretary of the Interior's Guidelines for the protection of cultural resources (36 CFR 800), adverse impacts may occur directly or indirectly when a project causes changes in the archeological, architectural, or cultural qualities that contribute to a resource's significance.

4.4.1 Direct Impacts

Direct impacts to cultural resources may occur during the construction phase of the transmission line and can result in the physical destruction and/or alteration of all or part of a resource. Typically, direct impacts result from the actual physical construction of the transmission line and/or from increased vehicular and pedestrian traffic during the construction phase. Increases in vehicular traffic has the potential to damage surficial or shallowly buried archeological sites, and the increase in pedestrian traffic may result in intentional or unintentional vandalism of a cultural resource. Additionally, construction of a transmission line may directly alter, damage, or destroy historic-age buildings, structures, landscapes, or districts. Direct impacts may also include impacts to a cultural resources overall setting. Setting is frequently a contributing factor to a cultural resources overall significance. Construction can potentially isolate a cultural resource from its setting and/or alter the setting through visual and/or physical impacts.

4.4.2 Indirect Impacts

Indirect impacts to cultural resources often occur to resources that are not located within the immediate project area but are within close proximity to the route construction. This may include the introduction of visual or audible elements that are out of character with the resource and/or its setting. Indirect impacts may also occur as a result of alterations in the patterns of land use, changes in population density, accelerated growth rates, or increased pedestrian or vehicular traffic. Historic buildings, structures, landscapes, and districts are among the types of resources that might be adversely affected by the indirect impact of the proposed transmission towers and lines.

4.4.3 Mitigation

The preferred form of mitigation for any impacts to cultural resources is avoidance. Alternative forms of mitigation for direct impacts can be developed for archeological and historical sites through the implementation of a site-appropriate data recovery program. Indirect impacts to historically significant properties and landscapes can be lessened through careful design choices and landscaping considerations. In some situations, the relocation of historic structures may be another possible form of mitigation.

4.4.4 Summary of Cultural Resource Impacts

Because the study area contains areas with a high probability for containing cultural resources, the construction of the proposed transmission line does have the potential to impact previously unrecorded cultural resources. One method utilized by archeologists to assess an area for the potential occurrence of cultural resources is the identification of high probability areas (HPAs). A HPA is an area that is considered to have a high potential for containing previously unrecorded cultural resources. The identification of HPA is usually done by examining 7.5-minute topographic maps and aerial photography, as well as other relevant data sources. When identifying HPAs, the topography and the availability of water and subsistence resources are all taken into consideration.

The soils and the geological processes that have occurred within the immediate project area are also considered. Certain geological processes and accompanying soil deposition can protect the integrity of an archeological site by burying it within deep sediments, or alternately, sites can be destroyed through a variety of erosional processes. Understanding the geologic processes within the project area is useful for predicting the location of cultural resources. Locations that are usually identified as HPAs for the occurrence of prehistoric sites include water crossings, stream confluences, drainages, alluvial terraces, wide floodplains, playa lakes, upland knolls, and areas where lithic or other subsistence resources could be found. Historic sites would be expected adjacent to historic roadways and in areas where structures appear on historic-age maps.

The designation of HPA and the evaluation of the segments for their potential to contain previously unrecorded cultural resources were made on the basis of topographic maps and aerial photography, as well as the Texas Tech University Playa Lakes Digital Database. No archeologist visited the study area for detailed investigations of the alternative routes. Therefore, some of the designated HPAs (as well as the direct and indirect impacts) may change if field archeologists conduct a visual reconnaissance or survey the routes. In addition, the plotting accuracy for the previously recorded archeological sites is not necessarily precise, but reflects the data available at TARL. Many of these sites, particularly those recorded several years ago, were plotted by a field archeologist based on topographic features and manual measurements for inclusion on the TARL database and maps.

A records review was performed for each alternative route being considered for the Wolfforth to Carlisle Transmission line. Routes (A–N) are comprised of 65 individual segments. During the records review, each of the 65 segments was researched in order to determine the number and type of previously recorded cultural resources that are located within 1,000 ft of each proposed route (see Table 6-1). At the time of the review, one cultural resource, the Wolfforth Cemetery was identified within a 1,000 ft of segments 10, 12, and 13. The resource is located at the northeast intersection of CR 1300 and 5th Street. While this is the only cultural resource located with 1,000 ft of a proposed route, a review of the Texas Archaeological Sites Atlas indicates that previously conducted cultural resources surveys within the general vicinity of the study area have resulted in the identification of both prehistoric and historic-age archeological sites. If any cultural resources have been recorded since the time of the records review, which was completed in May 2014, they are not accounted for in this total.

The Wolfforth Cemetery is located within 1,000 ft of segments 10, 12, and 13, which comprise portions of alternative routes F and G. Because the cemetery is located at least 380 ft away from each alternative route, impacts to the cemetery are not anticipated. However, if project impacts do occur within the cemetery, and/or if human remains or materials suggestive of the presence of human remains including grave shafts, coffin hardware, or other indicative materials are discovered within or adjacent to the construction area, all work in the vicinity must cease and coordination with the THC may be necessary under the Texas Health and Safety Code. Additionally, coordination with the county medical examiner and/or Justice of the Peace may also be necessary to comply with the Texas Code of Criminal Procedure, Chapter 49.

Because impacts to the Wolfforth Cemetery are not anticipated, the primary criteria used for evaluating the routes for their potential impacts to cultural resources is based on the amount of HPA that is estimated to be located along each of the alternative routes. The amount of HPA along each of the primary

alternative routes ranged from a low of approximately 3.38 miles on Route F to a high of approximately 9.34 miles on Route C. Table 6-1 in Section 6.0 presents the estimated amount of HPA for each alternative route.

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5.0 PUBLIC INVOLVEMENT ACTIVITIES

5.1 Correspondence with Agencies/Officials

The Environmental Consultants contacted the following federal, state, and local agencies and officials by letter in January 2014 to solicit comments, concerns, and information regarding potential environmental impacts, permits, or approvals for the construction of the proposed single-circuit 230-kV transmission line within the study area. A map of the study area was included with each letter. An example of the letters mailed to the agencies/officials and copies of the responses received are included in Appendix A.

Federal

- Federal Emergency Management Agency (FEMA)
- Natural Resources Conservation Service (NRCS)
- U.S. Fish and Wildlife Service (FWS)
- U.S. Army Corps of Engineers (USACE), Fort Worth District
- Environmental Protection Agency (EPA)
- Federal Aviation Administration (FAA)
- Bureau of Land Management (BLM)

State

- Texas Parks and Wildlife Department (TPWD)
- Texas General Land Office (GLO)
- Texas Commission on Environmental Quality (TCEQ)
- Texas Historical Commission (THC)
- Texas Water Development Board (TWDB)
- Texas Department of Transportation (TxDOT), Lubbock District
- TxDOT, Aviation Division
- TxDOT, Environmental Affairs Division
- South Plains Association of Governments

County

- Lubbock County Judge
- Lubbock County Precinct 1 Commissioner
- Lubbock County Precinct 4 Commissioner

- Lubbock County Director of Public Works
- Lubbock County Farm Bureau
- Lubbock County Farm Service Agency
- Hockley County Judge
- Hockley County Precinct 1 Commissioner
- Hockley County Precinct 4 Commissioner
- Hockley County Farm Bureau
- Hockley County Farm Service Agency

Local

- Canadian River Municipal Water Authority
- City of Lubbock Mayor
- City of Lubbock City Manager
- City of Lubbock Director of Public Works
- City of Lubbock Planning Department
- City of Wolfforth Mayor
- City of Wolfforth City Manager
- City of Wolfforth Director of Public Works
- City of Wolfforth City Secretary
- Frenship ISD
- Shallowater ISD
- Lubbock-Cooper ISD
- Smyer ISD
- Ropes ISD

As of the date of this document, written replies to the letters sent on January 31, 2014, have been received from the following agencies/offices: FEMA, NRCS, FWS, USACE, TPWD, GLO, THC, TxDOT Aviation Division, the South Plains Association of Governments, the Canadian River Municipal Water Authority, and Lubbock County. Copies of all responses are included in Appendix A. In addition to letters sent to the agencies in January 2014, the Environmental Consultants reviewed the NDD Element Occurrence Records from the TPWD, TARL records, and the THC Restricted Archeological Sites Atlas to verify or update cultural and natural resource records for the study area. All agency comments, concerns, and information received were taken into consideration by the Environmental Consultants and SPS in the preparation of this EA and in the evaluation of the alternative routes. Additionally, the

information received from the agencies will be taken into consideration by SPS before and during construction of the project. The following is a summary of the comments provided by federal, state, and local officials that have responded as of this writing.

FEMA responded by simply requesting that the local floodplain administrator be contacted for the review and possible permit requirements for this project. If federally funded, the project should be in compliance with Executive Orders 11988 and 11990.

The NRCS stated that the proposed project is exempt because transmission lines are not a conversion of Important Farmlands, and the site can still be used after construction. They also encourage the use of accepted erosion control methods during construction. Additionally, the NRCS included a Farmland Conversion Impact Rating (Form AD-1006), information on on-line sources for current soil survey information, the NRCS Farmland Policy Protection Act Form, NRCS Conservation Easements in Texas, as well as a handout on the USDA/NRCS Web Soil Survey.

The FWS responded in an email that adverse impacts to federally listed species or other protected resources would be unlikely.

The USACE assigned the project number SWF-2014-00080 and assigned Jason Story as the regulatory project manager. They also stated that Mr. Story would be reviewing the project and may request further information.

The TPWD responded by saying they had received the preliminary coordination letter regarding the proposed transmission line referenced. They recommended using or rebuilding existing facilities whenever possible, and recommended routing new transmission lines along roads, pipelines, or other utility ROW and easements to reduce habitat fragmentation and avoid or minimize impacts to undisturbed habitats when new construction was the only option. The TPWD then went on to describe the applicable federal laws, including the CWA, which regulates the discharge of dredged and fill material into the waters of the U.S., including wetlands. They mentioned that although the regulation of isolated wetlands has been removed from the USACE permitting process, they provide habitat for wildlife and help protect water quality and recommended that if proposed projects impact waterways or associated wetlands that the USACE be consulted. They also recommended that natural buffers contiguous to any wetlands or aquatic systems remain undisturbed to preserve wildlife cover, food sources, and travel corridors, and to implement erosion controls and replant with native vegetation. They went on to describe the MBTA, which prohibits take of migratory birds and their eggs, parts, and nests. The TPWD described the potential for electrocution and collision of large-bodied waterfowl and avian predators associated with the

numerous playa lakes in the study area, as well as the potential for disease created by decomposition after these fatalities. As a result, they recommended the Environmental Consultants and SPS route transmission lines to avoid or minimize disturbance to playa lakes and include line markers installed at the crossings or closest points to the drainages to reduce potential avian collisions. They went on to describe the vegetation types in the study area and included a map for reference. The TPWD then went on to describe the species of concern and special features within the study area counties, based on a review of NDD records, and recent aerial photography. These included the ferruginous hawk, western burrowing owl, black-tailed prairie dog, plains spotted skunk, and prairie dog towns. The TPWD attached a map with NDD data for reference, labeled with Element Occurrence Identification numbers. The TPWD gave a brief description of each species, as well as brief recommendations for avoidance. They then noted that the absence of NDD information does not imply that a species is absent from an area and cannot be used as presence/absence data. They recommended reviewing the TPWD county lists for updated information. They requested a copy of the EA for review and comment prior to application to the PUC for a CCN.

The GLO responded that it does not appear that the GLO has environmental issues or land use constraints at this time. They then asked to be provided the final route/location for the proposed to assess the route and determine if the project will cross streambeds or Permanent School Fund lands that would require an easement from the GLO.

The THC responded that the project will cross areas that have never been surveyed by a professional archeologist and may contain historic and archeological resources. They recommended consulting with a professional archeologist early in the route selection process to allow avoidance of recorded archeological resources and identify HPAs for further investigation and submit their scope of work for their concurrence once the route is selected.

The Canadian River Municipal Water Authority responded by including a map with the location of their facilities within the study area, which includes a 33-ft water pipeline easement, Surge Tank 12, and Pumping Plant 09.

Lubbock County referred the Environmental Consultants to the Lubbock Metropolitan Planning Organization's Master Thoroughfare Plan and provided information concerning a public meeting for a proposed outer loop around Lubbock. Lubbock County also advised that they would like to obtain a 110-ft ROW for all of their county roads in the study area.

The TxDOT Aviation Division began by reiterating Title 14, USC, Part 77 of the FAA FAR that requires notice to the FAA if the facility to be constructed fits certain conditions. They then stated that there are no

public use airports or heliports in or within 20,000 ft of the study area. They said that if any of the criteria of the FAR are met, the FAA must be notified using FAA form 7460-1, "Notice of Proposed Construction or Alteration."

The South Plains Association of Governments, after review of the grant application, "waive[d] comment" on the application.

5.2 Public Open-House Meeting

A public open-house meeting was held by SPS for the proposed Wolfforth to Carlisle 230-kV transmission line project at the Frenship High School Cafeteria, 902 N. Dowden Road, Wolfforth, Texas, on April 17, 2014, from 5:00 to 7:00 PM. Direct mail notice of the open-house meeting was sent by first class mail to approximately 919 landowners listed on the current county tax rolls as an owner of land located within 300 ft of the preliminary route segments. Additionally, agencies and other officials were mailed written notice of the meeting. The meeting was intended to solicit comments from landowners, citizens, and public officials concerning the proposed project. The meeting had the following objectives:

- Promote a better understanding of the proposed project including the purpose, need, and potential benefits and impacts;
- Inform and educate the public with regard to the procedure, schedule, and decision-making process; and
- Ensure that the decision-making process accurately identifies and considers the values and concerns of the public and community leaders.

Rather than a formal presentation in a speaker-audience format, the meeting was held in an open-house format. SPS representatives and the Environmental Consultants set up several information stations around the meeting room. Each station was devoted to a particular aspect of the routing study and was manned by SPS representatives and/or the Environmental Consultants. Large displays of maps, illustrations, photographs, and/or text explaining each particular topic were presented at the stations. Interested citizens and property owners were encouraged to visit each station in a particular order so the entire process and general project development sequence could be explained clearly. The open-house or information-station format is advantageous because it allows attendees to process information in a more relaxed manner and also allows them to focus on their particular areas of interest and ask specific questions. More importantly, the one-on-one discussions with SPS representatives and the Environmental Consultants encourage more interaction from those citizens who might be hesitant to participate in a speaker-audience format.

At the first station visitors signed in and were provided questionnaires to fill out, project fact sheets, and a map for reference. The questionnaire solicited comments on landowner/citizen concerns as well as an evaluation of the information presented at the meetings. An example copy of the questionnaire provided at the open house meeting (Questionnaire A) is included in Appendix B. Additionally, all persons located within 300 ft of the Preliminary Route Segments received a direct mail notice that included a landowner packet. The landowner packet included: a notice letter; the Texas Landowner's Bill of Rights; the "Landowners and Transmission Line Cases at the Public Utility Commission" brochure; Project Routing Questionnaire; Permission to Survey form; and a project map. The questionnaire included in the landowner packet (Questionnaire B) differed slightly from the questionnaire provided at the open-house meeting (Questionnaire A). Therefore, each version of the questionnaire was evaluated and summarized separately in the EA. An example copy of the questionnaire provided in the landowner packet (Questionnaire B) is included in Appendix B.

Completed questionnaires were received by SPS either at the meetings or later by mail. However, not all respondents answered every question, nor did all attendees fill out a questionnaire. Additionally, several questionnaires were received from respondents who did not attend an open-house meeting and/or who may not be directly affected by the proposed project.

A total of 164 citizens/landowners signed in at the public meeting, and some added a family member's name on the line as well. Therefore, a total of at least 188 persons attended the open-house meeting. A total of 71 questionnaires were submitted to SPS following the public meetings (45 completed Questionnaire A, and 26 completed Questionnaire B).

Questionnaire A Results

A total of nine questions were asked on Questionnaire A, the first of which was if respondents had attended the open-house meeting. Forty-three respondents (96%) indicated they had attended the open-house meeting, while one respondent indicated they had not attended the open-house meeting, and one respondent did not give a response.

The second question asked respondents if, in their opinion, the need for the project had been adequately explained. Thirty-two respondents (71%) indicated the need was adequately explained, while seven respondents (16%) indicated the need had not been adequately explained.

The third question asked respondents to rank which factors, in order of importance to them, should be considered (avoided if possible) in routing a transmission line. Respondents were asked to rank these

factors 1 through 9 (1 being the most important, and 9 being the least important) without duplicating rankings. However, many respondents did not provide a rank for every factor, or they duplicated rankings. The average ranking for each factor was as follows (in descending order of importance):

- Residential areas – 1.4;
- Cropland/agricultural uses – 2.3;
- Schools – 2.9;
- Businesses/commercial areas – 3.5;
- Recreational/park areas – 4.6;
- Churches/cemeteries – 5.1;
- Floodplains/wetlands – 5.4;
- Wildlife habitat/woodlands – 6.6; and
- Archeological/historical sites – 7.6.

The fourth question asked respondents to comment on any additional factors they think should be considered. Thirty-one (69%) of the respondents provided comments, including the following:

- Property values;
- Line should be as short as possible;
- Avoid existing houses/residential areas;
- Avoid water wells/underground water lines;
- Avoid pivot irrigation;
- Use existing ROW, including distribution line ROW;
- Health and safety issues (e.g., electromagnetic field [EMF], noise, wind failure);
- Aesthetics;
- Consider future residential and commercial development;
- Economic impact;
- Placing lines in rural areas are preferred;
- Height of transmission lines is a hazard for aerial application services for farmers;
- Use the most direct route;
- Avoid locating the new line near existing lines so that reliability of service isn't as susceptible to a single catastrophic event;
- Bury the line where possible; and
- Avoid locating line near vineyards as they attract birds which will damage grapes.

For the fifth question, respondents were asked if they had a concern with any of the transmission line segments shown on the displays. They were asked to indicate the segment and describe their concern. Thirty-three of the respondents (73%) provided a segment, while 32 of the respondents (71%) provided a concern although they did not necessarily specify a segment. Respondents expressed concerns with the following 38 segments: 2, 7–10, 13, 17–23, 25, 26, 28, 29, 32, 33, 37–40, 43, 46, 47, 51, 52, and 55–64. Issues that were mentioned by respondents include:

- Proximity to homes (2, 7, 8, 9, 13, 21, 26, 33, 37, 52);
- Proximity to property (9, 10, 18, 22, 23, 25, 28);
- Aesthetics (23, 29, 32);
- Devaluation of property (2, 18);
- Proximity to pivot irrigation/irrigation pipeline (17, 37, 46, 51, 52, 55);
- Crossing/affecting water well (17, 37, 43, 46);
- Health and safety issues, including EMF and RF noise (7, 8, 9, 38, 39, 47, 56, 57, 58, 59, 60, 61, 62, 63, 64);
- Proximity to existing line in case of catastrophic event (58, 59);
- Proximity to schools (13);
- Proximity to businesses (2, 13, 21, 40);
- Future development (13, 20, 21, 22, 33);
- Reduces acreage/affects farmland (26, 47);
- Proximity to cell tower (55);
- Crossing playa lake (52); and
- Crossing existing transmission line (32).

Although the fifth question asked for segments with which respondents had concerns, one respondent indicated segments that were favorable to them which included the following segments: 2, 8, 19, 24, 25, 31, 32, 33, and 38.

The sixth question asked respondents to rate the acceptability of locating a new transmission line with respect to five types of land use, with 1 being preferable, 2 being acceptable, and 3 being unacceptable. Many respondents did not provide a rank for every factor, or they duplicated rankings. The average ranking for each factor was as follows (in descending order of acceptance):

- Along existing transmission line ROW (34 responded) – 1.9;
- Along roads/railroads (30 responded) – 1.9;

- Along section lines (31 responded) – 2.1;
- Along fence line away from roads (33 responded) – 2.5; and
- Along ½ section lines (30 responded) – 2.5.

The seventh question asked which of the following situations applied to the respondent: (a) potential segment is near my home; (b) potential segment is across my land; (c) potential segment is across land I farm; or (d) other. A number of questionnaires had more than one situation checked. Thirty-two respondents (71%) indicated that a potential segment was located near their home, 13 respondents (29%) stated that a potential segment was located across land that they farm, 11 respondents (24%) indicated that a potential segment was located across their land, and 11 respondents (24%) checked the "other" category. A total of 13 respondents (29%) provided comments in the space provided next to the "other" category. Many of the comments provided were reiterations of responses to previous questions, and several identified the segment.

The comments provided in regard to "other" included the following:

- Close to apartments;
- Potential segment is near my homes (7 each);
- Near performance horse facility;
- Near business and horse training facility;
- Devaluation of land for development;
- Residential development;
- Over my home;
- Segments 9 and 10 are along our property lines;
- Close to my amateur radio station;
- Impacts water transmission line currently under construction by City of Lubbock;
- Have horse breeding facility; and
- Our irrigation well.

In the eighth question, respondents were asked if they believed that the public open-house meeting and the information provided were helpful to their understanding of the project. Thirty-one responded that the open-house format was helpful, while eight responded that the open-house meeting was not helpful. Thirty-three responded that the information provided was helpful, while four responded that the information provided was not helpful.

The ninth question asked respondents if they would like someone to follow-up with them to discuss the project in more detail. Sixteen (36%) responded that they would like someone to follow-up with them to discuss the project, while 24 (53%) responded that they did not need to be contacted.

After being able to provide their contact information, of which 44 (98%) provided, respondents were given a final chance to provide any additional comments. Seventeen respondents (38%) provided additional comments, many of which were reiterations of previous responses. Comments included the following:

- All concerns were not addressed;
- Question on property devaluation could not be answered at meeting;
- I farm Section 27;
- Concern over potential damage to business from birds attracted to lines and aesthetic value;
- Would have preferred a speaker and time to look at maps before and after public meeting;
- Concern for individual homes;
- Concern over issue of no current easement and property being utilized to boundary;
- Attached map of favorite route;
- Concern for nearby cell tower contract, irrigation well, and installed drip irrigation;
- Request that segment 9 and 10 be eliminated;
- Suggest route would run through these segments: 2, 8, 19, 24, 25, 31, 32, 33, and 38;
- Do not want a double-circuit line on property, already have existing 115-kV line;
- Concern for future residential and commercial development;
- Concern for property value and business;
- Will gather signatures and express concerns with PUC to oppose segments 13, 21, and 22; and
- Encourage minimizing impacts by using existing ROW, burying the line, but do not impose the cost on individuals.

Questionnaire B Results

As previously stated, the questionnaire included in the landowner packet (Questionnaire B) differed slightly from the questionnaire provided at the open-house meeting (Questionnaire A). Therefore, each version of the questionnaire was evaluated and summarized separately. An example copy of the questionnaire provided in the landowner packet (Questionnaire B) is included in Appendix B.

A total of seven questions were asked on Questionnaire B, the first of which asked respondents to rank which factors, in order of importance to them, should be considered in routing a transmission line. Respondents were asked to rank these factors 1 through 10 (1 being the most important, and 10 being the least important) without duplicating rankings. Many respondents did not provide a rank for every factor, or they duplicated rankings. The average ranking for each factor was as follows (in descending order of importance):

- Minimize the number of residences near the line – 2.5;
- Minimize length through cultivated fields – 3.1;
- Maintain reliable electric service – 3.6;
- Minimize the number of public facilities (e.g. parks, schools, churches) – 4.1;
- Minimize the cost of the line – 5.6;
- Minimize the number of businesses near the line – 5.7;
- Minimize total length of the line – 5.8;
- Minimize the clearing of trees – 6.8;
- Minimize length through rangeland – 6.9; and
- Minimize the impact on wildlife – 7.6.

Question 2 asked respondents to comment further on any of the factors from the first question, or identify any other factors they think should be considered. Thirteen (54%) of the respondents provided comments, including the following:

- Property values;
- Economic impact on future development;
- Avoid water lines;
- Avoid impacts to irrigation wells and systems;
- Use existing ROW, including utility easements, section lines, railroad tracks;
- Health and safety issues (e.g., EMF, wind failure);
- Aesthetics; and
- Burying the line where possible.

One response to this question identified favorable/unfavorable route segments. This is addressed under Question 3 below.

For Question 3, respondents were asked if they had a concern with a particular transmission line segment(s) shown on the display of potential routes. They were asked to indicate the segment number and describe their concern. Fifteen of the respondents (63%) provided a segment, while 16 of the respondents (67%) provided a concern although they did not necessarily specify a segment. Respondents expressed concerns with the following 16 segments: 2, 7, 22, 26, 32, 33, 37–39, 50, 53, 55, 60–62, and 63. Issues that were mentioned by respondents include:

- Proximity to homes (2, 7, 63);
- Aesthetics (32, 33, 61);
- Devaluation of property (2);
- Migrating birds (33);
- Health and safety issues, including EMF (2, 33);
- Crossing water well/water line (26, 50, 53, 55, 62, 63);
- Crossing pivot/drip irrigation (53, 55, 60, 61, 63);
- Crossing farmland/agriculture (7, 37);
- Proximity to businesses (2);
- Crossing landowners property (7);
- Proximity to lots (39);
- Proximity to/crossing existing line in case of catastrophic event (22, 33); and
- Are additional lines really needed (38).

The fourth question asked respondents to rate the acceptability of locating a new transmission line with respect to four types of land use, with 1 being preferable, 2 being acceptable, and 3 being unacceptable. Many respondents did not provide a rank for every factor. The average ranking for each factor was as follows (in descending order of acceptance):

- Along roads/railroads (18 responded) – 1.7;
- Along section lines (17 responded) – 1.9;
- Along fence line away from roads (15 responded) – 2.4; and
- Along ½-section lines (18 responded) – 2.5.

Question 5 asked which of the following situations applied to the respondent: (a) potential route is near my home; (b) potential route is across my land; (c) potential route is across land I farm; or (d) other. A number of questionnaires had more than one situation checked. Sixteen respondents (67%) indicated that a potential route crosses their land, 10 respondents (42%) indicated that a potential route is near their

home, six respondents (25%) stated that a potential route crosses land that they farm, and six respondents (25.0%) checked the "other" category. A total of six comments were submitted in the space provided. Those who completed this portion mentioned the following:

- Potential route is across our water lines;
- Potential route is near business;
- Potential route is near poles and light poles;
- Potential route impacts drip irrigation, water wells, and filter station;
- Potential route is near worship center; and
- Potential route is in front of school.

In the sixth question, respondents were asked if they believed that the public open-house meeting and the information provided were helpful to their understanding of the project. Twelve (50%) responded that the open-house format was helpful, while one responded that the open-house format was not helpful. Similarly, 12 (50%) responded that the information provided was helpful, while 1 responded that the information provided was not helpful.

After being able to provide their contact information, respondents were given a final chance to provide any additional comments. Eleven respondents provided additional comments, many of which were reiterations of previous responses. Comments included the following:

- Avoiding more lines would be preferable;
- Please don't put power line across the middle of the farm;
- If the project is to provide redundancy in the event that something might interrupt service, then the preferred route would be the segments farthest west and north;
- Land is an oil field (Broadview Field) and Lubbock water line will eventually cross area in near future;
- Too many lines including electric, light poles, underground civic, and private lines already impacting land;
- No easement currently exists, consequently, property has been utilized to the boundary;
- Did not get one set meeting or opportunity to talk as a group, and instead sections of small groups were utilized;
- Not able to attend, maybe should consider teleconference;
- I do not understand it all and may need to get a better understanding; and
- Thank you for keeping us informed. Please keep my information confidential.

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6.0 ALTERNATIVE ROUTE EVALUATION

The purpose of this study was to identify and evaluate the most viable alternative routes for the proposed 230-kV transmission line between the existing Wolfforth Substation and the existing Carlisle Substation, and to recommend the routes having the least adverse environmental impacts. The Environmental Consultants, with review and assistance from SPS, evaluated numerous preliminary alternative route segments for the proposed transmission line project, based on environmental/land use criteria and agency and public input. The resulting potential route segments were presented to the general public at an open-house meeting held on April 17, 2014. As a result of these evaluations and public input received at the open house, SPS and the Environmental Consultants selected 14 primary alternative routes for further analysis. These 14 primary routes were subjected to a detailed environmental analysis by the Environmental Consultants and to an engineering, cost, and future needs analysis by SPS.

6.1 Consultant's Environmental Evaluation

The Environmental Consultants completed the environmental analysis of the 14 primary alternative routes (Section 4.0), the results of which are shown in Table 6-1. The environmental evaluation was a comparison of alternatives strictly from an environmental viewpoint, based upon the measurement of 41 separate environmental criteria and the consensus opinion of the Environmental Consultants' group of evaluators. SPS used this information along with engineering, construction, maintenance, and operational factors to select the route that they felt best addresses the requirements of PURA and PUC Substantive Rules. A discussion of SPS's route selection is presented in Section 6.2. The Environmental Consultants' evaluation is discussed below.

The Environmental Consultants used a consensus process to evaluate the potential impact of the 14 alternative routes. Professionals with expertise in different environmental disciplines (terrestrial and aquatic ecology, land use/planning, and cultural resources) evaluated the 14 alternative routes. This evaluation was based on data collected for 41 separate environmental criteria for the primary alternative routes, as well as comments from local, state, and federal agencies; public involvement; field reconnaissance of the study area and alternative routes; and the general routing methodology used by the Environmental Consultants and SPS. Each person on the evaluation team independently analyzed the routes and the environmental data presented in Table 6-1. The evaluators then discussed their independent results. The relationship and relative sensitivity among the major environmental factors were determined by the group as a whole. The group then selected a route that best satisfies a balance between the major environmental factors, as well as alternate routes, all based strictly upon the environmental data.

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OVERSIZED SPREADSHEET Table 6-1

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During the initial discussion of the 14 primary alternative routes, it was the opinion of the group that each of the alternative routes would be an environmentally acceptable alternative for this project. The final decision in the selection of a recommended route was reached by comparing the advantages and disadvantages of these routes and recommending one route with the least impact.

Because there was no upland or riparian woodland crossed by any of the alternative routes, the ecology evaluator reviewed length of ROW across potential wetlands (mainly associated with playa lakes), length of ROW over open water, number of playa lake crossings, and overall length as the primary ecological criteria. In the ecology evaluator's professional opinion, Route G is the preferred route from an ecological perspective, because it only crosses 0.09 mile of potential wetlands, does not intersect any streams/rivers, crosses the second-least amount of open water (0.14 mile), crosses the second-fewest number of mapped playa lakes (two), and is the third-shortest alternative route (11.66 miles). Additionally, it does not cross any documented prairie dog towns. By comparison, Route C is the least desirable from an ecological standpoint; it crosses the greatest number of playa lakes (six), has the greatest distance across potential wetlands (0.20 mile), and open water (0.63 mile), and is the longest alternative route (22.94 miles).

Since the Wolfforth Cemetery is the only known cultural resource within 1,000 ft of any of the routes (routes E and F only), and is unlikely to be impacted during construction of any of the alternative routes, the primary consideration in the ranking of the alternatives from a cultural resources perspective was primarily based on the amount of HPA for cultural resources estimated along each route. The most favorable route from a cultural resources perspective is Route L, which had the second-least amount of HPA (3.46 miles). Only Route F had less HPA (3.38 miles), but the cultural resources evaluator considered the potential aesthetic impacts of Route F at the Wolfforth Cemetery.

Particular criteria considered important in the evaluation of potential impacts to land use included the total number of habitable structures located within 300 ft, the number of newly affected habitable structures within 300 ft, length parallel to existing transmission line ROW, length parallel to other compatible ROW, the overall length of the alternative routes, and potential impacts to recreational resources. Consideration was also given to the sensitivity of routing in close proximity to the Frenship ISD campuses and facilities, and other community values. In aggregate, the best route from a land use perspective is Route L. It ranked first for the number of habitable structures located within 300 ft (41), and first for the number of newly affected habitable structures within 300 ft (15). By comparison, although Route F is the second-shortest alternative (11.10 miles), it has the greatest number of habitable structures located within 300 ft of its centerline (158), 92 of which are newly affected.

Following the evaluation by discipline, the group of evaluators discussed the relative importance and sensitivity of each set of criteria (human, cultural, and natural resources) as applied to the 14 primary routes and the study area. It was the opinion of the group of evaluators that land use criteria should be the primary route selection factors for this project based on the relative lack of ecological resources or cultural resources present, and the significant amount of land use constraints present due to the developed nature of the study area. Following this decision, the group selected Route L as the consensus route that best addresses the requirements of PURA and PUC Substantive Rules and then agreed on a consensus ranking for the remaining alternatives, starting with the alternative route that has the least impact. This ranking is shown in Table 6-2. The decision to recommend Route L was based primarily on the following advantages among the objective criteria. Route L:

- has the fewest habitable structures (41) within 300 ft of its centerline;
- has the fewest number of newly affected habitable structures (15) within 300 ft of its centerline;
- is the seventh-shortest route;
- parallels existing transmission line ROW and compatible ROW for 8.42 miles (65% of its total length);
- parallels property lines for approximately 3.24 miles (25% of its total length);
- does not cross potential wetlands;
- crosses the second-least amount of 100-year floodplain (0.95 mile); and
- crosses the second-least amount of HPA for cultural resources (3.46 miles).

Therefore, based upon their evaluation of this particular project and their experience and expertise in transmission line routing, the Environmental Consultants rank Route L as the route that best satisfies the criteria specified in PURA § 37.056(c)(4) and PUC Substantive Rule 25.101(b)(3)(B) for consideration in the granting of CCNs.

Figures 6-1a–6-1c (map pockets) show the approximate locations of habitable structures and other land use features in the vicinity of the primary alternative routes. Habitable structures and other land use features, such as airports, parks/recreation areas, electronic communications towers, etc. are listed and described with respect to their distance from each primary alternative route in tables 6-3 through 6-16.

Table 6-2: Environmental Consultants' Ranking (by Route)
Wolfforth to Carlisle 230-kV Transmission Line Project
Hockley and Lubbock Counties, Texas

Ranking	Land Use	Ecology	Cultural Resources	Consensus
1st	L	G	L	L
2nd	M	N	J	K
3rd	K	F	F	J
4th	J	K	N	M
5th	I	J	K	I
6th	N	L	G	N
7th	G	I	M	G
8th	H	H	I	H
9th	E	M	H	E
10th	D	B	E	D
11th	A	A	A	B
12th	B	D	B	A
13th	C	E	D	C
14th	F	C	C	F

6.2 SPS's Route Selection

SPS selected Route L as the route it believes best addresses the requirements of PURA and PUC Substantive Rules, based on a review of potential environmental impacts, land use, community values, estimated costs, and landowner input. SPS did not find any engineering constraints, maintenance or construction concerns, or any system operating conditions that would alter its selection of Route L. Although SPS recommends Route L, it can construct and operate any of the routes proposed in this application.

Table 6-3: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route A

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
3	Single-family residence	293	SW
4	Single-family residence	232	SW
5	Commercial	300	SW
6	Single-family residence	220	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	174	N
162	Mobile home	247	N
163	Mobile home	257	N
164	Mobile home	164	N
165	Mobile home	188	S
166	Single-family residence	190	S
167	Mobile home	103	S
168	Single-family residence	143	S
169	Single-family residence	195	S
170	Single-family residence	86	S
247	Single-family residence	200	E
248	Mobile home	104	W
249	Single-family residence	193	W
250	Mobile home	254	W
251	Mobile home	236	W
252	Mobile home	225	W
253	Single-family residence	179	W
254	Single-family residence	246	W
255	Single-family residence	208	W
256	Mobile home	229	W
257	Mobile home	233	W
258	Single-family residence	183	E
259	Single-family residence	254	E
260	Single-family residence	158	E
261	Single-family residence	104	NW
262	Single-family residence	202	W

Table 6-3 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
263	Single-family residence	253	W
264	Single-family residence	187	N
292	Single-family residence	274	S
354	Single-family residence	165	N
355	Single-family residence	200	N
356	Single-family residence	225	N
357	Mobile home	219	N
358	Single-family residence	237	N
359	Single-family residence	273	N
402	Single-family residence	218	E
403	Single-family residence	216	E
404	Single-family residence	218	E
405	Single-family residence	219	E
406	Single-family residence	208	E
407	Single-family residence	190	E
408	Single-family residence	295	E
409	Single-family residence	196	E
410	Single-family residence	286	E
411	Single-family residence	194	E
412	Single-family residence	298	E
413	Single-family residence	190	E
414	Single-family residence	299	E
415	Single-family residence	191	E
416	Single-family residence	291	E
417	Single-family residence	195	E
418	Single-family residence	274	NW
500	Cell Tower	165	S
515	Reese Airpark	5,843	E

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-4: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route B

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
3	Single-family residence	293	SW
4	Single-family residence	232	SW
5	Commercial	300	SW
6	Single-family residence	220	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	174	N
162	Mobile home	247	N
163	Mobile home	257	N
164	Mobile home	164	N
165	Mobile home	188	S
166	Single-family residence	190	S
167	Mobile home	103	S
168	Single-family residence	143	S
169	Single-family residence	195	S
170	Single-family residence	86	S
247	Single-family residence	200	E
248	Mobile home	104	W
249	Single-family residence	193	W
250	Mobile home	254	W
251	Mobile home	236	W
252	Mobile home	225	W
253	Single-family residence	179	W
254	Single-family residence	246	W
255	Single-family residence	208	W
256	Mobile home	229	W
257	Mobile home	233	W
258	Single-family residence	183	E
259	Single-family residence	254	E
260	Single-family residence	158	E
261	Single-family residence	104	NW
264	Single-family residence	187	N

Table 6-4 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
292	Single-family residence	274	S
354	Single-family residence	165	N
355	Single-family residence	292	NE
366	Single-family residence	224	SW
367	Single-family residence	136	SW
368	Mobile home	296	S
402	Single-family residence	218	E
403	Single-family residence	216	E
404	Single-family residence	218	E
405	Single-family residence	219	E
406	Single-family residence	208	E
407	Single-family residence	190	E
408	Single-family residence	295	E
409	Single-family residence	196	E
410	Single-family residence	286	E
411	Single-family residence	194	E
412	Single-family residence	298	E
413	Single-family residence	190	E
414	Single-family residence	299	E
415	Single-family residence	191	E
416	Single-family residence	291	E
417	Single-family residence	195	E
418	Single-family residence	274	NW
500	Cell Tower	165	S
515	Reese Airpark	3,010	S

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-5: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route C

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
3	Single-family residence	293	SW
4	Single-family residence	232	SW
5	Commercial	300	SW
6	Single-family residence	220	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	174	N
162	Mobile home	247	N
163	Mobile home	257	N
164	Mobile home	164	N
165	Mobile home	188	S
166	Single-family residence	190	S
167	Mobile home	103	S
168	Single-family residence	143	S
169	Single-family residence	195	S
170	Single-family residence	86	S
247	Single-family residence	200	E
248	Mobile home	104	W
249	Single-family residence	193	W
250	Mobile home	254	W
251	Mobile home	236	W
252	Mobile home	225	W
253	Single-family residence	179	W
254	Single-family residence	246	W
255	Single-family residence	208	W
256	Mobile home	229	W
257	Mobile home	233	W
258	Single-family residence	183	E
259	Single-family residence	254	E
260	Single-family residence	158	E
261	Single-family residence	104	NW
262	Single-family residence	202	W

Table 6-5 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
263	Single-family residence	253	W
265	Single-family residence	156	N
278	Single-family residence	195	W
280	Single-family residence	202	S
281	Mobile home	160	S
282	Mobile home	203	S
283	Mobile home	222	S
284	Single-family residence	180	S
285	Single-family residence	283	S
286	Single-family residence	172	S
287	Mobile home	165	S
288	Mobile home	280	S
289	Mobile home	194	S
290	Mobile home	297	S
291	Single-family residence	207	S
292	Single-family residence	272	S
354	Single-family residence	165	N
355	Single-family residence	200	N
356	Single-family residence	225	N
357	Mobile home	219	N
358	Single-family residence	237	N
359	Single-family residence	273	N
402	Single-family residence	218	E
403	Single-family residence	216	E
404	Single-family residence	218	E
405	Single-family residence	219	E
406	Single-family residence	208	E
407	Single-family residence	190	E
408	Single-family residence	295	E
409	Single-family residence	196	E
410	Single-family residence	286	E
411	Single-family residence	194	E
412	Single-family residence	298	E
413	Single-family residence	190	E
414	Single-family residence	299	E
415	Single-family residence	191	E

Table 6-5 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
416	Single-family residence	291	E
417	Single-family residence	195	E
418	Single-family residence	274	NW
500	Cell Tower	165	S
515	Reese Airpark	5,466	S

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-6: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route D

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	174	N
162	Mobile home	247	N
163	Mobile home	257	N
164	Mobile home	164	N
165	Mobile home	188	S
166	Single-family residence	190	S
167	Mobile home	103	S
168	Single-family residence	143	S
169	Single-family residence	195	S
170	Single-family residence	86	S
247	Single-family residence	200	E
248	Mobile home	104	W
249	Single-family residence	193	W
250	Mobile home	254	W
251	Mobile home	236	W
252	Mobile home	225	W
253	Single-family residence	179	W
254	Single-family residence	246	W
255	Single-family residence	208	W
256	Mobile home	229	W
257	Mobile home	233	W
258	Single-family residence	183	E
259	Single-family residence	254	E
260	Single-family residence	158	E
261	Single-family residence	104	NW
266	Single-family residence	214	N
267	Single-family residence	274	S
268	Mobile home	162	S

Table 6-6 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
269	Single-family residence	281	S
270	Single-family residence	199	S
271	Single-family residence	232	S
272	Single-family residence	176	S
273	Single-family residence	174	S
274	Mobile home	255	S
275	Single-family residence	165	S
276	Single-family residence	163	S
277	Single-family residence	179	S
278	Single-family residence	110	N
279	Commercial	260	S
280	Single-family residence	202	S
281	Mobile home	160	S
282	Mobile home	203	S
283	Mobile home	222	S
284	Single-family residence	180	S
285	Single-family residence	283	S
286	Single-family residence	172	S
287	Mobile home	165	S
288	Mobile home	280	S
289	Mobile home	194	S
290	Mobile home	297	S
291	Single-family residence	207	S
292	Single-family residence	272	S
354	Single-family residence	165	N
355	Single-family residence	292	NE
366	Single-family residence	224	SW
367	Single-family residence	136	SW
368	Mobile home	149	W
369	Mobile home	268	W
370	Mobile home	152	W
371	Single-family residence	177	W
372	Single-family residence	176	W
373	Mobile home	182	W
374	Mobile home	172	W
375	Mobile home	164	W

Table 6-6 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
376	Single-family residence	167	W
377	Single-family residence	176	W
378	Single-family residence	191	W
399	Single-family residence	193	S
400	Single-family residence	180	S
401	Single-family residence	178	S
418	Single-family residence	188	N
500	Cell Tower	165	S
515	Reese Airpark	3,010	S

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-7: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route E

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	174	N
162	Mobile home	247	N
163	Mobile home	257	N
164	Mobile home	164	N
165	Mobile home	188	S
166	Single-family residence	190	S
167	Mobile home	103	S
168	Single-family residence	143	S
169	Single-family residence	195	S
170	Single-family residence	86	S
247	Single-family residence	200	E
248	Mobile home	104	W
249	Single-family residence	193	W
250	Mobile home	254	W
251	Mobile home	236	W
252	Mobile home	225	W
253	Single-family residence	179	W
254	Single-family residence	246	W
255	Single-family residence	208	W
256	Mobile home	229	W
257	Mobile home	233	W
258	Single-family residence	183	E
259	Single-family residence	254	E
260	Single-family residence	158	E
261	Single-family residence	104	NW
266	Single-family residence	214	N
267	Single-family residence	182	E
268	Mobile home	270	E

Table 6-7 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
293	Mobile home	181	E
295	Single-family residence	243	E
296	Single-family residence	183	E
297	Single-family residence	156	E
298	Single-family residence	156	E
299	Single-family residence	156	E
300	Single-family residence	133	E
301	Single-family residence	141	E
302	Single-family residence	157	E
303	Single-family residence	204	E
304	Single-family residence	153	S
305	Single-family residence	255	S
306	Mobile home	105	S
307	Mobile home	230	E
308	Commercial	188	E
309	Single-family residence	177	S
360	Single-family residence	99	S
361	Single-family residence	125	S
362	Single-family residence	130	S
363	Mobile home	164	S
364	Mobile home	150	S
365	Mobile home	127	S
366	Single-family residence	148	S
367	Single-family residence	136	SW
368	Mobile home	149	W
369	Mobile home	268	W
370	Mobile home	152	W
371	Single-family residence	177	W
372	Single-family residence	176	W
373	Mobile home	182	W
374	Mobile home	172	W
375	Mobile home	164	W
376	Single-family residence	167	W
377	Single-family residence	176	W
378	Single-family residence	191	W
399	Single-family residence	193	S

Table 6-7 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
400	Single-family residence	180	S
401	Single-family residence	178	S
418	Single-family residence	188	N
500	Cell Tower	470	W
513	Cell Tower American Towers, LLC 1	610	S
514	South Plains Gun Club	361	N
515	Reese Airpark	3,010	S

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-8: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route F

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
7	Single-family residence	176	E
8	Commercial (Wolfforth Rail Depot Station)	192	S
9	Commercial	273	S
10	Single-family residence	275	N
11	Commercial (City of Wolfforth Groundwater Storage Booster Station)	282	S
12	Single-family residence	263	S
13	Commercial (J-Mar Supply; Advanced Lawn & Landscapes; Excellent Lawn & Landscapes)	252	S
14	Single-family residence	283	S
15	Single-family residence	258	S
16	Single-family residence	259	S
17	Single-family residence	253	S
18	Single-family residence	280	S
19	Single-family residence	289	S
20	Single-family residence	286	S
21	Single-family residence	239	S
22	Commercial (ABC Bank)	88	S
23	Bennett Elementary School	288	N
24	Bennett Elementary School	225	N
25	Bennett Elementary School	262	N
26	Commercial (XCEL Trailers)	118	E
27	Single-family residence	109	E
28	Single-family residence	113	E
29	Single-family residence	296	E
30	Single-family residence	99	E
31	Single-family residence	100	E
32	Single-family residence	94	E
33	Single-family residence	193	E
34	Single-family residence	196	E
35	Single-family residence	243	E
36	Single-family residence	143	E
37	Single-family residence	283	W
38	Single-family residence	244	W

Table 6-8 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
39	Single-family residence	191	W
40	Single-family residence	162	W
41	Single-family residence	164	W
42	Single-family residence	161	W
43	Single-family residence	155	W
44	Single-family residence	163	W
45	Single-family residence	146	W
46	Single-family residence	166	W
47	Single-family residence	157	W
48	Single-family residence	142	W
49	Single-family residence	166	W
50	Single-family residence	133	W
51	Single-family residence	149	W
52	Mobile home	238	E
53	Mobile home	275	E
54	Single-family residence	268	E
55	Single-family residence	235	E
56	Single-family residence	199	E
57	Single-family residence	247	E
58	Single-family residence	212	E
59	Single-family residence	175	E
60	Commercial (Texas Tech Equestrian Center)	164	W
61	Single-family residence	264	W
62	Single-family residence	274	W
63	Single-family residence	294	W
64	Single-family residence	266	W
114	Single-family residence	298	SE
115	Mobile home	141	E
116	Single-family residence	131	E
117	Commercial	140	E
118	Commercial	170	E
119	Commercial (vacant)	53	E
120	Single-family residence	173	W
179	Single-family residence	123	N
180	Single-family residence	125	N
181	Single-family residence	123	N

Table 6-8 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
182	Single-family residence	125	N
183	Single-family residence	126	N
184	Single-family residence	172	N
185	Mobile home	279	N
186	Single-family residence	112	N
187	Single-family residence	115	N
188	Single-family residence	115	N
189	Single-family residence	296	N
190	Single-family residence	121	N
191	Single-family residence	159	N
192	Single-family residence	105	N
193	Single-family residence	81	N
194	Single-family residence	60	N
195	Single-family residence	96	N
196	Single-family residence	167	N
197	Single-family residence	232	N
198	Single-family residence	259	N
199	Single-family residence	293	N
200	Single-family residence	123	S
201	Single-family residence	131	S
202	Single-family residence	228	S
203	Single-family residence	174	S
204	Single-family residence	154	S
205	Single-family residence	283	S
206	Mobile home	254	E
207	Mobile home	224	E
208	Mobile home	233	E
209	Mobile home	225	E
210	Mobile home	231	E
211	Mobile home	217	E
212	Mobile home	251	E
213	Mobile home	300	E
214	Mobile home	300	E
215	Mobile home	236	E
216	Mobile home	215	E
217	Mobile home	223	E

Table 6-8 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
218	Mobile home	221	E
219	Mobile home	222	E
220	Mobile home	226	E
221	Mobile home	232	E
222	Mobile home	279	E
223	Mobile home	244	E
224	Mobile home	220	E
225	Mobile home	246	E
226	Mobile home	238	E
227	Mobile home	252	E
228	Mobile home	299	E
229	Mobile home	293	E
230	Mobile home	253	E
231	Mobile home	229	E
232	Mobile home	272	E
233	Mobile home	293	E
234	Mobile home	255	E
235	Mobile home	224	E
236	Mobile home	237	E
237	Mobile home	235	E
238	Mobile home	236	E
239	Mobile home	287	E
240	Mobile home	217	E
241	Mobile home	243	E
242	Mobile home	219	E
243	Mobile home	231	E
244	Mobile home	235	E
245	Mobile home	281	E
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E

Table 6-8 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	401	W
501	Wolfforth Cemetery	380	E
503	Frenship Middle School Athletic Fields	107	S
504	Frenship Middle School Tennis Courts	827	S
505	Cell Tower (American Towers, LLC)	658	S
506	Cell Tower (All Tell Communications LLC)	289	S
507	Frenship High School Athletic Fields	19	N
508	Frenship High School Football Stadium	943	N
509	Bennett Elementary School Athletic Fields	0	W
511	FM Tower (K253BD)	1,451	W
515	Reese Airpark	16,983	W

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-9: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route G

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
7	Single-family residence	176	E
75	Mobile home	258	W
76	Mobile home	183	W
77	Single-family residence	276	W
78	Mobile home	207	W
79	Mobile home	206	W
80	Single-family residence	235	W
81	Single-family residence	251	W
82	Single-family residence	251	W
83	Single-family residence	239	W
84	Single-family residence	235	W
85	Single-family residence	249	W
86	Mobile home	242	W
87	Mobile home	228	W
88	Single-family residence	209	W
89	Single-family residence	225	W
95	Single-family residence	242	N
96	Single-family residence	240	N
97	Single-family residence	191	S
98	Single-family residence	172	S
99	Single-family residence	292	S
100	Single-family residence	153	S
101	Single-family residence	289	S
102	Single-family residence	173	S
103	Single-family residence	268	S
104	Single-family residence	164	S
105	Single-family residence	284	S
106	Single-family residence	211	N
107	Single-family residence	295	S
108	Single-family residence	259	S
109	Single-family residence	274	S
110	Single-family residence	284	S
111	Single-family residence	283	S
112	Single-family residence	279	N

Table 6-9 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
113	Single-family residence	299	N
114	Single-family residence	298	SE
115	Mobile home	141	E
116	Single-family residence	131	E
117	Commercial	140	E
118	Commercial	170	E
119	Commercial (vacant)	53	E
120	Single-family residence	173	W
179	Single-family residence	123	N
180	Single-family residence	125	N
181	Single-family residence	123	N
182	Single-family residence	125	N
183	Single-family residence	126	N
184	Single-family residence	172	N
185	Mobile home	279	N
186	Single-family residence	112	N
187	Single-family residence	115	N
188	Single-family residence	115	N
189	Single-family residence	296	N
190	Single-family residence	121	N
191	Single-family residence	159	N
192	Single-family residence	105	N
193	Single-family residence	81	N
194	Single-family residence	60	N
195	Mobile home	96	N
196	Single-family residence	167	N
197	Single-family residence	232	N
198	Single-family residence	259	N
199	Single-family residence	293	N
200	Single-family residence	123	S
201	Single-family residence	131	S
202	Single-family residence	228	S
203	Single-family residence	174	S
204	Single-family residence	154	S
205	Single-family residence	283	S
206	Mobile home	254	E

Table 6-9 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
207	Mobile home	224	E
208	Mobile home	233	E
209	Mobile home	225	E
210	Mobile home	231	E
211	Mobile home	217	E
212	Mobile home	251	E
213	Mobile home	300	E
214	Mobile home	300	E
215	Mobile home	236	E
216	Mobile home	215	E
217	Mobile home	223	E
218	Mobile home	221	E
219	Mobile home	222	E
220	Mobile home	226	E
221	Mobile home	232	E
222	Mobile home	279	E
223	Mobile home	244	E
224	Mobile home	220	E
225	Mobile home	246	E
226	Mobile home	238	E
227	Mobile home	252	E
228	Mobile home	299	E
229	Mobile home	293	E
230	Mobile home	253	E
231	Mobile home	229	E
232	Mobile home	272	E
233	Mobile home	293	E
234	Mobile home	255	E
235	Mobile home	224	E
236	Mobile home	237	E
237	Mobile home	235	E
238	Mobile home	236	E
239	Mobile home	287	E
240	Mobile home	217	E
241	Mobile home	243	E
242	Mobile home	219	E

Table 6-9 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
243	Mobile home	231	E
244	Mobile home	235	E
245	Mobile home	281	E
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	401	W
501	Wolfforth Cemetery	380	E
511	FM Tower (K253BD)	1,451	W
515	Reese Airpark	12,467	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-10: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route H

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
75	Mobile home	258	W
76	Mobile home	183	W
77	Single-family residence	276	W
78	Mobile home	207	W
79	Mobile home	206	W
80	Single-family residence	235	W
81	Single-family residence	251	W
82	Single-family residence	251	W
83	Single-family residence	239	W
84	Single-family residence	235	W
85	Single-family residence	249	W
86	Mobile home	242	W
87	Mobile home	228	W
88	Single-family residence	209	W
89	Single-family residence	225	W
90	Multi-family residence (2 units)	208	W
91	Multi-family residence (2 units)	214	W
92	Multi-family residence (2 units)	208	W
93	Multi-family residence (2 units)	211	W
94	Multi-family residence (2 units)	208	W
120	Single-family residence	196	S
121	Commercial (Sun Star Electric)	158	N
122	Commercial	271	N
123	Mobile home	255	S
124	Mobile home	292	S
125	Mobile home	266	S
126	Mobile home	291	S
127	Mobile home	272	S
128	Mobile home	300	S
129	Mobile home	271	S
130	Mobile home	298	S
131	Mobile home	148	S

Table 6-10 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
132	Mobile home	158	S
133	Mobile home	152	S
134	Mobile home	149	S
135	Mobile home	143	S
136	Mobile home	149	S
137	Mobile home	151	S
138	Mobile home	152	S
139	Mobile home	143	S
140	Mobile home	189	S
141	Mobile home	222	S
142	Mobile home	256	S
143	Mobile home	286	S
144	Commercial (vacant)	108	SE
145	Single-family residence	176	N
146	Single-family residence	286	N
147	Single-family residence	182	N
148	Single-family residence	182	N
149	Single-family residence	298	N
150	Single-family residence	189	N
151	Single-family residence	299	N
152	Single-family residence	164	N
153	Single-family residence	291	N
154	Single-family residence	179	N
155	Single-family residence	290	N
156	Mobile home	199	W
157	Single-family residence	188	W
179	Single-family residence	123	N
180	Single-family residence	125	N
181	Single-family residence	123	N
182	Single-family residence	125	N
183	Single-family residence	126	N
184	Single-family residence	172	N
185	Mobile home	279	N
186	Single-family residence	112	N
187	Single-family residence	115	N
188	Single-family residence	115	N

Table 6-10 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
189	Single-family residence	296	N
190	Single-family residence	121	N
191	Single-family residence	159	N
192	Single-family residence	105	N
193	Single-family residence	81	N
194	Single-family residence	60	N
195	Mobile home	96	N
196	Single-family residence	167	N
197	Single-family residence	232	N
198	Single-family residence	259	N
199	Single-family residence	293	N
200	Single-family residence	123	S
201	Single-family residence	131	S
202	Single-family residence	228	S
203	Single-family residence	174	S
204	Single-family residence	154	S
205	Single-family residence	283	S
206	Mobile home	254	E
207	Mobile home	224	E
208	Mobile home	233	E
209	Mobile home	225	E
210	Mobile home	231	E
211	Mobile home	217	E
212	Mobile home	251	E
213	Mobile home	300	E
214	Mobile home	300	E
215	Mobile home	236	E
216	Mobile home	215	E
217	Mobile home	223	E
218	Mobile home	221	E
219	Mobile home	222	E
220	Mobile home	226	E
221	Mobile home	232	E
222	Mobile home	279	E
223	Mobile home	244	E
224	Mobile home	220	E

Table 6-10 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
225	Mobile home	246	E
226	Mobile home	238	E
227	Mobile home	252	E
228	Mobile home	299	E
229	Mobile home	293	E
230	Mobile home	253	E
231	Mobile home	229	E
232	Mobile home	272	E
233	Mobile home	293	E
234	Mobile home	255	E
235	Mobile home	224	E
236	Mobile home	237	E
237	Mobile home	235	E
238	Mobile home	236	E
239	Mobile home	287	E
240	Mobile home	217	E
241	Mobile home	243	E
242	Mobile home	219	E
243	Mobile home	231	E
244	Mobile home	235	E
245	Mobile home	281	E
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E

Table 6-10 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	470	W
510	Cell Tower	554	S
511	FM Tower (K253BD)	1,451	W
515	Reese Airpark	7,376	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-11: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route I

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
68	Single-family residence	131	W
69	Single-family residence	269	NW
70	Single-family residence	195	N
71	Single-family residence	126	N
72	Single-family residence	249	N
73	Single-family residence	214	N
74	Single-family residence	228	N
75	Mobile home	258	W
76	Mobile home	183	W
77	Single-family residence	276	W
78	Mobile home	207	W
79	Mobile home	206	W
80	Single-family residence	235	W
81	Single-family residence	251	W
82	Single-family residence	251	W
83	Single-family residence	239	W
84	Single-family residence	235	W
85	Single-family residence	249	W
86	Mobile home	242	W
87	Mobile home	228	W
88	Single-family residence	209	W
89	Single-family residence	225	W
90	Multi-family residence (2 units)	208	W
91	Multi-family residence (2 units)	214	W
92	Multi-family residence (2 units)	208	W
93	Multi-family residence (2 units)	211	W
94	Multi-family residence (2 units)	208	W
156	Mobile home	199	W
157	Single-family residence	188	W
178	Single-family residence	176	W
310	Single-family residence	223	S
311	Single-family residence	279	S

Table 6-11 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
312	Single-family residence	99	S
313	Single-family residence	151	S
314	Single-family residence	173	S
315	Single-family residence	225	S
316	Single-family residence	226	S
317	Single-family residence	220	S
318	Single-family residence	208	N
319	South Plains Hebraic Center	152	N
320	Single-family residence	209	N
321	Single-family residence	209	N
322	Single-family residence	222	N
326	Single-family residence	232	N
327	Terra Vista Middle School	288	N
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E

Table 6-11 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	165	S
502	Willow Bend Elementary School Athletic Field	595	SE
512	Terra Vista Middle School Athletic Fields	581	N
515	Reese Airpark	5,004	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-12: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route J

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
156	Mobile home	244	S
157	Single-family residence	160	S
158	Single-family residence	255	S
159	Commercial (Lokey Construction Office)	111	S
160	Single-family residence	186	W
161	Mobile home	293	NW
178	Single-family residence	176	W
310	Single-family residence	223	S
311	Single-family residence	279	S
312	Single-family residence	99	S
313	Single-family residence	151	S
314	Single-family residence	173	S
315	Single-family residence	225	S
316	Single-family residence	226	S
317	Single-family residence	220	S
318	Single-family residence	208	N
319	South Plains Hebraic Center	152	N
320	Single-family residence	209	N
321	Single-family residence	209	N
322	Single-family residence	222	N
326	Single-family residence	232	N
327	Terra Vista Middle School	288	N
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E

Table 6-12 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	165	S
502	Willow Bend Elementary School Athletic Field	595	SE
512	Terra Vista Middle School Athletic Fields	581	N
515	Reese Airpark	5,004	NW

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-13: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route K

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
144	Commercial (vacant)	108	SE
145	Single-family residence	176	N
146	Single-family residence	286	N
147	Single-family residence	182	N
148	Single-family residence	182	N
149	Single-family residence	298	N
150	Single-family residence	189	N
151	Single-family residence	299	N
152	Single-family residence	164	N
153	Single-family residence	291	N
154	Single-family residence	179	N
155	Single-family residence	290	N
156	Mobile home	244	S
157	Single-family residence	160	S
158	Single-family residence	255	S
159	Commercial (Lokey Construction Office)	111	S
160	Single-family residence	186	W
161	Mobile home	293	NE
246	Single-family residence	181	W
326	Single-family residence	232	N
327	Terra Vista Middle School	288	N
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E

Table 6-13 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	165	S
512	Terra Vista Middle School Athletic Fields	581	N
515	Reese Airpark	6,367	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-14: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route L

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
156	Mobile home	244	S
157	Single-family residence	160	S
158	Single-family residence	255	S
159	Commercial (Lokey Construction Office)	111	S
160	Single-family residence	186	W
161	Mobile home	293	NW
178	Single-family residence	176	W
246	Single-family residence	181	W
326	Single-family residence	232	N
327	Terra Vista Middle School	288	N
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E

Table 6-14 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	165	S
512	Terra Vista Middle School Athletic Fields	581	N
515	Reese Airpark	5,004	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-15: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route M

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
1	Single-family residence	217	W
2	Single-family residence	138	W
65	Single-family residence	181	W
66	Single-family residence	176	W
67	Single-family residence	193	W
160	Single-family residence	186	W
161	Mobile home	197	W
171	Single-family residence	217	W
172	Single-family residence	164	N
173	Single-family residence	191	N
174	Single-family residence	65	N
175	Single-family residence	217	N
176	Mobile home	211	N
177	Single-family residence	170	N
246	Single-family residence	181	W
323	Single-family residence	248	NW
324	Single-family residence	170	N
325	Single-family residence	169	N
377	Single-family residence	270	N
378	Single-family residence	82	N
379	Single-family residence	40	N
380	Mobile home	283	N
381	Mobile home	285	N
382	Mobile home	272	N
383	Mobile home	258	N
384	Mobile home	162	N
385	Mobile home	117	N
386	Mobile home	297	S
387	Mobile home	224	S
388	Mobile home	155	S
389	Mobile home	158	S
390	Mobile home	154	S
391	Mobile home	223	S
392	Mobile home	157	S

Table 6-15 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
393	Mobile home	167	S
394	Mobile home	184	S
395	Mobile home	233	S
396	Mobile home	266	S
397	Mobile home	291	S
398	Mobile home	296	S
399	Single-family residence	193	S
400	Single-family residence	180	S
401	Single-family residence	178	S
418	Single-family residence	188	N
500	Cell Tower	165	S
515	Reese Airpark	3,759	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

Table 6-16: Habitable Structures and Other Land Use Features in the Vicinity of Alternative Route N

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
75	Mobile home	258	W
76	Mobile home	183	W
77	Single-family residence	276	W
78	Mobile home	207	W
79	Mobile home	206	W
80	Single-family residence	235	W
81	Single-family residence	251	W
82	Single-family residence	251	W
83	Single-family residence	239	W
84	Single-family residence	235	W
85	Single-family residence	249	W
86	Mobile home	242	W
87	Mobile home	228	W
88	Single-family residence	209	W
89	Single-family residence	225	W
95	Single-family residence	242	N
96	Single-family residence	240	N
97	Single-family residence	191	S
98	Single-family residence	172	S
99	Single-family residence	292	S
100	Single-family residence	153	S
101	Single-family residence	289	S
102	Single-family residence	173	S
103	Single-family residence	268	S
104	Single-family residence	164	S
105	Single-family residence	284	S
106	Single-family residence	211	N
107	Single-family residence	295	S
108	Single-family residence	259	S
109	Single-family residence	274	S
110	Single-family residence	284	S
111	Single-family residence	283	S
112	Single-family residence	279	N
113	Single-family residence	299	N

Table 6-16 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
114	Single-family residence	298	SE
115	Mobile home	141	E
116	Single-family residence	131	E
117	Commercial	140	E
118	Commercial	170	E
119	Commercial (vacant)	53	E
120	Single-family residence	173	W
179	Single-family residence	123	N
180	Single-family residence	125	N
181	Single-family residence	123	N
182	Single-family residence	125	N
183	Single-family residence	126	N
184	Single-family residence	172	N
185	Mobile home	279	N
186	Single-family residence	112	N
187	Single-family residence	115	N
188	Single-family residence	115	N
189	Single-family residence	296	N
190	Single-family residence	121	N
191	Single-family residence	159	N
192	Single-family residence	105	N
193	Single-family residence	81	N
194	Single-family residence	60	N
195	Mobile home	96	N
196	Single-family residence	167	N
197	Single-family residence	232	N
198	Single-family residence	259	N
199	Single-family residence	293	N
200	Single-family residence	123	S
201	Single-family residence	131	S
202	Single-family residence	228	S
203	Single-family residence	174	S
204	Single-family residence	154	S
205	Single-family residence	283	S
206	Mobile home	254	E
207	Mobile home	224	E

Table 6-16 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
208	Mobile home	233	E
209	Mobile home	225	E
210	Mobile home	231	E
211	Mobile home	217	E
212	Mobile home	251	E
213	Mobile home	300	E
214	Mobile home	300	E
215	Mobile home	236	E
216	Mobile home	215	E
217	Mobile home	223	E
218	Mobile home	221	E
219	Mobile home	222	E
220	Mobile home	226	E
221	Mobile home	232	E
222	Mobile home	279	E
223	Mobile home	244	E
224	Mobile home	220	E
225	Mobile home	246	E
226	Mobile home	238	E
227	Mobile home	252	E
228	Mobile home	299	E
229	Mobile home	293	E
230	Mobile home	253	E
231	Mobile home	229	E
232	Mobile home	272	E
233	Mobile home	293	E
234	Mobile home	255	E
235	Mobile home	224	E
236	Mobile home	237	E
237	Mobile home	235	E
238	Mobile home	236	E
239	Mobile home	287	E
240	Mobile home	217	E
241	Mobile home	243	E
242	Mobile home	219	E
243	Mobile home	231	E

Table 6-16 (Cont'd)

Feature ID Number[1]	Structure/Feature	Distance from Centerline (ft)	Direction
244	Mobile home	235	E
245	Mobile home	281	E
328	Single-family residence	217	E
329	Single-family residence	221	E
330	Single-family residence	215	E
331	Single-family residence	218	E
332	Single-family residence	217	E
333	Single-family residence	215	E
334	Single-family residence	219	E
335	Single-family residence	215	E
336	Single-family residence	208	E
337	Single-family residence	271	E
338	Single-family residence	206	E
339	Single-family residence	270	E
340	Single-family residence	203	E
341	Single-family residence	269	E
342	Single-family residence	206	E
343	Single-family residence	267	E
344	Single-family residence	202	E
345	Single-family residence	268	E
346	Single-family residence	205	E
347	Single-family residence	265	E
348	Single-family residence	210	E
349	Single-family residence	270	E
350	Single-family residence	204	E
351	Single-family residence	275	E
352	Single-family residence	205	E
353	Single-family residence	276	E
500	Cell Tower	470	W
511	FM Tower (K253BD)	1,451	W
515	Reese Airpark	12,467	N

[1]Note: All habitable structures and other land-use features are located on figures 6-1a–6-1c (map pockets).

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APPENDIX A AGENCY CORRESPONDENCE

ATKINS

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January 31, 2014

Name
Title
Company
Address
City, State Zip

Atkins Project No. 100034591

RE: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project,
Lubbock and Hockley Counties, Texas

Dear Name:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, is proposing to construct new electric transmission facilities in Lubbock and Hockley Counties, Texas. Specifically, SPS is proposing to construct a new 230-kilovolt (kV) single-circuit transmission line between SPS's existing Wolfforth Substation, located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 miles west of U.S. Highway 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The study area and the location of the existing substation facilities are presented on the attached figure. The proposed transmission line would require an approximate 100-foot-wide right-of-way (ROW).

Atkins is preparing an Environmental Assessment (EA) and Alternative Routing Study for the proposed project that will support SPS's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Atkins is in the process of collecting and evaluating environmental data for the study area. As part of this effort, we are asking that your agency/office relate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Atkins would like to thank you in advance for your comments, which will be an important consideration in both the selection and evaluation of alternative routes, as well as in the assessment of impacts. If any permits, easements, or other approvals by your agency/office are required, or if you are aware of any major proposed development or construction in the study area, we would also appreciate receiving this information. If you have any questions concerning this project or our request for information, please call me at 512-327-6840. Your earliest reply will be appreciated.

Sincerely,

Thomas Ademski
Project Manager

Enclosure

cc: S. Frederiksen, SPS
S. Morris, SPS

OVERSIZED
MAP
Study Area Location

OFFICIALS/AGENCIES CONTACTED
WOLFFORTH TO CARLISLE 230-kV TRANSMISSION LINE PROJECT

FEDERAL

Tony Robinson
Regional Administrator
Region IV
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Natural Resources Conservation Service
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Julie Wicker
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Wildlife Habitat Assessment Program
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Texas Water Development Board
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Lubbock District
Texas Department of Transportation
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Texas Department of Transportation
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Tim Pierce
Executive Director
South Plains Association of Governments
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LUBBOCK COUNTY

The Honorable Tom Head
Lubbock County Judge
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Lubbock, TX 79408

Bill McCay
Lubbock County Precint 1 Commissioner
P.O. Box 10536
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Patti Jones
Lubbock County Precint 4 Commissioner
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HOCKLEY COUNTY

The Honorable Larry Sprowls
Hockley County Judge
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Levelland, TX 79336

Curtis Thrash
Hockley County Precinct 1 Commissioner
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LOCAL

Bill Basom
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Mayor
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James W. Loomis
City Manager
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R. Keith Smith, P.E.
Director of Public Works
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Sally Abbe
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Darrell Newsom
City Manager
City of Wolfforth
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Doug Hutcheson
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City Secretary
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Shallowater, TX 79363

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WOLFFORTH TO CARLISLE 230-kV TRANSMISSION LINE PROJECT

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P.O. Box 206
Smyer, TX 79367

Gary Lehnen
Ropes ISD Superintendent
304 Ranch
Ropesville, TX 79358

U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

PUBLIC NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

WE WOULD REQUEST THAT THE COUNTIES FLOODPLAIN ADMINISTRATORS BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT.

If project is Federally funded, we would request project to be compliant with EO 11988 and 11990.

REVIEWER: February 12, 2014

Mayra G. Diaz
Floodplain Management and Insurance Branch
Mitigation Division
If additional jurisdictions are involved in the project or if you have any questions, please contact me at 940-898-5541.

ATKINS

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Austin, Texas 78730

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RECEIVED
FRC MAIL CENTER
FEMA REGION 6

2014 FEB 36 P 1:53

January 31, 2014

Mr. Tony Robinson
Regional Administrator
Region IV
Federal Emergency Management Agency
FRC 800 North Loop 288
Denton, TX 76209-3698

Atkins Project No. 100034591

RE: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project, Lubbock and Hockley Counties, Texas

Dear Mr. Robinson:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, is proposing to construct new electric transmission facilities in Lubbock and Hockley Counties, Texas. Specifically, SPS is proposing to construct a new 230-kilovolt (kV) single-circuit transmission line between SPS's existing Wolfforth Substation, located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The study area and the location of the existing substation facilities are presented on the attached figure. The proposed transmission line would require an approximate 100-foot-wide right-of-way (ROW).

Atkins is preparing an Environmental Assessment (EA) and Alternative Routing Study for the proposed project that will support SPS's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Atkins is in the process of collecting and evaluating environmental data for the study area. As part of this effort, we are asking that your agency/office relate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Atkins would like to thank you in advance for your comments, which will be an important consideration in both the selection and evaluation of alternative routes, as well as in the assessment of impacts. If any permits, easements, or other approvals by your agency/office are required, or if you are aware of any major proposed development or construction in the study area, we would also appreciate receiving this information. If you have any questions concerning this project or our request for information, please call me at 512-327-6840. Your earliest reply will be appreciated.

Sincerely,

Thomas J. Ademski
Project Manager

Enclosure

cc: S. Frederiksen, SPS
S. Morris, SPS

Date Rec'd: 2-5-14		
Rec'd by: dho		
	Action	Info
RA		✓
Deputy RA		✓
XA		
Analyst		
RES		
REC		
MIT		✓
MSD		
NP		
Grants		
File		✓
Suspense Date: info only		

14-03-29186

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
101 South Main Street
Temple, Texas 76501-7602
Telephone: 254-742-9800 Fax: 254-742-9819

February 12, 2014

Atkins
6504 Bridge Point Parkway
Suite 200
Austin, Texas 78730

Attention: Thomas Ademski

Subject: LNU-Farmland Protection
Proposed Wolfforth to Carlisle 230 kV Transmission Line Project
Lubbock and Hockley Counties, Texas

We have reviewed the information provided in your correspondence dated January 31, 2014 concerning the proposed transmission line project in Lubbock and Hockley Counties, Texas. This review is part of the National Environmental Policy Act (NEPA) evaluation for Public Utility Commission of Texas (PUCT). We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed project is exempt because transmission lines are not a conversion of Important Farmlands and the site can still be used after construction. The Farmland Conversion Impact Rating (Form AD-1006) indicating the exemption is enclosed. We encourage the use of accepted erosion control methods during the construction of this project.

If you have any questions, please contact me at (254) 742-9854, Fax (254) 742-9859 or by email at drew.kinney@tx.usda.gov.

Sincerely,

Drew Kinney

Drew Kinney
NRCS GIS Specialist

Attachment

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request January 31, 2014
Name of Project Wolfforth to Carlisle 230kV Transmission Line Project	Federal Agency InvolvedPUCT
Proposed Land Use	County and State Lubbock and Hockley Counties, Texas
PART II *(To be completed by NRCS)*	Date Request Received By NRCS February 12, 2014

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)* YES ☐ NO ☒		Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 2-12-14	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160				
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or local site assessment)*	160				
TOTAL POINTS ***(Total of above 2 lines)***	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

United States Department of Agriculture
NRCS
Natural Resources Conservation Service

101 S. Main Street
Temple, TX 76501-6624
Phone: 254-742-9960
FAX: 254-742-9859

For Informational Purposes

To Whom It May Concern:

The official source for current soil survey information is Web Soil Survey at http://websoilsurvey.nrcs.usda.gov. Enclosed is a pamphlet about the website.

Farmland Classification maps can be obtained by following the steps below:

Delineate your area of interest (AOI) and create an AOI, or create an AOI from a zipped shape file. Go to the Soil Data Explorer tab, then the Suitability's and Limitations for Use tab, and then under the Land Classifications list of reports, run the Farmland Classification report. Print or save the report to a file, or add it to the shopping cart and produce a Custom Soil Resource Report to submit to us electronically, or print it out for mailing.

NRCS Farmland Policy Protection Act Form AD-1006 or NRCS-CPA-106 can be obtained at the following URL's respectively:
http://www.usda.gov/rus/water/ees/pdf/ad1006.pdf
http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf

NRCS Conservation Easements for Texas can be obtained at the following URL to determine if your project overlaps with any conservation easements:
http://www.tx.nrcs.usda.gov/easements.html

NRCS Conservation Easements by state can be obtained at the following URL:http://datagateway.nrcs.usda.gov/GDGOrder.aspx

If you have any questions, please contact the Texas State Soil Scientist at (254) 742-9863.

The Web Soil Survey (WSS) provides agricultural producers, agencies, Technical Service Providers, and others electronic access to relevant soil and related information needed to make land-use and management decisions. The WSS:

- Provides an alternative to traditional hardcopy publication,
- Provides the means for quicker delivery of information,
- Provides electronic access to full soil survey report content,
- Provides access to the most current data, and
- Allows customers to get just the information they want.

Print a Hydric Soil Map

- Complete Steps 1, 2, and 3
- From the "Soil Data Explorer" tab, click on the "Suitabilities and Limitations for Use" tab
- Click on "Land Classifications"
- Click on "Map Unit Hydric Rating"
- Click the "View Ratings" button
- Click the "Legend" tab to open or close the map symbol legend
- Click the "Create Printable Document" button
- Click the "View" button
- Click on the File menu and Print

Print a Soil Chemical Properties Report

- Complete Steps 1, 2, and 3
- From the "Soil Data Explorer" tab, click the "Soil Reports" tab
- Click on "Soil Chemical Properties"
- Click on "Chemical Soil Properties"
- Click the "View Soil Report" button
- Click on the File menu and Print

USDA NRCS

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January 2007

USDA NRCS

United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

http://websoilsurvey.nrcs.usda.gov

Define,

View,

Explore

Web Soil Survey provides a simple yet powerful way to analyze soil data in three basic steps

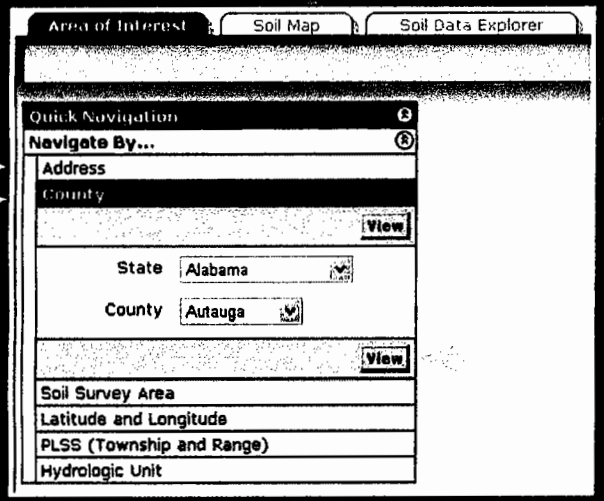
Helping People Help the Land

Starting Web Soil Survey

Start WSS

- Open the NCSS WSS site at: http://websoilsurvey.nrcs.usda.gov
- Click the "Start WSS" button to begin

ep 1
efine Your Area of Interest (AOI)



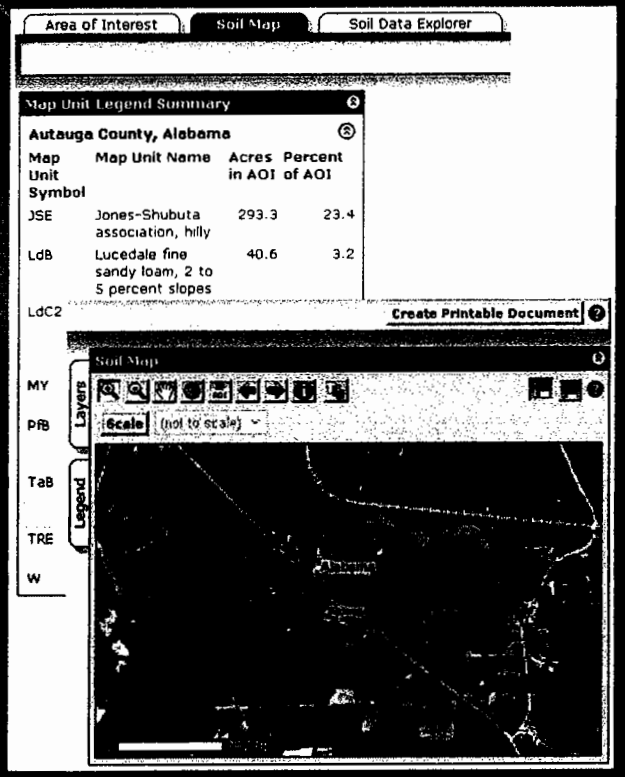
- Under "Navigate By...," click on "Address" or "County" to view your area of interest (other navigation options are also available)
- Click the "View" button

Area of Interest Interactive Map

- Click the Zoom tool (plus sign) and drag a box to zoom in on a specific area
- Click the rectangular AOI tool to drag a box or use the polygon AOI tool to click around your specific area of interest

Step 2
View and Print Your Soil Map

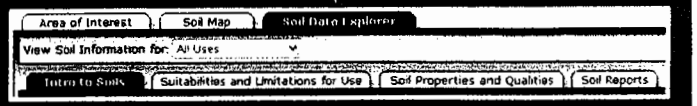
- Click on the "Soil Map" tab



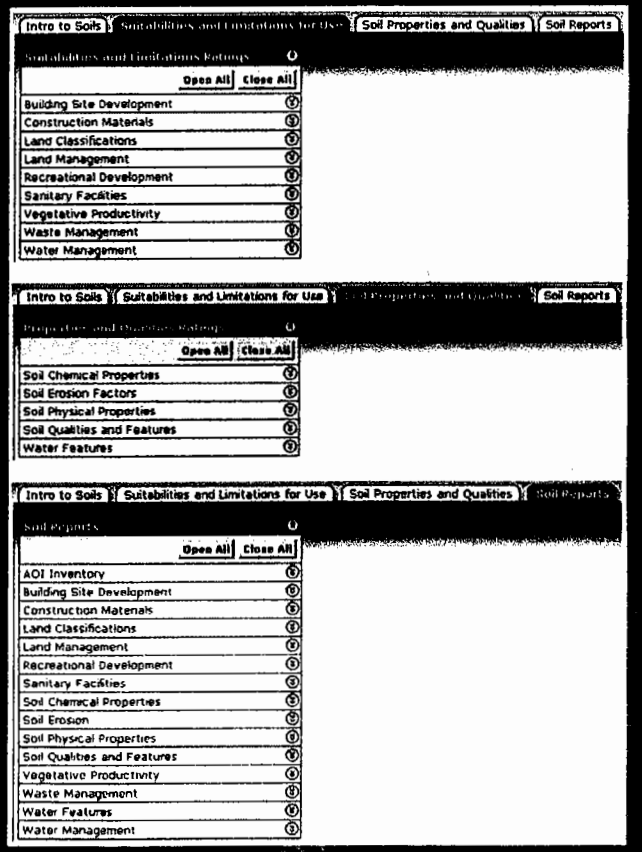
- View your soil map by clicking on the "Create Printable Document" button
- To redefine the soil map location, click on the "Area of Interest" tab and click the "Clear AOI" button
- Click the "View" button
- Click on the File menu and Print

Step 3
Explore Your Soil Information

- Click on the "Soil Data Explorer" tab



- Click on one of the following tabs



Note: At any time during your visit to the WSS, you can get online help by clicking on the top question mark in the upper right corner (click on the "x" button to close).

Ademski, Thomas J

From: Edwards, Sean [sean_edwards@fws.gov]
Sent: Monday, March 17, 2014 11:56 AM
To: Ademski, Thomas J
Subject: Wolfforth to Carlisle 230-kV Transmission Line Project, Lubbock & Hockley Counties, Texas

Mr. Ademski,

We have received and reviewed Atkins letter and map regarding the proposed Wolfforth to Carlisle 230-kV Transmission Line Project to be located in Lubbock and Hockley Counties, Texas. Upon review of your materials and our information, adverse impacts to federally listed species or other protected resources would be unlikely. We have no comments or recommendations to offer. Please contact me if I may be of further assistance.

Kind Regards,

Sean Edwards
Biologist - Conservation Planning Assistance
U.S. Fish & Wildlife Service
2005 NE Green Oaks Blvd., Ste 140
Arlington, Texas 76006
(817) 277-1100

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

REPLY TO
ATTENTION OF

February 14, 2014

Regulatory Division

SUBJECT: Project Number SWF-2014-00080, Wolfforth to Carlisle 230-kV Transmission Line

Thomas Ademski
Atkins North America, Inc.
6504 Bridge Point Parkway
Suite 200
Austin, TX 78730

Dear Mr. Ademski:

Thank you for your letter received February 5, 2014, concerning a proposal by Southwestern Public Service Company to construct a new 230-kilovolt single-circuit line between the existing Wolfforth and Carlisle substations located in Lubbock and Hockley Counties, Texas. This project has been assigned Project Number SWF-2014-00080. Please include this number in all future correspondence concerning this project.

Mr. Jason Story has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible.

You may be contacted for additional information about your request. For your information, please reference the Fort Worth District Regulatory Branch homepage at www.swf.usace.army.mil/Missions/Regulatory.aspx and particularly guidance on submittals at www.media.swf.usace.army.mil/pubdata/environ/regulatory/introduction/submital.pdf and mitigation at www.usace.army.mil/Missions/Regulatory/Permitting/Mitigation.aspx that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory.aspx or contact Mr. Jason Story at the address above or telephone 817-886-1852 and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Please help the Regulatory Program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Stephen L Brooks
Chief, Regulatory Division

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Boerne

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Houston

Dick Scott
Wimberley

Lee M. Bass
Chairman-Emeritus
Fort Worth

Carter P. Smith
Executive Director

April 22, 2014

Mr. Thomas J. Ademski
Atkins North America, Inc.
6504 Bridge Point Parkway, Suite 200
Austin, TX 78730

RE: Southwestern Public Service Company (SPS) - Proposed 230-kilovolt (kV) transmission line (Atkins Project No. 100034591), Lubbock and Hockley Counties.

Dear Mr. Ademski:

Texas Parks and Wildlife Department (TPWD) received the preliminary coordination letter regarding the proposed transmission line referenced above, between SPS's existing Wolfforth Substation, located on Farm-to-Market Raod (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway 82 in western Lubbock County and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. TPWD staff has reviewed the document and offers the following comments concerning this project.

Project Description

The proposed project entails the construction of a new 230-kV transmission line from the existing Wolfforth Substation to the existing Carlisle Substation. The transmission line would require an approximate 100-foot right-of-way (ROW).

Routing

The preliminary coordination letter states Atkins is preparing an Environmental Assessment (EA) and Alternative Routing Study for the proposed project. The project map provided shows no proposed routes.

Recommendation: When possible, TPWD recommends using or rebuilding existing facilities. Where new construction is the only feasible option, TPWD recommends routing new transmission lines along existing road, pipeline, or other utility right of way (ROW) and easements to reduce habitat fragmentation. By utilizing existing utility corridors, county roads and highway ROWs, adverse impacts to fish and wildlife resources would be mitigated by avoiding and/or minimizing the impacts to undisturbed habitats.

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512.389.4800
www.tpwd.texas.gov

Federal Laws

Clean Water Act

Section 404 of the Clean Water Act establishes a federal program to regulate the discharge of dredged and fill material into the waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency are responsible for regulating water resources under this act. Although the regulation of isolated wetlands has been removed from the USACE permitting process, both isolated and jurisdictional wetlands provide habitat for wildlife and help protect water quality.

As seen on the attached map, numerous playa lakes are located within the project study area.

Recommendation: If the proposed project would impact waterways or associated wetlands, TPWD recommends Atkins consult with the USACE for potential impacts to waters of the United States including jurisdictional determinations, delineations, and mitigation. All waterways and associated floodplains, riparian corridors, playa lakes, and wetlands provide valuable wildlife habitat and should be protected to the maximum extent possible. Natural buffers contiguous to any wetlands or aquatic systems should remain undisturbed to preserve wildlife cover, food sources, and travel corridors. Erosion controls and sediment runoff control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site specific native vegetation. Measures should be properly installed in order to effectively minimize the amount of sediment and other debris entering the waterway.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits taking, attempting to take, capturing, killing, selling/purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts and nests, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

As discussed above, numerous playa lakes are located within the project study area. Playa lakes are important habitat features that are used by a host of wildlife species including large numbers of waterfowl and predator species. There is potential for electrocution and collision of large-bodied waterfowl and avian predators with electrical wires near these upland lakes. Direct loss to wildlife from collisions with wires or from electrocution may be less significant than the potential for disease created by decomposition after these fatalities. Indirect adverse impacts imposed by these collisions and subsequent decomposition of animal tissue within a water regime significantly contributes to the concentration of botulism bacteria that is highly toxic and often fatal to wildlife. During disease epidemics, playa lakes that are highly concentrated with botulism bacteria can have devastating adverse impacts on the remaining waterfowl and wildlife populations that use them.

Recommendation: TPWD recommends Atkins route the transmission line to avoid crossing or disturbing playa lakes in the project area to the extent feasible. Lines that cross or are located near playa lakes should have line markers installed at the crossings or closest points to the drainages to reduce potential collisions by birds flying along or near the drainages.

For additional information, please see the guidelines published by USFWS and the Avian Power Lines Interaction Committee (APLIC) in the updated guidance document Reducing Avian Collisions with Power Lines: State of the Art in 2012. This manual, released on December 20, 2012, identifies best practices and provides specific guidance to help electric utilities and cooperatives reduce bird collisions with power lines. A companion document, Suggested Practices for Avian Protection on Power Lines, was published by APLIC and the USFWS in 2006. For more information on both documents, please visit www.aplic.org.

If migratory bird species are found nesting on or adjacent to the project area, they must be dealt with in a manner consistent with the MBTA.

Vegetation

Based on a review of the Ecological Mapping Systems of Texas (EMST) project, the following vegetation types are found in the study area:

- High Plains: Central Mixedgrass Prairie
- High Plains: Western Great Plains Closed Depression Wetland

- High Plains: Western Great Plains Shortgrass Prairie
- High Plains: Western Great Plains Floodplain
- High Plains: Native Invasive Shrub and Woodland
- High Plains: Disturbance Grassland
- High Plains: Urban
- High Plains: Open Water
- High Plains: Agriculture
- High Plains: Invasive Shrub and Woodland
- High Plains: Barren
- High Plains: Azonal Wetland

Project area vegetation types are shown on the attached map for your reference. Additional information about the EMST, including a link to download shapefiles, can be found at http://www.tpwd.state.tx.us/gis/gallery/.

Species of Concern/Special Features

In addition to state- and federally-protected species, TPWD tracks special features, natural communities, and rare species that are not listed as threatened or endangered. These species and communities are tracked in the Texas Natural Diversity Database (TXNDD), and TPWD actively promotes their conservation. TPWD considers it important to evaluate and, if necessary, minimize impacts to rare species and their habitat to reduce the likelihood of future endangerment.

Based on a review of TXNDD information and recent aerial photographs, the following rare species and special features could potentially be impacted by project activities:

Species of Concern
Ferruginous Hawk (*Buteo regalis*)
Western Burrowing Owl (*Athene cunicularia hypugaea*)
Black-tailed prairie dog (*Cynomys ludovicianus*)
Plains spotted skunk (*Spilogale putorius interrupta*)

Special Features
Prairie dog towns

TXNDD records in the project study area are shown on the attached map for your reference. Records on that map are labeled using their Element

Occurrence Identification (EOID) number. That number corresponds to the EOID field on the attached TXNDD reports. As shown on the attached map, records of the Plains spotted skunk, Black-tailed prairie dog, and Ferruginous have been documented in or near the project study area. In addition, several prairie dog towns that have not been documented in the TXNDD are visible on current aerial photography.

The Black-tailed prairie dog is a keystone species that provides food and/or shelter for rare species tracked by TPWD such as the Ferruginous Hawk and the Western Burrowing Owl, as well as many other wildlife species.

> **Recommendation:** TPWD recommends Atkins survey the potential routes for prairie dog towns and species that depend on them. If prairie dog towns are found in the study area, TPWD recommends SPS avoid these areas during ROW clearing and placement of the structures. If prairie dog burrows would be disturbed as a result of the proposed project, TPWD recommends non-harmful exclusion methods be used to encourage the animals to vacate the area prior to disturbance and discourage them from returning to the area during construction.

The Western Burrowing Owl is a ground-dwelling owl that uses the burrows of prairie dogs and other fossorial animals for nesting and roosting. The Western Burrowing Owl is protected under the MBTA and take of these birds, their nests, and eggs is prohibited. Potential impacts to the Western Burrowing Owl could include habitat removal as well as displacement and/or destruction of nests and eggs if ground disturbance occurs during the breeding season.

> **Recommendation:** If prairie dog towns would be disturbed as a result of the proposed project, TPWD recommends the burrows be surveyed for burrowing owls. If nesting owls are found, disturbance should be avoided until the eggs have hatched and the young have fledged.

Please note that the absence of TXNDD information in an area does not imply that a species is absent from that area. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence or condition of special species, natural communities, or other significant features within your

project area. These data are not inclusive and cannot be used as presence/absence data. This information cannot be substituted for on-the-ground surveys. The TXNDD is updated continuously. As the project progresses and for future projects, please request the most current and accurate information at TexasNatural.DiversityDatabase@tpwd.texas.gov .

Recommendation: Please review the TPWD county lists for the counties in the study area, as rare species in addition to those discussed above could be present, depending upon habitat availability. These lists are available online at http://www.tpwd.state.tx.us/gis/ris/es/ . If during construction the project area is found to contain rare species, natural plant communities, or special features, TPWD recommends that precautions be taken to avoid impacts to them. The USFWS should be contacted for species occurrence data, guidance, permitting, survey protocols, and mitigation for federally-listed species. For the USFWS rare species lists by county, please visit http://www.fws.gov/endangered/ .

Determining the actual presence of a species in a given area depends on many variables including daily and seasonal activity cycles, environmental activity cues, preferred habitat, transiency and population density (both wildlife and human). The absence of a species can be demonstrated only with great difficulty and then only with repeated negative observations, taking into account all the variable factors contributing to the lack of detectable presence. If encountered during construction, measures should be taken to avoid impacting wildlife.

Because the proposed route alternatives have not yet been identified, TPWD cannot provide specific comments on potential impacts to threatened and endangered species or general fish and wildlife resources. Please provide a copy of the EA to TPWD for review and comment prior to application to the Public Utilities Commission for a Certificate of Convenience and Necessity.

I appreciate the opportunity to provide preliminary input on potential impacts related to this project, and I look forward to reviewing the EA. Please call me at (806) 761-4936 if we may be of further assistance.

Sincerely,

Rick Hanson

Rick Hanson
Wildlife Habitat Assessment Program
Wildlife Division

RH:gg.ERCS-8603

Attachments (3)

cc: Mohammed Ally, Public Utility Commission of Texas

Playa Lakes in Project Area

Date: 4/15/2014

Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.

Legend

Playas

TXNDD Tracked Species in Project Area

Date: 4/15/2014

Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.

Legend

eorep_tracked

EO Type

- Animal Assemblage
- Invertebrate Animal
- Nonvascular Plant
- Terrestrial Community - Other Classificatio
- Vascular Plant

TXNDD Tracked Species in Project Area

Element Occurrence ID (EOID) 974

Scientific Name **Buteo regalis**

Common Name **Ferruginous Hawk**

Global Rarity Rank **G4** State Rarity Rank **S2B,S4N** Federal Status State Status

First Observation Date **<null>** Survey Date **12/9/1993** Last Observation Date **12/9/1993**

EO Data

FORAGING HABITAT INCLUDES A PLAYA LAKE; TWO FORAGING HAWKS WERE SEEN OVER FALLOW FIELDS AND AN ADJACENT PLAYA LAKE ON 9 DECEMBER 1993; THESE ARE AMONG A POPULATION OF FERRUGINOUS HAWKS THAT REGULARLY WINTER IN THE VICINITY

General Description

<null>

Protection Comments

<null>

Management Comments

<null>

General Comments

NUMEROUS FALLOW FIELDS, MOSTLY COTTON AND MILO, AND PLAYA LAKES OCCUR WEST OF LUBBOCK AND EAST OF REESE AFB; BIRDS WERE CONSISTENTLY SEEN EXPLOITING THESE HABITATS

Element Occurrence ID (EOID) [redacted]

Scientific Name [redacted]

Common Name [redacted]

Global Rarity Rank [redacted] State Rarity Rank [redacted] Federal Status [redacted] State Status [redacted]

First Observation Date [redacted] Survey Date [redacted] Last Observation Date [redacted]

EO Data

[redacted]

General Description

[redacted]

Protection Comments

[redacted]

Management Comments

[redacted]

General Comments

[redacted]

Element Occurrence ID (EOID) 9129

Scientific Name Cynomys ludovicianus

Common Name Black-tailed Prairie Dog

Global Rarity Rank G4 State Rarity Rank S3 Federal Status State Status

First Observation Date 1999-00-00 Survey Date 6/8/2005 Last Observation Date 6/8/2005

EO Data

1999-2004 and 8 June 2005: 6 black-tailed prairie dog towns were digitized based on aerial imagery and observed during ground truthing.

General Description

8 June 2005: shortgrass prairie

Protection Comments

<null>

Management Comments

<null>

General Comments

<null>

Element Occurrence ID (EOID) [redacted]

Scientific Name [redacted]

Common Name [redacted]

Global Rarity Rank [redacted] State Rarity Rank [redacted] Federal Status [redacted] State Status [redacted]

First Observation Date [redacted] Survey Date [redacted] Last Observation Date [redacted]

EO Data

[redacted]

General Description

[redacted]

Protection Comments

[redacted]

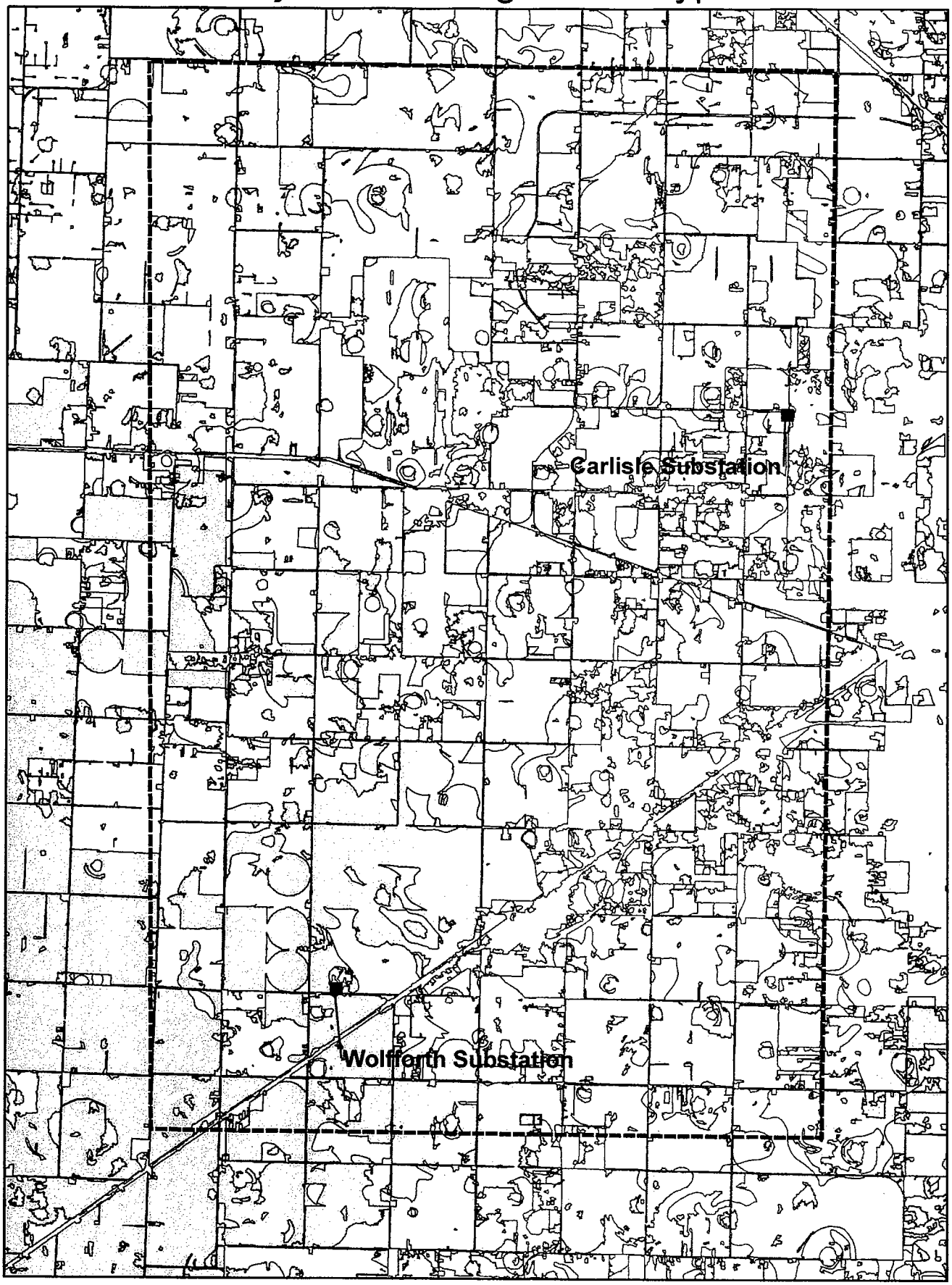
Management Comments

[redacted]

General Comments

[redacted]

Project Area Vegetation Types



Date: 4/15/2014

Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.

Legend

- Western Great Plains Closed Depression Wetland
- Western Great Plains Shortgrass Prairie
- Barren
- Central Mixedgrass Prairie
- Disturbance Grassland
- Invasive Shrub and Woodland
- Native Invasive Shrub and Woodland
- Open Water
- Urban
- Western Great Plains Floodplain
- Agriculture
- Azonal Wetland

TEXAS GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

February 6, 2014

Thomas Ademski
Atkins North America, Inc.
6504 Bridge Point Parkway, Suite 200
Austin, Texas 78730-5091

Re: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project
Lubbock and Hockley Counties, Texas

Dear Mr. Ademski:

On behalf of Commissioner Patterson, I would like to thank you for your letter concerning the above referenced project.

Using your map depicting the project preliminary study area, it does not appear that the General Land Office will have any environmental issues or land use constraints at this time.

When a final route/location for this proposed project has been determined, please contact me by email at glenn.rosenbaum@glo.texas.gov or by phone at (512) 463-8180, so we can assess the route and determine if the project will cross any streambeds or Permanent School Fund land that would require an easement from our agency.

Again, thank you for your inquiry.

Sincerely,

Glenn Rosenbaum
Glenn Rosenbaum
Team Leader, Right-of-Way Department
Asset Inspection – Professional Services Program

Texas General Land Office
Stephen F. Austin Building • 1700 North Congress Avenue, Texas 78701-1495
Post Office Box 12873 • Austin, Texas 78711-2873
Phone: 512-463-5001 • 800-998-4GLO
www.glo.state.tx.us

TEXAS HISTORICAL COMMISSION

real places telling real stories

March 12, 2014

Thomas Ademski
Atkins
6504 Bridge Point Parkway, Ste 200
Austin, TX 78730

Re: Project review: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project (PUC: 201405155)

Dear Mr. Ademski,

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Tiffany Osburn, has completed its review. According to our maps, the proposed transmission line project will cross that has never been surveyed by a professional archeologist and may contain historic and archeological resources.

We recommend consulting with a professional archeologist early in your route selection process to allow avoidance of recorded archeological resources. Your archeologist should also identify areas high probability areas (HPAs) for further investigation and may submit their scope of work for our concurrence once the route is selected. You can obtain lists of most professional archeologists in Texas on-line at www.rpanet.org or http://www.council oftexasarcheologists.org. Please note that other professional archeologists meeting the qualifying standards may be used; see these standards at http://www.cr.nps.gov /local-law/arch_stnds_9.htm.

Thank you for your assistance in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please contact Tiffany Osburn at 512/463-8883.

Sincerely,

for
Mark Wolfe, State Historic Preservation Officer

MW/to

RICK PERRY, GOVERNOR • MATTHEW F. KREISLE, III, CHAIRMAN • MARK WOLFE, EXECUTIVE DIRECTOR

Texas Department of Transportation

AVIATION DIVISION
125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • 512/416-4500 • FAX 512/416-4510

Mr. Thomas J. Ademski
Atkins North America, Inc.
6504 Bridge Point Parkway
Suite 200
Austin, Texas 78730

February 5, 2014

Dear Mr. Ademski;

I received your letter dated January 31, 2014 concerning Atkins job number 100034591.

Title 14, US Code, Part 77 of the Federal Aviation Administration's (FAA) Federal Aviation Regulations (FAR) requires notice to the FAA if the facility to be constructed fits either of the below listed conditions:

77.9 (b) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway greater than 3,200 feet in actual length, excluding heliports. (ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

77.9 (a) Any construction or alteration of more than 200' above the surface of the ground at its location

There are no public use airports or heliport in or within 20,000 feet of the study area.

If the criterion of part FAR 77.9 (a) is met by the proposed routing, the FAA must be notified in four copies using FAA Form 7460-1, "Notice of Proposed Construction or Alteration". This form, supporting documents, and how to file electronically are available at http://oeaaa.faa.gov

Sincerely,

William B. Gunn
Compliance

ATKINS

Atkins North America, Inc.
6504 Bridge Point Parkway, Suite 200
Austin, Texas 78730

Telephone: +1.512.327.6840
Fax: +1.512.327.2453

www.atkinsglobal.com/northamerica

January 31, 2014

Mr. David Fulton
Director
Aviation Division
Texas Department of Transportation
125 East 11th Street
Austin, TX 78701

RECEIVED

FEB 04 2014

TXDOT AVIATION DIVISION

Atkins Project No. 100034591

RE: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project,
Lubbock and Hockley Counties, Texas

Dear Mr. Fulton:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, is proposing to construct new electric transmission facilities in Lubbock and Hockley Counties, Texas. Specifically, SPS is proposing to construct a new 230-kilovolt (kV) single-circuit transmission line between SPS's existing Wolfforth Substation, located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The study area and the location of the existing substation facilities are presented on the attached figure. The proposed transmission line would require an approximate 100-foot-wide right-of-way (ROW).

Atkins is preparing an Environmental Assessment (EA) and Alternative Routing Study for the proposed project that will support SPS's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Atkins is in the process of collecting and evaluating environmental data for the study area. As part of this effort, we are asking that your agency/office relate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

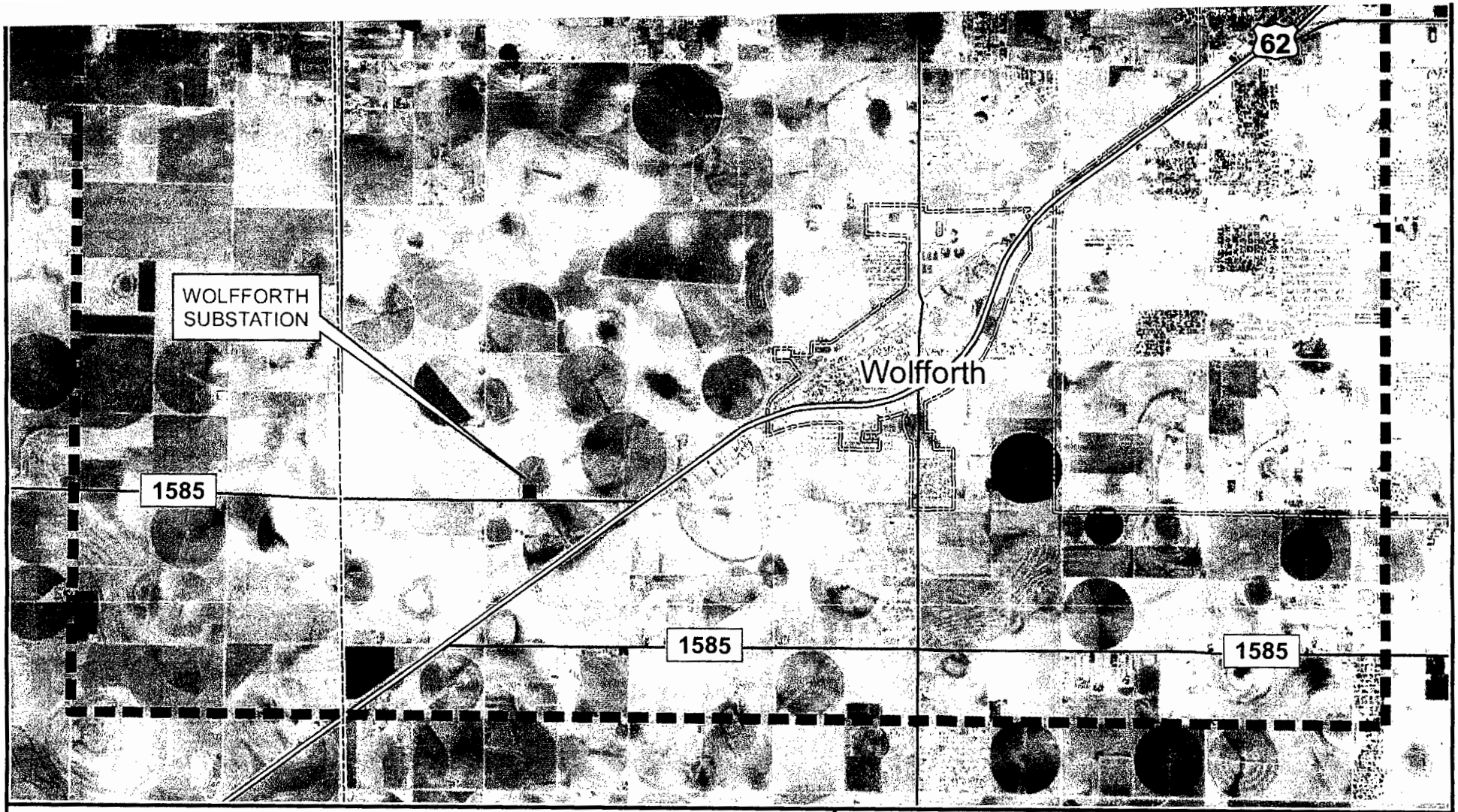
Atkins would like to thank you in advance for your comments, which will be an important consideration in both the selection and evaluation of alternative routes, as well as in the assessment of impacts. If any permits, easements, or other approvals by your agency/office are required, or if you are aware of any major proposed development or construction in the study area, we would also appreciate receiving this information. If you have any questions concerning this project or our request for information, please call me at 512-327-6840. Your earliest reply will be appreciated.

Sincerely,

Thomas J. Ademski
Project Manager

Enclosure

cc: S. Frederiksen, SPS
S. Morris, SPS



Study Area Boundary

City Boundary

N

0 1 2 Miles

Vicinity Map

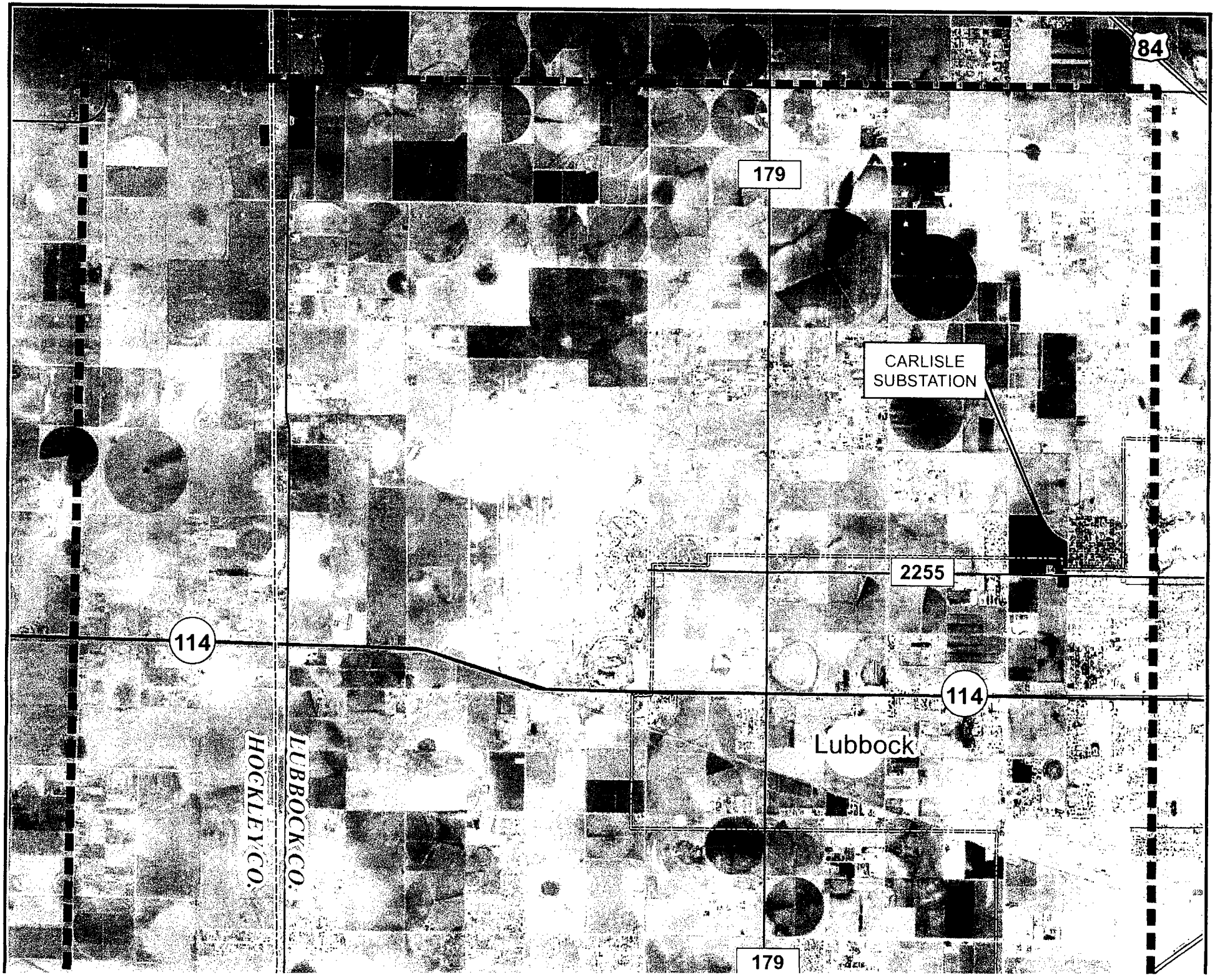
Aerial Source: 2012 USDA NAIP Imagery

ATKINS

STUDY AREA LOCATION MAP
WOLFFORTH TO CARLISLE
230-KV TRANSMISSION LINE PROJECT
LUBBOCK AND HOCKLEY COUNTIES

N:\Clients\U_Z\XCel_Energy\Wolfforth_to_Carlisle\geo\figs\Wolfforth_to_Carlisle_Study_Area_Agency_Fig_11x17.mxd

Revised: 1/29/2014


84
179
CARLISLE
SUBSTATION
2255
114
114
Lubbock
HOCKLEY CO.
LUBBOCK CO.
179

South Plains Association of Governments

Clinton Sawyer, Councilmember, City of Amherst
PRESIDENT

Tim C. Pierce
EXECUTIVE DIRECTOR

February 11, 2014

Atkins
Attn: Tommy Adernski
6504 Bridge Point Parkway
Suite 200
Austin, Texas 78730

Subject: Proposed Wolfforth to Carlisle 230-kV Transmission Line Project, Lubbock and Hockley Counties, Texas

Dear Mr. Rodgers:

The South Plains Association of Governments (SPAG) has reviewed the grant application cited above and has made a decision to **"WAIVE COMMENT"** on this application.

Thank you for the opportunity to review this application.

Best regards,

Belinda Solis

Belinda Solis
TRACS Coordinator
1323 58th Street
Lubbock, TX 79412
(806) 762-8721

Ademski, Thomas J

From: TERESA CABALLERO [tacaballero@suddenlinkmail.com]
Sent: Thursday, February 06, 2014 3:57 PM
To: Ademski, Thomas J
Cc: tcaballero@suddenlinkmail.com; bbasom@suddenlinkmail.com
Subject: CRMWA information request
Attachments: CRMWA maps.pdf

Mr. Thomas Ademski,

On the attached Google map the blue line represents the Canadian River Municipal Water Authority pipeline.

Our easement on both sides of the pipeline is 33' with the following exceptions.

One exception being our Surge Tank 12 (represented as ST 12 on the map) where our easement at this location is 113' X 400'.
An additional exception being our Pumping Plant 09 (represented on the map as 576+99) where our easement at this location is 270" X 650'.

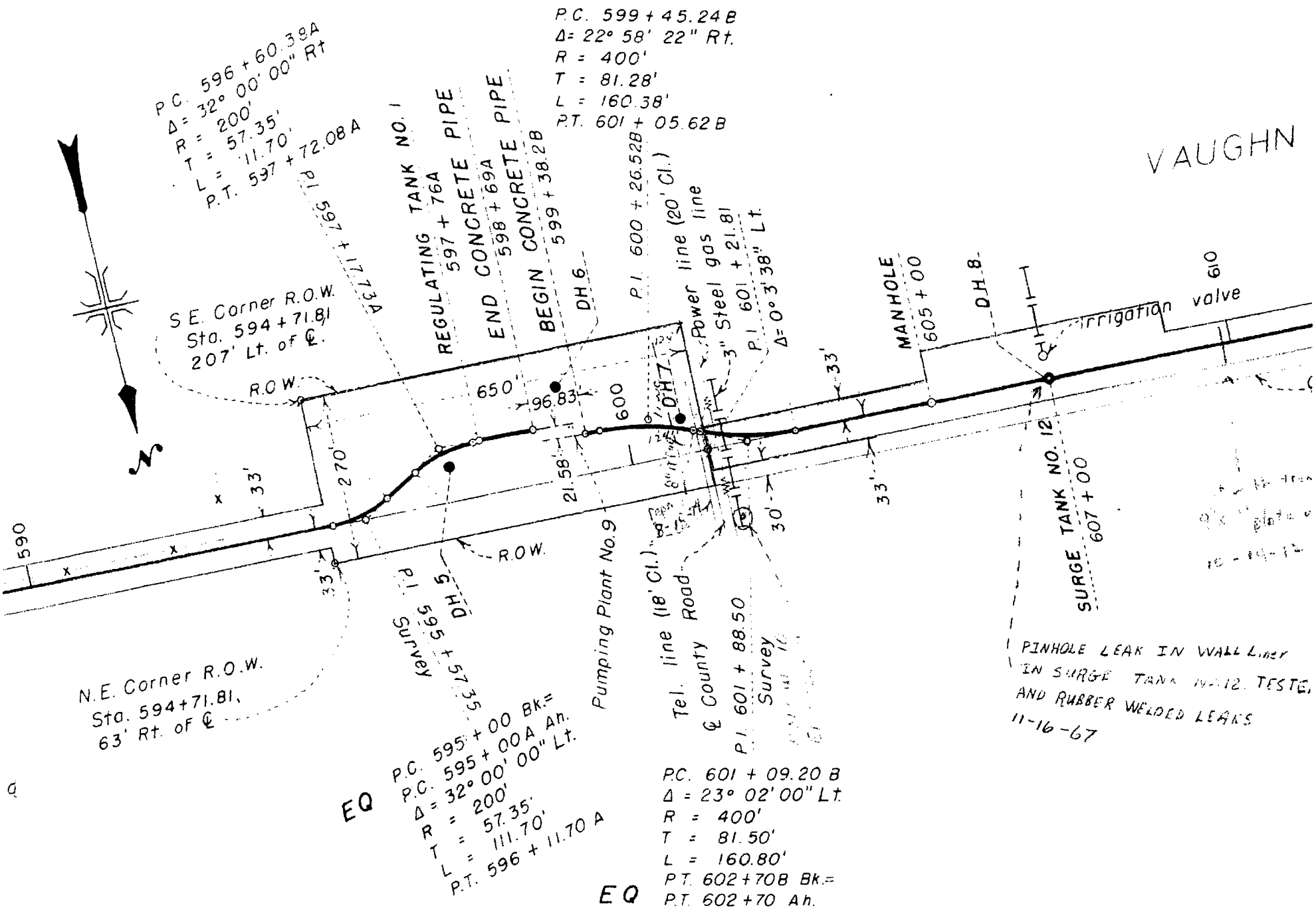
If you require additional information please contact me at 806-763-1926.

Sincerely,
Tony Caballero
Canadian River Municipal Water Authority

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.

Google earth

miles 5
km 8


P.C. 599 + 45.24 B
Δ = 22° 58' 22" Rt.
R = 400'
T = 81.28'
L = 160.38'
P.T. 601 + 05.62 B
P.C. 596 + 60.38 A
Δ = 32° 00' 00" Rt
R = 200'
T = 57.35'
L = 111.70'
P.T. 597 + 72.08 A
P.I. 597 + 17.73 A
REGULATING TANK NO. 1
597 + 76A
END CONCRETE PIPE
598 + 69A
BEGIN CONCRETE PIPE
599 + 38.28
DH 6
P.I. 600 + 26.52B
Power line (20' Cl.)
3" Steel gas line
P.I. 601 + 21.81
Δ = 0° 3' 38" Lt.
MANHOLE
605 + 00
DH 8
Irrigation valve
610
VAUGHN
S.E. Corner R.O.W.
Sta. 594 + 71.81
207' Lt. of ℄
R.O.W.
650'
96.83'
600
DH 7
33'
270'
21.58'
590
N.E. Corner R.O.W.
Sta. 594 + 71.81,
63' Rt. of ℄
P.I. 595 + 57.95 Survey
DH 5
R.O.W.
Pumping Plant No. 9
Tel. line (18' Cl.)
℄ County Road
P.I. 601 + 88.50 Survey
30'
33'
SURGE TANK NO. 12
607 + 00
PINHOLE LEAK IN WALL LINER
IN SURGE TANK NO. 12. TESTED
AND RUBBER WELDED LEAKS
11-16-67
EQ
P.C. 595 + 00 Bk.=
P.C. 595 + 00 A Ah.
Δ = 32° 00' 00" Lt.
R = 200'
T = 57.35'
L = 111.70'
P.T. 596 + 11.70 A
EQ
P.C. 601 + 09.20 B
Δ = 23° 02' 00" Lt.
R = 400'
T = 81.50'
L = 160.80'
P.T. 602 + 708 Bk.=
P.T. 602 + 70 Ah.

Ademski, Thomas J (Tommy)

From: Nick Olenik <NOlenik@co.lubbock.tx.us>
Sent: Thursday, February 13, 2014 8:40 AM
To: Ademski, Thomas J
Subject: FW: Re-scheduled Public Meeting

This message has been archived.

FYI

From: Steven Warren [mailto:Steven.Warren@txdot.gov]
Sent: Tuesday, February 11, 2014 8:25 AM
To: Bill McCay; Brian Baker; Darrell Newsom; External D. Jones; David Vroonland; Drew Paxton; George McMahon; Glen Robertson; Mike Lamberson; Neil Welch; Nick Olenik; Pat Henderson; Stacy Smith
Cc: Cary Karnstadt; Doug Eichorst; Jefferson Grimes; Jerry Cash; Joni Hutson; Karen Bradshaw; Kristi Schwartz; Lindsey Kimmitt; Margaret Canty; Michael Sexton; Nishant Kukadia; Roger Beall; Tricia Bruck
Subject: Re-scheduled Public Meeting

Just wanted to let you know we have re-scheduled the Outer Route Public Meeting for February 25th, 2014 from 6:30 pm to 8:00 pm at the Lubbock Cooper Performing Arts Center. You are encouraged to attend. We actually had 45 people show up for the cancelled meeting on February 4th, so there is definitely a lot of interest in this project.

Steven P. Warren, P.E.

Director of Transportation Planning

& Development – Lubbock District

APPENDIX B PUBLIC INVOLVEMENT

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

	Print Name	Affiliation	Address	Email
1.	Sandra Estrello		1708 NCR 1100, Shallowater	
2.	Marcus Estrello		same —	
3.	Herman Bush			
4.	Jane Davis		2302 Windsor Dr., Richardson, TX 75082	
5	DAVID EDWARDS		PO Box 794056 Dallas TX 75379	
6.	Martha Edwards		P.O. Box 797125 Dallas, TX 75379	bymar3211@AOL.Com
7.	Byron Edwards		" "	"
8	David Pearson		4210 88th St Lubbock 79423	dwdwdw@msn.com
9.	LINDA KLATTENHOFF		6208 [illegible] Wolfforth 79382	
10/11	Jack & Sonja Mitchell		7901 34th Lubbock, TX 79407	
12	William J. Havens		PO Box 16709 Lubbock TX 79490	
13/14	Mr. & Mrs Dennis Mason + 1		7314 1st Lubbock, TX 79410	
15	Kara mason		"	
16	Maxine Horn		7315 Amherst Lubbock 79416	mkg13@aol.com
17	GARY LEWIS FOR	FAMILY	5507-27th LUBBOCK TEX 79407	
18	TRUMAN LEWIS			
19	MONA LEWIS			
20	TRUMA K. LEWIS			

April 17, 2014 **5:00pm to 7:00pm** **Wolfforth, Texas**

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

	Print Name	Affiliation	Address	Email
(21)	Wanda Welch		9227 Co. Rd. 6400 - Shallowater Tex	
(22)	Edith Squires		9313 Co. Rd. 6400 Shallowater, Tex.	
(20)(24)	Jim + Linda Hall	Lubbock Turf 7008 - 34th	6812 Rochester, Lubbock	
(25)	Bobby Richey	FARMER	6808 CR 1100 WOLFFORTH, TEX	
(26)	Tom Bond		8012 CR 1100 wolfforth	
(27)	Mike Walker	Farmer	11623 CR 6700 Lubbock	
(28)	Nancy Turner		7115 26th St Lubbock	
(29)	Dean Johnson	Home Owner	3911 Kelsey Lubbock	
32	Yolanda Huerta (+2)	Home owner.	7347 25th St. Lubbock TX	
	Thelma Ray Butler	Landowner	7319 25th St Lubbock TX	
	Eddie Standen	"	6805 - 2nd Lubbock TX	
	Bart & CAROLYN Poe	Landowner	6811 - 2ND Lubbock, TX	
	RICK WALLIS	L'O	120 N Quincy Lub TX	
	Carl White	Land owner	2514 CR 1700 Lubbock TX	
	Larry Landin +3	home + Land owner	1706 NCR 1300 LBK TX 79416	

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April 17, 2014 | 5:00pm to 7:00pm | Wolfforth, Texas

Public Meeting Sign-in

Wolfforth - Carlisle 230 kV Transmission Line Project

Xcel Energy® | RESPONSIBLE BY NATURE®

Power for the Plains

Print Name	Affiliation	Address	Email
Loyd Rinehart	Homeowner	8321 4th	loydr@door.net
John Copeland (+1)	Homeowner	8319 4th	s.c@ccu.edu
Jack Farmer	Faith Free Will Baptist Church	8th + Inler	JWFarmer2012@yahoo.com
Anna M. Rodriguez	Homeowner.	7314 3rd St	
Nancy Cade Edwards	Homeowner	8320 19th St 79407	ncedwa@yahoo.com
Vicks Jones	Bill payer	6220 19th St 79407	viojones111@yahoo.com
Mary Morrow Drake (+1)	Property Homeowner	4202 64th 79413	
Loyd Smith Tilger	Property Owner	5214 44th St 79414	—
Kelly Hendricks	Owner	1206 FM 2378	—
Jerry R Russell Jr	Owner	4202 County Road 1300	—
Gary Noble	owner	8009 CR 6830	—
Ronald G Cerar	OWNER	7141 FM 41 WOLF	AJUDE@SPTC.NET
Alonso Lopez	owner	401 N-Yuma	
Pat Enloe	owner	5207-70 St Lubbock 79424	
Linda Stephenson	owner	7301 ~~upto~~ Amherst Lubbock 79414	lsdw56@yahoo.com

April 17, 2014 5:00pm to 7:00pm Wolfforth, Texas

59

Public Meeting Sign-in

Wolfforth - Carlisle 230 kV Transmission Line Project

Xcel Energy® | RESPONSIBLE BY NATURE®

Power for the Plains

Print Name	Affiliation	Address	Email
Bill Burleson	L OWNER	7302 Amherst	wildbill2661@yahoo.com
Tom Winegar (+1)	Land Owner	2610 Saratoga Ave	WIN29@sbcglobal.net
Robert Loveless	owner	6812 - 2nd	rcloveless@gmail.com
MACK ELANS	owner	3504 N Fm. 2328	maceelans70@gmail.com
Gloria Luna (+1)	Land OWNER	9302 CR 6520	vanian2kid@yahoo.com
Randy & Sandy Coleman	Land Owner	8012 CR 6900	rscoleman@suddenlink.net
Bruce Maddox	FBC Wolfforth	501 Main	hubtex59@gmail.com
Jarrod Cook	Land Owner	1002 Prospect Ave.	jarrod@richardsonseeds.com
BOB + JAN MATTHEWS	LANDOWNER	8004 CR 6910	lubbock7@sbcglobal.net
Nona Burgamy	Land Owner	7112 19th	n8marie3b@sbcglobal.net
Billy + Melba Boyd	Land Owner	2127 - 57th St Lubbock 79412	N/A
William J Taylor	73213 Rift	Lubbock Tex 79416	N/A
x3 [illegible] (8)	Owner	7305 25	
TOM WALKER	OWNER	6003 CR 1500	TOM.WALKER@NTS-ONLINE.NET
Ellwood Ellis		3314 Eleth St. LBK 79403	

April 17, 2014 5:00pm to 7:00pm Wolfforth, Texas

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Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
Robbie Murphy		730 / 25th	
Susan Lacy		7327 25th St	Susan.Ussery73@gmail.com
Jeanne Peterson	Peggy Crawley	1014 D. 8th Lamesa, TX 79331	peteferms2@gmail.com
Stephanie Mayers		7420 Auburn St Lubbock, 79416	Smayers2261@yahoo.com
Melissa Burns		1806 FM 2378 Lubbock 79407	melissa@lubbockstar.com
Downey Burns		" "	landscape@lubbockstar.com
Danny Hunter	landowner	NW Quarter Section 2 Milwaukee/Erskine	huntgas@aol.com
Rob FOR A ~~Robin~~ Hunter	"	"	pokeyhunt@aol.com
Crystal Salazar		9002 CR 6520, 79416	Csalazar@bucknertruck.com
Ken & Jackie Marley	"	7414 Auburn	Kmarley@clearwire.Net
DONNA HURT	"	101 TROY AVE #A 79416	Jeep353@gmail.com
GLEN MERRY		5810 co Rd 1300	N/A
Jeanne Jones FRANKLIN FRANK	"	6909 36th 79407	jkfjones@yahoo.com
Robert/Catherine Creager		7302 1st Street 79416	Ccreager@clearwire.net
Peter/Edward Fenn		7306 26th 79407	vitrap123@gmail.com

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
NICK OLENIK	Lubbock County Public Works	P.O. Box 10536 Lubbock TX 79408	NOLENIK@CO.LUBBOCK.TX.US
Henry Reimer		18311 CR 1640 Wolfforth TX	Hrmrlisa@AOL.com
(1+) Judy Richardson	Land Owner	3209 Kelsey Ave. Lubbock	
(1+) Charla Campbell	Land Owner	7301 1st St	
Josh Kristinek	City of Lubbock	1625 13th Street, Lubbock TX 79401	jkristinek@mylubbock.us
Alex Scarborough Jr	Tom's Tree Place	5104-34th	alexs@tomstreeplace.com
LEONARD KECTON		10510 CR 1100 WOLFFORTH	LLKT@DOOR.NET
AJIT GOVINDAN	SOTHY HOLDINGS INC	5208 MARSHA SHARP FREEWAY LUBBOCK TX 79407	ajit@terra-eng.com
Lindsey Huntley	Land Owner	9304 York Ave. Lubbock, TX 79424	farawayfarms@hotmail.com
Lester York	Land Owner	" "	"
Travis & Glenda Bratcher	Landowner	8502 County Rd 6430	glenda.bratcher@yahoo.com
Joel + Josephine Montoya	Land owners	2106 N CR 1460	Josie1460 at yahoo.com
Prosperity Bank Agent Mary Gayle Greenhill	Land Owner	1401 A-1 Ave Q Lubbock 79401	brent.mcdonald@prosperitybankusa.com
Scott Scarborough	Tom's Tree Place	5104-34 LBB TX 79410	scotts@tomstreeplace.com
Cynthia Henry	Land owner	6988 8th St. Lubbock 79416	cynthia.henry@ttu.edu

(12)

Public Meeting Sign-in

Wolfforth - Carlisle 230 kV Transmission Line Project

Xcel Energy | RESPONSIBLE BY NATURE | Power for the Plains

	Print Name	Affiliation	Address	Email
122	CRAIG BRUMMETT	owner	1718-PONTIAC AVE, Lubbock, TX 79416	brummettfirm@sbcglobal.net
123/124	VAN WILSON (1+)	owner	PO Box 64247 Lubbock TX 79464	vancalwilson@yahoo.com ~~vwilson@yahoo.com~~
125	DAMON RICHARDS	OWNER	1203 ALCOVE AVE LUBBOCK TX 79416	damon@lbklawyers.com
126	Jorge Calderón	owner	9609 C.R. 6900 Lubbock TX 79407	jcalderon1@valornet.com
127	Patti Frullo	owner	4024-75th St 79423	pfrullo@allsaintsschool.org
128	Frank V. Canales			
129	Dusty Durham	owner	1714 Pontiac Ave.	dusty.l.durham@xcelenergy.com
130	Nancy Noret Moore	owner		nnm@austin.rr.com
131	Cindy Noret Ware	owner		cwaretmco@sbcglobal.net
132/133	Curtis + Winnie Clymo	OWNER	2602 Saratoga Avenue 79407	cwclymo@yahoo.com
134	John Gonzales	OWER	7348 26th 79410	
135	Darrell Nasson	City Mgr, Wolfforth	302 Main Wolfforth 79382	dnasson@wolfforthtx.us
136	JEFF KLEIN	Owner	11306 CR 7100, W 79382	Jeff.A.Klein23@Gmail.Com
137	Sean Rich	owner	10108 CR 1300 Wolfforth 79382	Rich.sean@gmail.com
138/139/140	José A Bocanegra (+2)	OWNER	7322-26 ST. Lubbock TX	

April 17, 2014 5:00pm to 7:00pm Wolfforth, Texas

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
(141) Karen Michael	Frenship Today/A-J		karen.michael@lubbockonline.com
Helen & Gerald Fitzgerald	Friends of		
Lisa Flores		7331 W 4th Lubbock, TX 79416	lflores676@gmail.com

April 17, 2014 | 5:00pm to 7:00pm | Wolfforth, Texas

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
Jossie Harris Lethridge		7337 25th	msJossieLove@yahoo.com
Beth Walker		11621 CR 6700	
Alberto Gonzalez SR		9217 CR 6400	
DEXTER DUHAN	Duhan Family Limited Ptshp.	Box 12347 Lubbock 79452	
Michael A Timmons		7916 CR6900 Lubb. 79416	
Karen Wallin		120 N. Quincy 79416	
		11209 FM2641 Shallowater	
(+6) Lubbock ~~Saddle Club~~ (27) LaDonna Mild	Lubbock Saddle Club	~~6502~~ 9702 CR 6520, Lubbock	amildbug@sptc.net
Nathan Prueitt		6411 CR 1200 Lubbock, TX 79407	nathan.prueitt@gmail.com
Rick N Marylou Gomez		9008 CR 6520 Lbk, TX 79416	
JIM + DOROTHY SHAW		2610 Research Blvd Lub, 79407	
Jo Ann + H.V. Newman Jr		3807 N FM 179 Shallowater TX 79363	
~~Randy Elmore~~		912 N Alameda, Carlsbad, NM ~~88220~~	
~~Tiffin~~ Wilbur Jones		1510 N County Rd 1300 Lubbock TX 79416	Wilbur.jones@lcu.edu
Sarah Chandler (+1)		2510 N. Hwy 183, Early, TX, 76802	dcearly@yahoo.com

(25)

April 17, 2014 | 5:00pm to 7:00pm | Wolfforth, Texas

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
Douglas Chandler		2500 N. Hwy 183, Early, TX 76802	dcearly@yahoo.com
NANCY M. EDWARDS	Owner	4005-16th St, #18D, Lubbock, 79416	
LARRY HAGOOD	Friend	4005-16th St, #18D, Lubbock, 79416	
Karl Edwards	Son of Owner	10608 - Toledo Ave, Lubbock 79424	
MICHAEL NOEL	OWNER	8006 CR 6910 LUBBOCK, TX	
CHERYL NOEL	OWNER	8006 CR 6910 LUBBOCK, TX	
TOM MITT SCARBOROUGH	OWNER	P.O. BOX 78 WOLFFORTH, TX	
WES HALLMARK	OWNER	P.O. Box 53516 Lubbock 79453	HALLMARKW@SVN.com
B. Davis Gentry	OWNER	8204 BRENTWOOD AVE	
B. DAVIS GENTRY			
Felicitas López	OWNER	8605 C.R 6400 Shallowater, TX 79363	
José Gómez	OWNER	8605 C.R. 6400 Shallowater, TX 79363	
Janice Sisson	owner	7726 19th - Lubbock	
Douglas Heck	Owner	7306 FM 179 Wolfforth 79382	
Tommy Hoelscher	OWNER	2701 CR 130 GARDEN CITY TX 79739	

April 17, 2014 | 5:00pm to 7:00pm | Wolfforth, Texas

(15)

Public Meeting Sign-in

Xcel Energy® | RESPONSIBLE BY NATURE® Power for the Plains

Wolfforth - Carlisle 230 kV Transmission Line Project

Print Name	Affiliation	Address	Email
William C. Gordy	Owner	1012 Prospect Ave	wcgordy@yahoo.com
Kim Nelson	OWNER	5402 FM 179 Lubbock	kim@SPRTexas.NET
Kyle Turner	Owner	1708 Pontiac Ave	Kyle.turner@lcu.edu
Charles Belton	owner	1316-54th Lubbock	Loader@beltonoil.com
James WALTER HAGOOD	OWNER	9808 FM 2378 WOLFFORTH	whagood9810@gmail.com
William MURRAY	OWNER	1112 FM 2378	

April 17, 2014 | 5:00pm to 7:00pm | Wolfforth, Texas

Fact Sheet - Engineering and Land Rights
Wolfforth – Carlisle 230 kV Transmission Line Project

Design Component	Steel Mono-Pole Structure
Right-of-Way Width	90 feet
Estimated Distance Between Poles	600–900 feet
Pole Height	80–140 feet
Poles per Mile	6-9
Ground Clearance (beneath conductor under max operating conditions)	31–57 feet
Maximum Width of Power Line Cross Arms	31 feet, 2 inches (15'6" each side)

Design and Construction

Xcel is proposing to use steel mono-poles for the proposed 230 kV transmission line.

Construction would be completed in several phases after all necessary right-of-way has been acquired:

- Brush and Vegetation Clearing
- Pole hole auguring
- Foundation construction where soils warrant
- Erecting the poles
- Stringing conductor
- Reclamation and Cleanup
- Construction of the transmission line is expected to last approximately 18 to 24 months.

Project Right-of-Way

The right-of-way (ROW) for this project is based upon several factors including the voltage of the transmission line, structure spacing, conductor tension, operational safety, and maintenance. The ROW required for the 230 kV line would be 90 feet.

Easement Acquisition and Survey Permission

An easement is a permanent right authorizing a utility to use the ROW to build and maintain a transmission line. Access easements would be needed for construction and long-term maintenance of the transmission line.

To assist with transmission line engineering and design, the companies and/or consultants would acquire temporary access or survey permission from landowners.

Working in the Right-of-Way

Normally, access by the landowner within the transmission line easement is not restricted. Activities not permitted within the easement are those that jeopardize the integrity of the structures or reduce the ground-to-line clearance, such as construction of buildings.

Fact Sheet - Routing and Siting Process
Wolfforth – Carlisle 230 KV Transmission Line Project

I. Define the Project Study Area and Identify Preliminary Alternative Route Segments

The project area was delineated based on the project termination points, which include the existing Wolfforth Substation, located on Farm-to-Market Road (FM) 1585 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 and Quincy Avenue, in the City of Lubbock. Preliminary feasible transmission line segments were identified that could link to generate a feasible end-to-end transmission line route. Initial identification of segments was based on known corridor opportunities such as existing rights-of-way and associated linear corridors (roads, railroads, other utilities), as well as existing land uses and parcel boundaries.

II. Engage the Public and Local Agencies

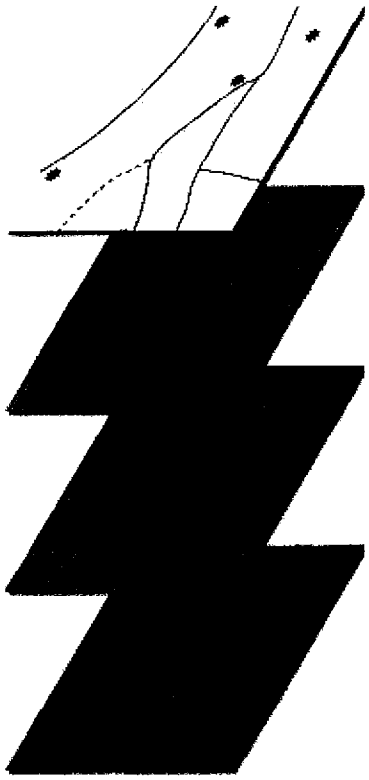
Present the preliminary route segments to the public to gather input and feedback from property owners, as well as elected officials, agencies and organizations. An open house forum provides an opportunity for the public to meet with the project proponent and their consultants to discuss the project purpose, design specifications and requirements, engineering and land right issues and the process used for selecting a preferred end-toend transmission line alternative.

III. Conduct an Opportunities and Constraints Analysis

Research and gather data for the routing and environmental analysis efforts, including but not limited to: existing habitable structures in proximity to the alternative routes; other structures or facilities that could cause conflicts such as communications towers, windmills, airports, center-pivot or rolling irrigation systems, and oil wells and pads; inventory of opportunities such as road, railroad, utility or other linear corridors and rights-of-way; and environmental resources in the study area such as wetlands, drainages, sensitive habitat for wildlife and plant species, and cultural resources. The data collected during this stage will be used in the routing and siting process where criteria are assessed and quantified. In addition to environmental constraints and opportunities, data will be collected to address specific siting criteria established by the Public Utilities Commission of Texas for purposes of the CCN permit application.

PUC *Siting Criteria to be Addressed*

- The number of habitable structures within 300 feet of segment centerline
- The number of AM transmitters within 10,000 feet of segment centerline
- The number *of* FM microwave transmitters within 2,000 feet of segment centerline
- The number of private airstrips and *FAA*-registered airstrips with runways shorter than 3,200 feet within 10,000 feet of centerline
- The number of FAA-registered airstrips with at least one runway longer than 3,200 feet within 20,000 feet of centerline
- The number of heliports within 5,000 feet of centerline
- The length of traveling irrigation systems (rolling or pivot) crossed
- The number of parks and recreational areas (owned by a governmental body or an organized group, club, or church) within 1,000 feet of centerline
- The number of historical and archeological sites known to be within 1,000 ft of centerline



IV. Route Refinement

Resource data collected during the opportunities and constraints phase will be studied and mapped using a Geographic Information System (GIS). Routing and siting the proposed transmission line and substation will focus on opportunities and constraints and whether there are any avoidance or exclusion areas to consider. Opportunity areas include linear facilities and corridors that may provide suitable opportunity for co-locating a transmission line, such as a road, highway, railroad or utility right-of-way. Another linear opportunity is following parcel boundaries if there are limited conflicts with structures or commercial operations. Avoidance areas include sensitive areas that could potentially incur environmental impacts, such as federally listed and protected biological species, recorded archaeological sites or historic structures on the National Register.

Exclusion areas include locations with a high level of sensitivity and are likely to have regulatory or legislative protections and restrictions, or areas with extreme physical constraints. A comparative matrix is generated to summarize and quantify the data collected and to help rank the alternatives in relation to their environmental, land use, engineering and cost impacts.

V. Environmental Assessment and Alternative Route Analysis

Following the Route Refinement phase, an environmental assessment will be prepared addressing the top feasible end-to-end route alternatives. The report will summarize the routing process, input from the public and agencies, and the results of the environmental assessment. A preferred end-to-end alternative will be selected by Xcel based on the results of the analysis. This report will be submitted to the PUCTexas, along with the CCN application.

VI. CCN Application

An application for a Certificate of Convenience and Necessity (CCN) will be submitted to the PUCTexas for the commission's consideration. The application, along with all supporting attachments, will be filed pursuant to P.U.C. Subst. R. 25.174. The Environmental Assessment and Alternative Route Analysis will be included in the application, along with engineering data, cost estimates, and public involvement documentation.

VI. PUC Texas Public Hearings

The proposed project will be considered at a public hearing with the PUCTexas which allows the public to provide comment and testimony on the proposal.

Xcel Energy®
RESPONSIBLE BY NATURE™

Power for the Plains

Siting and Land Rights
P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: (806) 378-2132
Facsimile: (806) 378-2142

PROPOSED WOLFFORTH TO CARLISLE 230 kV TRANSMISSION LINE PROJECT PUBLIC OPEN HOUSE MEETING

THURSDAY
APRIL 17, 2014
5:00 PM – 7:00 PM
FRENSHIP HIGH SCHOOL CAFETRIA
902 N. DOWDEN ROAD
WOLFFORTH, TX 79382

Welcome and thank you for taking the time to attend this public open-house meeting regarding the Proposed Xcel Energy Wolfforth to Carlisle 230-kilovolt (kV) transmission line project. The purpose of the public meeting is to present information, receive your ideas and concerns, and answer your questions about the project. Before the electric utility and its routing consultant (Atkins) make any final decisions concerning which potential routes will be filed by Xcel Energy for consideration by the Public Utility Commission of Texas (PUCT), Xcel Energy and Atkins would like to hear your opinion on several issues.

After you have visited the various display stations around the room and talked with the project representatives, please fill out this questionnaire and place it in the box marked questionnaires at the door before you leave. Your responses will help the utility company and Atkins understand the community's concerns and better aid the project team as it incorporates the input received into the development of the route alternatives that will be submitted to the PUCT for its consideration. Again, thank you for your time and interest.

1. Did you attend the open house meeting?

Yes ____ No ____

2. In your opinion, has the need for the project been adequately explained?

Yes ____ No ____

LINE ROUTING CONSIDERATIONS

3. The routing of a transmission line involves many considerations. What factors do you believe should be considered (avoided if possible) in the siting of this transmission line? (If you have multiple concerns, please rank them 1st, 2nd, 3rd, etc.)

Proximity to:

_____ a. Residential areas
_____ b. Cropland/Agricultural Uses
_____ c. Floodplains/wetlands
_____ d. Recreational/park areas
_____ e. Businesses/commercial areas
_____ f. Schools
_____ g. Churches/cemeteries
_____ h. Wildlife habitat/woodlands
_____ i. Archeological/historic sites

5. What other factors do you believe should be considered? (Continue on back if necessary).

_____
_____
_____

6. If you have a concern with a particular transmission line segment(s) shown on the display of potential routes, please indicate the segment number and describe your concern.

Segment No.	Concern
_____	_____
_____	_____
_____	_____

7. The potential route segments cross several land use types and follow different land use features. Please rate the acceptability of a transmission line (T-line) in respect to each of the following locations from 1 (preferable) to 3 (unacceptable). Circle the appropriate number for each location.

	Preferable	Acceptable	Unacceptable
a. Along existing T-line right-of-way	1	2	3
b. Along roads/railroads	1	2	3
c. Along fence lines away from roads	1	2	3
d. Along section lines	1	2	3
e. Along 1/2 section lines	1	2	3

ADDITIONAL INFORMATION

8. Which of the following applies to your situation?

   _____ a. Potential segment is near my home
   _____ b. Potential segment is across my land
   _____ c. Potential segment is across land I farm
   _____ d. Other, please specify _____

9. Do you believe this meeting and the information provided was helpful for your understanding of the project?

Meeting	_____ yes	_____ no
Information Provided	_____ yes	_____ no

10. Would you like someone to follow-up with you to discuss the project in more detail?

    _____ No _____ Yes (Please provide contact information below.)

Optional:

Name _____

Address _____

City, State/ZIP_____

Daytime phone_____

E-mail_____

ADDITIONAL COMMENTS OR QUESTIONS

_____
_____
_____
_____
_____

Please turn in your completed questionnaire at this meeting or mail within three days to:

Scott Morris
Xcel Energy, Siting and Land Rights
P.O. Box 1261
Amarillo, Texas 79105-1261

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights
P. O. Box 1261
Amarillo, TX 79105-1261
Telephone: 806-378-2738
Facsimile: 806-378-2724

March 31, 2014

<<Name>>
<<CO>>
<<Address1>>
<<City>>, <<State>> <<Zip>>

RE: Proposed Carlisle Sub to Wolfforth Sub 230 kV transmission line project

To whom it may concern:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, is proposing to construct a new 230 kilovolt (kV) electric transmission line in Lubbock and Hockley Counties, Texas. The purpose of this project is to improve the reliability of SPS's existing system, and allow for new load growth in the area.

The proposed transmission line will be approximately 10 – 20 miles long, depending on the route approved by the Public Utility Commission of Texas (PUCT). It will connect the existing Carlisle Substation (located on the South side of 4th Street approximately ½ mile East of County Road 1600 located in Lubbock County) to the existing Wolfforth Substation (located on the North side of FM 1525/County Road 7300 approximately ¼ mile East of County Road 1100 in Lubbock County). Please see the enclosed map.

You are receiving this notice because we encourage your participation. Your input will be an important consideration in the evaluation of alternative routes and in the assessment of potential impacts. In addition, we would appreciate receiving information about any permits, easements, or other approvals by your agency/office that you believe could affect this project, or if you are aware of any major proposed development or construction in the study area. .

SPS will host a public open house to solicit input to help determine the preferred route for the proposed transmission line as well as to share information about routing alternatives.

Thursday, April 17th, 2014 **5:00 p.m. – 7:00 pm**
Friendship School Cafeteria 902 Dowden Road Wolfforth, TX 79382

Preliminary route segments are shown on the attached map. Maps with greater detail will be available at the open house.

At the open house, information will be provided regarding the project need, route selection process, typical design features and the right-of-way acquisition process. You will have the opportunity to talk to Xcel Energy representatives and community members about the proposed project and to provide comments and concerns.

SPS is committed to routing the proposed transmission line in a manner consistent with the values of the local communities, the Texas Utility Code, the PUCT Rules and Policies, and the need to provide reliable electric service to the area. Your input is important.

If you have any questions about the project or the open house, please contact me at (806) 378-2738 or email scott.g.morris@xcelenergy.com.

Sincerely,

Scott Morris

Scott Morris
Senior Agent, Siting and Land Rights
Xcel Energy

Enclosures as noted

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights
P. O. Box 1261
Amarillo, TX 79105-1261
Telephone: 806-378-2738
Facsimile: 806-378-2724

March 31, 2014

4-W Petroleo Inc. % Buntmann & Associates Inc.
410 17th St. Ste 1020
Denver, CO 80202

RE: Proposed Carlisle Sub to Wolfforth Sub 230 kV transmission line project
Tract #: Segment(s) #:

Dear landowner,

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, is proposing to construct a new 230 kilovolt (kV) electric transmission line in Lubbock and Hockley Counties, Texas. The purpose of this project is to improve the reliability of SPS's existing system, and allow for new load growth in the area.

The proposed transmission line will be approximately 10 – 20 miles long, depending on the route approved by the Public Utility Commission of Texas (PUCT). It will connect the existing Carlisle Substation (located on the South side of 4th Street approximately ½ mile East of County Road 1600 located in Lubbock County) to the existing Wolfforth Substation (located on the North side of FM 1525/County Road 7300 approximately ¼ mile East of County Road 1100 in Lubbock County). Please see the enclosed map.

You are receiving this notice because one or more of the preliminary route segments is located on or within 300 feet of your property. SPS will host a public open house to solicit input to help determine the preferred route for the proposed transmission line as well as to share information about routing alternatives.

Thursday, April 17th, 2014 **5:00 p.m. – 7:00 pm**
Friendship School Cafeteria 902 Dowden Road Wolfforth, TX 79382

Preliminary route segments are shown as dashed lines on the attached map. Maps with greater detail will be available at the open house.

At the open house, information will be provided regarding the project need, route selection process, typical design features and the right-of-way acquisition process. You will have the opportunity to talk to Xcel Energy representatives and community members about the proposed project and to provide comments and concerns.

Please review the following enclosed documents:

- **Texas Landowner's Bill of Rights;**
- **Landowners and Transmission Line Cases at the Public Utility Commission;**
- **Project routing questionnaire;**
- **Permission to survey form; and,**
- **Project map.**

SPS is committed to routing the proposed transmission line in a manner consistent with the values of the local communities, the Texas Utility Code, the PUCT Rules and Policies, and the need to provide reliable electric service to the area. Your input is important.

If you have any questions about the project or the open house, please contact me at (806) 378-2738 or email scott.g.morris@xcelenergy.com.

Sincerely,

Scott Morris

Scott Morris
Senior Agent, Siting and Land Rights
Xcel Energy

Enclosures as noted

THE STATE OF TEXAS

LANDOWNER'S BILL OF RIGHTS

PREPARED BY THE

OFFICE OF THE
ATTORNEY GENERAL OF TEXAS

STATE OF TEXAS LANDOWNER'S BILL OF RIGHTS

This Landowner's Bill of Rights applies to any attempt by the government or a private entity to take your property. The contents of this Bill of Rights are prescribed by the Texas Legislature in Texas Government Code Sec. 402.031 and Chapter 21 of the Texas Property Code.

1. You are entitled to receive adequate compensation if your property is taken for a public use.

2. Your property can only be taken for a public use.

3. Your property can only be taken by a governmental entity or private entity authorized by law to do so.

4. The entity that wants to take your property must notify you that it wants to take your property.

5. The entity proposing to take your property must provide you with a written appraisal from a certified appraiser detailing the adequate compensation you are owed for your property.

6. The entity proposing to take your property must make a bona fide offer to buy the property before it files a lawsuit to condemn the property – which means the condemning entity must make a good faith offer that conforms with Chapter 21 of the Texas Property Code.

7. You may hire an appraiser or other professional to determine the value of your property or to assist you in any condemnation proceeding.

8. You may hire an attorney to negotiate with the condemning entity and to represent you in any legal proceedings involving the condemnation.

9. Before your property is condemned, you are entitled to a hearing before a court appointed panel that includes three special commissioners. The special commissioners must determine the amount of compensation the condemning entity owes for the taking of your property. The commissioners must also determine what compensation, if any, you are entitled to receive for any reduction in value of your remaining property.

10. If you are unsatisfied with the compensation awarded by the special commissioners, or if you question whether the taking of your property was proper, you have the right to a trial by a judge or jury. If you are dissatisfied with the trial court's judgment, you may appeal that decision.

CONDEMNATION PROCEDURE

Eminent domain is the legal authority that certain entities are granted that allows those entities to take private property for a public use. Private property can include land and certain improvements that are on that property.

Private property may only be taken by a governmental entity or private entity that is authorized by law to do so. Your property may be taken only for a public purpose. That means it can only be taken for a purpose or use that serves the general public. Texas law prohibits condemnation authorities from taking your property to enhance tax revenues or foster economic development.

Your property cannot be taken without adequate compensation. Adequate compensation includes the market value of the property being taken. It may also include certain damages if your remaining property's market value is diminished by the acquisition itself or by the way the condemning entity will use the property.

HOW THE TAKING PROCESS BEGINS

The taking of private property by eminent domain must follow certain procedures. First, the entity that wants to condemn your property must provide you a copy of this Landowner's Bill of Rights before - or at the same time - the entity first represents to you that it possesses eminent domain authority.

Second, if it has not been previously provided, the condemning entity must send this Landowner's Bill of Rights to the last known address of the person who is listed as the property owner on the most recent tax roll. This requirement stipulates that the Landowner's Bill of Rights must be provided to the property owner at least seven days before the entity makes a final offer to acquire the property.

Third, the condemning entity must make a bona fide offer to purchase the property. The requirements for a bona fide offer are contained in Chapter 21 of the Texas Property Code. At the time a purchase offer is made, the condemning entity must disclose any appraisal reports it produced or acquired that relate specifically to the property and were prepared in the ten years preceding the date of the purchase offer. You have the right to discuss the offer with others and to either accept or reject the offer made by the condemning entity.

CONDEMNATION PROCEEDINGS

If you and the condemning entity do not agree on the value of your property, the entity may begin condemnation proceedings. Condemnation is the legal process that eligible entities utilize to take private property. It begins with a condemning entity filing a claim for your property in court. If you live in a county where part of the property being condemned is located, the claim must be filed in that county. Otherwise, the condemnation claim can be filed in any county where at least part of the property being condemned is located. The claim must describe the property being condemned, state with specificity the public use, state the name of the landowner, state that the landowner and the condemning entity were unable to agree on the value of the property, state that the condemning entity provided the landowner with the Landowner's Bill of Rights, and state that the condemning entity made a bona fide offer to acquire the property from the property owner voluntarily.

SPECIAL COMMISSIONERS' HEARING

After the condemning entity files a condemnation claim in court, the judge will appoint three local landowners to serve as special commissioners. The judge will give you a reasonable period to strike one of the special commissioners. If a commissioner is struck, the judge will appoint a replacement. These special commissioners must live in the county where the condemnation proceeding is filed, and they must take an oath to assess the amount of adequate compensation fairly, impartially, and according to the law. The special commissioners are not legally authorized to decide whether the condemnation is necessary or if the public use is proper. Their role is limited to assessing adequate compensation for you. After being appointed, the special commissioners must schedule a hearing at the earliest practical time and place. The special commissioners are also required to give you written notice of the condemnation hearing.

You are required to provide the condemning entity any appraisal reports that were used to determine your claim about adequate compensation for the condemned property. Under a new law enacted in 2011, landowners' appraisal reports must be provided to the condemning entity either ten days after the landowner receives the report or three business days before the special commissioners' hearing - whichever is earlier. You may hire an appraiser or real estate professional to help you determine the value of your private property. Additionally, you can hire an attorney to represent you during condemnation proceedings.

At the condemnation hearing, the special commissioners will consider your evidence on the value of your condemned property, the damages to remaining property, any value added to the remaining property as a result of the condemnation, and the condemning entity's proposed use of your condemned property.

SPECIAL COMMISSIONERS' AWARD

After hearing evidence from all interested parties, the special commissioners will determine the amount of money that you should be awarded to adequately compensate you for your property. The special commissioners' decision is significant to you not only because it determines the amount that qualifies as adequate compensation, but also because it impacts who pays for the cost of the condemnation proceedings. Under the Texas Property Code, if the special commissioners' award is less than or equal to the amount the condemning entity offered to pay before the proceedings began, then you may be financially responsible for the cost of the condemnation proceedings. However, if the special commissioners' award is more than the condemning entity offered to pay before the proceedings began, then the condemning entity will be responsible for the costs associated with the proceedings.

The special commissioners are required to provide the court that appointed them a written decision. That decision is called the "Award." The Award must be filed with the court and the court must send written notice of the Award to all parties. After the Award is filed, the condemning entity may take possession of the property being condemned, even if either party appeals the Award of the special commissioners. To take possession of the property, the condemning entity must either pay the amount of the Award or deposit the amount of the Award into the court's registry. You have the right to withdraw funds that are deposited into the registry of the court.

OBJECTION TO THE SPECIAL COMMISSIONERS' AWARD

If either the landowner or the condemning entity is dissatisfied with the amount of the Award, either party can formally object to the Award. In order to successfully make this valuation objection, it must be filed in writing with the court. If neither party timely objects to the special commissioners' Award, the court will adopt the Award as the final judgment of the court.

If a party timely objects to the special commissioners' Award, the court will hear the case in the same manner that other civil cases are heard. Landowners who object to the Award and ask the court to hear the matter have the right to a trial and can elect whether to have the case decided by a judge or jury. The allocation of any trial costs is decided in the same manner that costs are allocated with the special commissioners' Award. After trial, either party may appeal any judgment entered by the court.

DISMISSAL OF THE CONDEMNATION ACTION

A condemning entity may file a motion to dismiss the condemnation proceeding if it decides it no longer needs your condemned property. If the court grants the motion to dismiss, the case is over and you are entitled to recover reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing on the motion to dismiss.

If you wish to challenge the condemning entity's authority to take your property, you can lodge that challenge by filing a motion to dismiss the condemnation proceeding. Such a motion to dismiss would allege that the condemning entity did not have the right to condemn your property. For example, a landowner could challenge the condemning entity's claim that it seeks to take the property for a public use. If the court grants the landowner's motion, the court may award the landowner reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing or judgment.

RELOCATION COSTS

If you are displaced from your residence or place of business, you may be entitled to reimbursement for reasonable expenses incurred while moving personal property from the residence or relocating the business to a new site. However, during condemnation proceedings, reimbursement for relocation costs may not be available if those costs are separately recoverable under another law. Texas law limits the total amount of available relocation costs to the market value of the property being moved. Further, the law provides that moving costs are limited to the amount that a move would cost if it were within 50 miles.

RECLAMATION OPTIONS

If private property was condemned by a governmental entity, and the public use for which the property was acquired is canceled before that property is used for that public purpose, no actual progress is made toward the public use within ten years or the property becomes unnecessary for public use within ten years, landowners may have the right to repurchase the property for the price paid to the owner by the entity at the time the entity acquired the property through eminent domain.

DISCLAIMER

The information in this statement is intended to be a summary of the applicable portions of Texas state law as required by HB 1495, enacted by the 80th Texas Legislature, Regular Session. This statement is not legal advice and is not a substitute for legal counsel.

ADDITIONAL RESOURCES

Further information regarding the procedures, timelines and requirements outlined in this document can be found in Chapter 21 of the Texas Property Code.

Landowners and Transmission Line Cases at the PUC

Public Utility Commission of Texas

1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326
(512) 936-7261
www.puc.state.tx.us

Effective: June 1, 2011

Purpose of This Brochure

This brochure is intended to provide landowners with information about proposed new transmission lines and the Public Utility Commission's ("PUC" or "Commission") process for evaluating these proposals. At the end of the brochure is a list of sources for additional information.

The following topics are covered in this brochure:
- How the PUC evaluates whether a new transmission line should be built,
- How you can participate in the PUC's evaluation of a line, and
- How utilities acquire the right to build a transmission line on private property.

You are receiving the enclosed formal notice because one or more of the routes for a proposed transmission line may require an easement or other property interest across your property, or the centerline of the proposed project may come within 300 feet of a house or other habitable structure on your property. This distance is expanded to 500 feet if the proposed line is greater than 230 kilovolts (kV). For this reason, your property is considered **directly affected land.** This brochure is being included as part of the formal notice process.

If you have questions about the proposed routes for a transmission line, you may contact the applicant. The applicant also has a more detailed map of the proposed routes for the transmission line and nearby habitable structures. The applicant may help you understand the routing of the project and the application approval process in a transmission line case but cannot provide legal advice or represent you. ***The applicant cannot predict which route may or may not be approved by the PUC. The PUC decides which route to use for the transmission line, and the applicant is not obligated to keep you informed of the PUC's proceedings. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene, which is discussed below.***

The PUC is sensitive to the impact that transmission lines have on private property. At the same time, transmission lines deliver electricity to millions of homes and businesses in Texas, and new lines are sometimes needed so that customers can obtain reliable, economical power.

The PUC's job is to decide whether a transmission line application should be approved and on which route the line should be constructed. The PUC values input from landowners and encourages you to participate in this process by intervening in the docket.

PUC Transmission Line Case

Texas law provides that most utilities must file an application with the PUC to obtain or amend a Certificate of Convenience and Necessity (CCN) in order to build a new transmission line in Texas. The law requires the PUC to consider a number of factors in deciding whether to approve a proposed new transmission line.

The PUC may approve an application to obtain or amend a CCN for a transmission line after considering the following factors:
- Adequacy of existing service;
- Need for additional service;
- The effect of approving the application on the applicant and any utility serving the proximate area;
- Whether the route utilizes existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the route parallels existing compatible rights-of-way;
- Whether the route parallels property lines or other natural or cultural features;
- Whether the route conforms with the policy of prudent avoidance (which is defined as the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort); and
- Other factors such as community values, recreational and park areas, historical and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers in the area.

If the PUC decides an application should be approved, it will grant to the applicant a CCN or CCN amendment to allow for the construction and operation of the new transmission line.

Application to Obtain or Amend a CCN:

An application to obtain or amend a CCN describes the proposed line and includes a statement from the applicant describing the need for the line and the impact of building it. In addition to the routes proposed by the applicant in its application, the possibility exists that additional routes may be developed, during the course of a CCN case, that could affect property in a different manner than the original routes proposed by the applicant.

The PUC conducts a case to evaluate the impact of the proposed line and to decide which route should be approved. Landowners who would be affected by a new line can:

- informally file a protest, or
- formally participate in the case as an intervenor.

Filing a Protest (informal comments):

If you do not wish to intervene and participate in a hearing in a CCN case, you may file **comments.** An individual or business or a group who files only comments for or against any aspect of the transmission line application is considered a "protestor."

Protestors make a written or verbal statement in support of or in opposition to the utility's application and give information to the PUC staff that they believe supports their position.

Protestors are ***not*** parties to the case, however, and ***do not have the right to***:

- Obtain facts about the case from other parties;
- Receive notice of a hearing, or copies of testimony and other documents that are filed in the case;
- Receive notice of the time and place for negotiations;
- File testimony and/or cross-examine witnesses;
- Submit evidence at the hearing; or
- Appeal P.U.C. decisions to the courts.

If you want to make comments, you may either send written comments stating your position, or you may make a statement on the first day of the hearing. If you have not intervened, however, you will not be able to participate as a party in the hearing. Only parties may submit evidence and ***the PUC must base its decision on the evidence.***

Intervening in a Case:

To become an intervenor, you must file a statement with the PUC, no later than the date specified in the notice letter sent to you with this brochure, requesting intervenor status (also referred to as a party). This statement should describe how the proposed transmission line would affect your property. Typically, intervention is granted only to directly affected landowners. However, any landowner may request to intervene and obtain a ruling on his or her specific fact situation and concerns. A sample form for intervention and the filing address are attached to this brochure, and may be used to make your filing. A letter requesting intervention may also be used in lieu of the sample form for intervention.

If you decide to intervene and become a party in a case, you will be required to follow certain procedural rules:

- You are required to timely respond to requests for information from other parties who seek information.
- If you file testimony, you must appear at a hearing to be cross-examined.
- If you file testimony or any letters or other documents in the case, you must send copies of the documents to every party in the case and you must file multiple copies with the PUC.
- If you intend to participate at the hearing and you do not file testimony, you must at least file a statement of position, which is a document that describes your position in the case.
- Failure to comply with these procedural rules may serve as grounds for you to be dismissed as an intervenor in the case.
- If you wish to participate in the proceedings it is very important to attend any prehearing conferences.

Intervenors may represent themselves or have an attorney to represent them in a CCN case. If you intervene in a case, you may want an attorney to help you understand the PUC's procedures and the laws and rules that the PUC applies in deciding whether to approve a transmission line. The PUC encourages landowners to intervene and become parties.

Stages of a CCN Case:

If there are persons who intervene in the case and oppose the approval of the line, the PUC may refer the case to an administrative law judge (ALJ) at the State Office of Administrative Hearings (SOAH) to conduct a hearing, or the Commission may elect to conduct a hearing itself. The hearing is a formal proceeding, much like a trial, in which testimony is presented. In the event the case is referred to SOAH, the ALJ makes a recommendation to the PUC on whether the application should be approved and where and how the line should be routed.

There are several stages of a CCN case:

- The ALJ holds a prehearing conference (usually in Austin) to set a schedule for the case.
- Parties to the case have the opportunity to conduct discovery; that is, obtain facts about the case from other parties.
- A hearing is held (usually in Austin), and parties have an opportunity to cross-examine the witnesses.
- Parties file written testimony before the date of the hearing. Parties that do not file written testimony or statements of position by the deadline established by the ALJ may not be allowed to participate in the hearing on the merits.
- Parties may file written briefs concerning the evidence presented at the hearing, but are not required to do so.
- In deciding where to locate the transmission line and other issues presented by the application, the ALJ and Commission rely on factual information submitted as evidence at the hearing by the parties in the case. In order to submit factual information as evidence (other than through cross-examination of other parties' witnesses), a party must have intervened in the docket and filed written testimony on or before the deadline set by the ALJ.
- The ALJ makes a recommendation, called a **proposal for decision**, to the Commission regarding the case. Parties who disagree with the ALJ's recommendation may file exceptions.
- The Commissioners discuss the case and decide whether to approve the application. The Commission may approve the ALJ's recommendation, approve it with specified changes, send the case back to the ALJ for further consideration, or deny the application. The written decision rendered by the Commission is called a **final order**. Parties who believe that the Commission's decision is in error may file motions for rehearing, asking the Commission to reconsider the decision.
- After the Commission rule on the motion for rehearing, parties have the right to appeal the decision to district court in Travis County.
-

Right to Use Private Property

The Commission is responsible for deciding whether to approve a CCN application for a proposed transmission line. If a transmission line route is approved that impacts your property, the electric utility must obtain the right from you to enter your property and to build, operate, and maintain the transmission line. This right is typically called an easement.

Utilities may buy easements through a negotiated agreement, but they also have the power of eminent domain (condemnation) under Texas law. Local courts, not the PUC, decide issues concerning easements for rights-of-way. The PUC does not determine the value of property.

The PUC final order in a transmission case normally requires a utility to take certain steps to minimize the impact of the new transmission line on landowners' property and on the environment. For example, the order normally requires steps to minimize the possibility of erosion during construction and maintenance activities.

HOW TO OBTAIN MORE INFORMATION

The PUC's online filings interchange on the PUC website provides free access to documents that are filed with the Commission in Central Records. The docket number, also called a control number on the PUC website, of a case is a key piece of information used in locating documents in the case. You may access the Interchange by visiting the PUC's website home page at www.puc.state.tx.us and navigate the website as follows:

- Select "Filings."
- Select "Filings Search."
- Select "Filings Search."
- Enter 5-digit Control (Docket) Number. *No other information is necessary.*
- Select "Search." *All of the filings in the docket will appear in order of date filed.*
- Scroll down to select desired filing.
- Click on a blue "Item" number at left.
- Click on a "Download" icon at left.

Documents may also be purchased from and filed in Central Records. For more information on how to purchase or file documents, call Central Records at the PUC at 512-936-7180.

PUC Substantive Rule 25.101, Certification Criteria, addresses transmission line CCNs and is available on the PUC's website, or you may obtain copies of PUC rules from Central Records.

Always include the docket number on all filings with the PUC. You can find the docket number on the enclosed formal notice. Send documents to the PUC at the following address.

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, TX 78711-3326

The information contained within this brochure is not intended to provide a comprehensive guide to landowner rights and responsibilities in transmission line cases at the PUC. This brochure should neither be regarded as legal advice nor should it be a substitute for the PUC's rules. However, if you have questions about the process in transmission line cases, you may call the PUC's Legal Division at 512-936-7261. The PUC's Legal Division may help you understand the process in a transmission line case but cannot provide legal advice or represent you in a case. You may choose to hire an attorney to decide whether to intervene in a transmission line case, and an attorney may represent you if you choose to intervene.

Communicating with Decision-Makers

Do not contact the ALJ or the Commissioners by telephone or email. They are not allowed to discuss pending cases with you. They may make their recommendations and decisions only by relying on the evidence, written pleadings, and arguments that are presented in the case.

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P. O. Box 1261
Amarillo, TX 79105-1261
Telephone: 806-378-2132
Facsimile: 806-378-2142

CARLISLE SUBSTATION TO WOLFFORTH SUBSTATION
230 KV ELECTRIC TRANSMISSION LINE PROJECT
ROUTING QUESTIONNAIRE

LANDOWNER: _____
TRACT #(S)_____ SEGMENT(S) _____
LEGAL DESCRIPTION(S):
Portion: _____Section(s) _____ Block(s) _____
Portion: _____Section(s) _____ Block(s) _____

This questionnaire is designed to help you identify issues related to routing of a proposed 230 kV overhead electric transmission line for the Carlisle Sub to Wolfforth Substation project. Your answers will assist the study team in understanding public interests and concerns, and will allow the team to incorporate this information in the route selection process. Please complete this questionnaire **after** you have reviewed the information presented in tonight's meeting. Thank you for your input.

LINE ROUTING CONSIDERATIONS

1. The routing of a transmission line involves many considerations. Please rank the following factors in the order of their importance to you. Indicate the most important factor with the number "1", second most important with the number "2", and so on.

   _____ a. Minimize total length of the line
   _____ b. Minimize length through cultivated fields
   _____ c. Minimize length through rangeland
   _____ d. Minimize the number of residences near the line
   _____ e. Minimize the number of businesses near the line
   _____ f. Minimize the number of public facilities (e.g. parks, schools, churches)
   _____ g. Minimize the clearing of trees
   _____ h. Minimize the impact on wildlife
   _____ i. Minimize the cost of the line
   _____ j. Maintain reliable electric service

2. If you would like to comment further on any of the above factors or identify any other factors that you feel should be considered, please use the space below.

   _____
   _____
   _____

3. If you have a concern with a particular transmission line segment(s) shown on the display of potential routes, please indicate the segment number and describe your concern.

Segment No.	Concern
_____	_____
_____	_____
_____	_____

4. The route alternatives cross several land use types and follow different land use features. Please rate the acceptability of a transmission line in respect to each of the following locations from 1 (preferable) to 3 (unacceptable). Circle the appropriate number for each location.

	Preferable	Acceptable	Unacceptable
a. Along roads/railroads	1	2	3
b. Along fence lines away from roads	1	2	3
c. Along section lines	1	2	3
d. Along 1/2 section lines	1	2	3

ADDITIONAL INFORMATION

5. Which of the following applies to your situation?

_____ a. Potential route is near my home
_____ b. Potential route is across my land
_____ c. Potential route is across land I farm
_____ d. Other, please specify _____

6. Do you believe this meeting and the information provided was helpful for your understanding of the project?

Meeting	_____ yes	_____ no
Information Provided	_____ yes	_____ no

7. Your name, address, and phone number are optional, but would be very useful should we need to contact you regarding an issue.

Name _____
Address _____
Phone Number _____

ADDITIONAL COMMENTS OR QUESTIONS

_____
_____
_____
_____

State of Texas Tract(s) #: _____
Carlisle to Wolfforth 230kV Electrical Transmission Line

PERMISSION TO SURVEY

I, _____ of _____ County, State of Texas, hereby grant Southwestern Public Service and its representatives, permission to enter upon the following described land, which is either owned or leased by me, for the purposes of performing a civil survey, soil testing, any necessary environmental studies, and utility location (including possible exposure of underground wires, pipes, or other facilities by hydro-vac) for the construction of an electrical transmission line:

Portion	Section	Block	Survey	County
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Dated this _____ day of _____, 2014.

_____ _____
Witness **owner**

_____ _____
Tenant **owner**

LANDOWNER COMMENTS & RESTRICTIONS:

_____

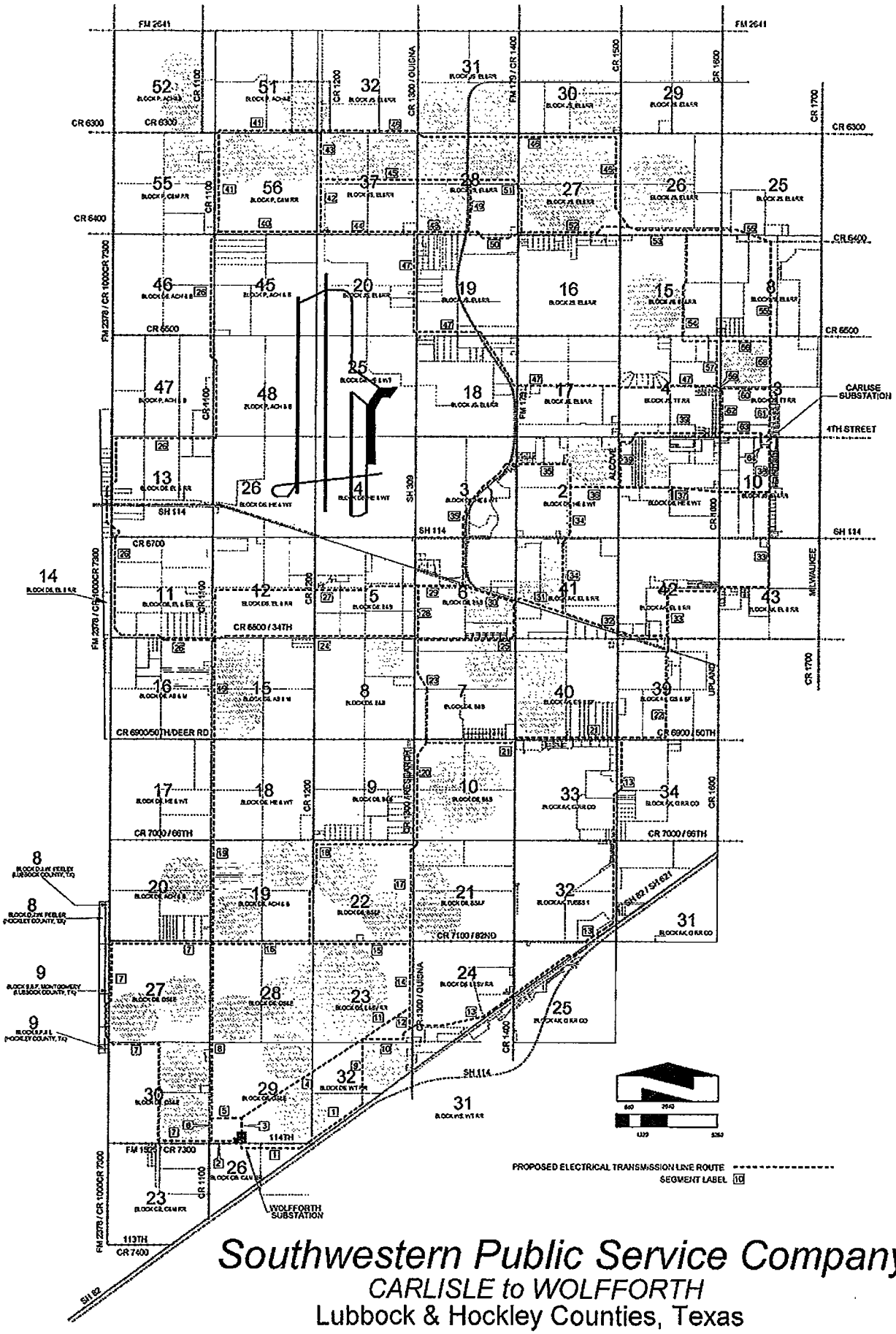
_____

_____

LANDOWNER CONTACT INFORMATION:

_____

_____



Southwestern Public Service Company

CARLISLE to WOLFFORTH

Lubbock & Hockley Counties, Texas

OVERSIZED
MAP
Figure 2-2

OVERSIZED
MAP
Figure 6-1a

OVERSIZED
MAP
Figure 6-1b

OVERSIZED MAP Figure 6-1c

ATTACHMENT 2

OVERSIZED STRUCTURE DRAWINGS

ATTACHMENT 2

OVERSIZED STRUCTURE DRAWINGS

ATTACHMENT 2

OVERSIZED STRUCTURE DRAWINGS

ATTACHMENT 2

OVERSIZED STRUCTURE DRAWINGS

ATTACHMENT 2

OVERSIZED STRUCTURE DRAWINGS

First Reading
October 9, 2003
Item No. 77B

Second Reading
October 10, 2003
Item No. 1

ORDINANCE NO. **2003-00110**

FRANCHISE AGREEMENT

AN ORDINANCE GRANTING TO SOUTHWESTERN PUBLIC SERVICE COMPANY ("SPS") D/B/A XCEL ENERGY THE RIGHT, PRIVILEGE AND FRANCHISE TO CONDUCT WITHIN THE CITY OF LUBBOCK, TEXAS, AN ELECTRICAL LIGHTING AND POWER BUSINESS AND TO ENTER UPON, ERECT, CONSTRUCT, MAINTAIN, EXTEND, REPAIR, REPLACE AND REMOVE IN, UNDER, UPON, WITHIN, OVER, ABOVE, ACROSS AND ALONG ANY AND ALL OF THE PRESENT AND FUTURE PUBLIC ROADS, HIGHWAYS, STREETS, LANES, AND ALLEYS OF THE CITY OF LUBBOCK, A SYSTEM OF POLES, POLE LINES, TOWERS, DISTRIBUTION LINES, TRANSMISSION LINES, WIRES, GUYS, CABLES, CONDUITS, TRANSFORMERS, AND OTHER DISTRIBUTION AND TRANSMISSION EQUIPMENT, FACILITIES AND APPURTENANCES NECESSARY OR PROPER FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRICITY INTO, IN, WITHIN, FROM, ACROSS, AND THROUGH THE CITY OF LUBBOCK, AS NOW EXISTING, OR AS SAID CITY LIMITS MAY HEREAFTER BE EXTENDED; AND GRANTING SPS, ITS SUCCESSORS AND ASSIGNS, THE AUTHORITY TO USE SUCH FOR THE PURPOSE OF TRANSMISSION, DISTRIBUTION, DELIVERY AND SALE OF ELECTRICITY TO THE CITY, AND TO THE INHABITANTS OF THE CITY, OR ANY OTHER PERSON OR PERSONS, FIRMS OR CORPORATIONS, WHEREVER LOCATED WITHIN OR WITHOUT THE CITY LIMITS OF LUBBOCK, FOR USE BY SUCH PURCHASES OR PURCHASERS FOR ANY PURPOSE AUTHORIZED BY LAW FOR WHICH ELECTRICITY MAY BE USED OR FOR ANY OTHER PURPOSE OR USE WHICH IS OR MAY BECOME NORMAL OR CUSTOMARY IN THE RETAIL ELECTRIC INDUSTRY IN TEXAS; PROVIDING THAT THIS FRANCHISE SHALL BE EFFECTIVE FOR A PERIOD OF TWENTY (20) YEARS COMMENCING UPON AND EXTENDING FROM THE EFFECTIVE DATE OF THIS ORDINANCE AFTER FINAL PASSAGE HEREOF ; PROVIDING FOR THE TEMPORARY REMOVAL, RAISING OR LOWERING BY SPS OF ITS WIRES AND OTHER APPURTENANCES; PROVIDING FOR THE RIGHT TO, AND CONDITION OF, THE OPENING OF PAVEMENTS AND SIDEWALKS BY SPS; RETAINING ALL RIGHTS OF CITY TO REGULATE THE LOCATION OF SPS'S FACILITIES IN, UPON, ALONG, UNDER AND OVER THE STREETS, ALLEYS AND OTHER PUBLIC PLACES OF CITY, AS WELL AS TO REQUIRE THE RELOCATION OF SAME; PROVIDING FOR EFFICIENT ELECTRICAL SERVICE AND THE MAINTAINING OF SPS'S FACILITIES; PROVIDING FOR THE USE BY CITY FOR THE PURPOSES SPECIFIED OF POLES AND CONDUITS OF SPS; PROVIDING COMPENSATION, AND METHOD OF PAYMENT OF SUCH, TO THE CITY FOR THE USE BY SPS OF THE STREETS, ALLEYS AND PUBLIC WAYS OF THE CITY, AND FOR SPS'S RECOVERY OF SUCH FEE; PROVIDING FOR THE MAINTAINING OF RECORDS BY SPS WITH RIGHT OF INSPECTION BY CITY RESERVING TO CITY ALL POWERS OF REGULATION; PROHIBITING ASSIGNMENT EXCEPT BY CONSENT BY CITY EXCEPT IN CERTAIN CASES; GIVING CITY'S CONSENT TO THE CUTTING AND TRIMMING BY SPS OF CONFLICTING TREES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING

THAT THIS FRANCHISE SHALL NOT BE EXCLUSIVE; MAKING MISCELLANEOUS PROVISIONS RELATIVE TO THIS GRANT OF FRANCHISE; REPEALING ALL PREVIOUS ELECTRICAL LIGHTING AND POWER FRANCHISE ORDINANCES AND RELATED RELEASE; PROVIDING FOR THE PUBLICATION OF THIS FRANCHISE ORDINANCE AND ITS ACCEPTANCE BY SPS.

WHEREAS, the City granted to Southwestern Public Service Company ("SPS") a franchise to operate and maintain an electric system in the City of Lubbock via Ordinance No. 8341, finally passed by the City Council on July 22, 1982.

WHEREAS, the electrical lighting and power franchise previously granted by the City Council of the City of Lubbock expired on September 10, 2002, and it appearing to this Council that the renewal of the franchise that has expired is expedient and wise, and will be of benefit to both SPS and the City of Lubbock; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LUBBOCK, TEXAS:

I. Franchise Authorization

That subject to the terms, conditions, and provisions of this ordinance, the City of Lubbock, Texas, hereinafter referred to as "City", does hereby grant unto Southwestern Public Service Company, a corporation incorporated under the laws of the State of New Mexico, having a permit to do business in the State of Texas, hereinafter referred to as "SPS", its successors and assigns, the right, privilege and franchise to conduct an electrical lighting and power business within the boundaries of the City of Lubbock, as such boundaries now exist or may hereafter be extended.

SPS shall have the right to enter upon, erect, construct, maintain, extend, repair, replace, and remove in, under, upon, within, over, above, across and along any and all of the present and future public roads, highways, streets, lanes, alleys and other public rights-of-way of the City now or hereafter owned or controlled by the City a system of

poles, pole lines, towers, distribution lines, transmission lines, underground and above ground lines, wires, guys, cables, conduits, transformers, and other distribution and transmission equipment, facilities and appurtenances necessary, proper or reasonably needed for the transmission and distribution of electricity into, in, within, from, across and through the City as now existing or as the said City limits may hereafter be extended to the extent City is authorized to grant such right.

SPS is authorized to use said poles, lines, towers, wires, guys, conduits, transformers, and other distribution and transmission equipment, facilities and appurtenances for the transmission, distribution, delivery and sale of electricity to the City and to the inhabitants of the City or any other person or persons, firms or corporations wherever located for use by such purchaser or purchasers for any purpose authorized by law for which electricity may be used or for any other purpose or use which is or may become normal or customary in the retail electric industry in Texas.

II. Term and Deregulation.

The term of this franchise granted to SPS shall be for Twenty (20) years from the date the franchise becomes effective as outlined below. The franchise rights and privileges shall be in full force and effect December 1, 2003 or thirty (30) days from the last publication of this Ordinance, whichever occurs later, provided SPS has formally accepted this franchise as provided in Section XXII.

III. Franchise Fee/Payment

As compensation and rental for the use of the streets, alleys and public ways of City in the conduct of its business under this franchise, SPS shall pay the City each year of the life of this franchise, beginning December 1, 2003, a sum of money equal to five percent (5%) of the annual gross receipts of SPS from its retail electric lighting and

power sales for consumption within the corporate limits of the City. All amounts payable to the City under this section shall be surcharged to SPS's customers taking electric service within the corporate limits of Lubbock. The franchise payments shall be due and payable monthly with the first payment to be due and payable on January 15, 2004. Each subsequent payment shall be due on the 15th day of each month thereafter for the remaining life of this franchise. Each payment shall be based on the gross receipts of SPS during the preceding calendar month. Said monthly payments above provided shall be exclusive of and in addition to ad valorem taxes.

All money due and payable to City by SPS computed under the terms of the previous franchise shall be payable to the time that computation begins under this franchise.

Any and all such payments made by SPS pursuant to this Section shall be credited on any amount imposed, levied or assessed against SPS by the City of Lubbock, pursuant to ordinance or otherwise, at any time as a charge (whether designated as rental, tax or otherwise) for the use by SPS of City's streets, alleys and public ways. The term "gross receipts" as herein used, shall include all receipts from the sale of electric lighting and power in SPS's certificated territory in the corporate limits of Lubbock, Texas. The term "gross receipts" shall also include all fees, commissions, collections, rents, royalties, and any income associated directly or indirectly with the sale of electric lighting and power within the corporate limits of Lubbock, Texas. Notwithstanding the general definition above, "gross receipts" shall not include revenues collected for franchise fees or sales taxes, and does not include bad debt from gross receipts billed but not paid and not collected. Any revenue subsequently received by SPS that was previously determined to be bad debt by SPS shall be subject to the franchise fee. SPS's wholesale sale of electric

lighting and power to the City's municipally owned electric utility are not covered by this Franchise Agreement and are not included in "gross receipts."

It is further understood and agreed to by SPS that the franchise fee authorized herein shall form the basis for which any franchise fee is authorized and calculated according to state law after retail electric deregulation is authorized by the State of Texas in the region which encompasses the City of Lubbock. This includes, without limitation, Sections 33.008 (b) and 39.402(b) of the Texas Utility Code.

All franchise fees that SPS fails to pay within the time period specified in this section shall bear interest according to the following formula: for the period January 1 through June 30, the prime rate last published in the *Wall Street Journal* in the preceding December plus two percent (2%); and for the period from July 1 through December 31, the prime rate last published in the *Wall Street Journal* in the preceding June plus two percent (2%).

IV. Pole Location.

Within the streets or other public rights-of-way of the City, the location and route of all poles, stubs, guys, anchors, liens, conduits, underground duct lines, manholes, and cables placed and constructed and to be placed and constructed by SPS in the construction and maintenance of its electrical lighting and power system in, within, through, or under the streets, alleys, or other public rights-of-way of the City shall be subject to reasonable and proper regulation, control and direction of the City, or of the City official to whom such duties have been or may be delegated.

All poles, guys or anchors erected by SPS shall be so set that they will not cause diversion of surface waters in any gutter or drain so as to cause damage to adjoining property, and so that the same will interfere as little as practicable with the ordinary travel

on the streets, sidewalks and other public rights-of-way of the City; the regulation and control herein reserved shall include, without limitation, the right of the City to require SPS, at SPS's expense, to relocate its poles, lines or conduits so as to permit the following activities undertaken by the City on its behalf:

a. The widening or straightening of any street, alley or public right-of-way located within the City.
b. The closing, opening or relocation of any street, alley or public right-of-way within the City.
c. The location or relocation of any water or sewer lines within the City.
d. The changing of grade of any street, alley, curb or sidewalk within the City.
e. The construction and maintenance of parks and other public improvements owned by the City of Lubbock located within the City.

In all cases where SPS is required to relocate, change the route of or the position of the poles, lines or the conduits, the City shall provide thirty (30) days advance written notice to SPS specifying the new location, route, or position of the poles, lines, or conduits involved. SPS shall be entitled to be paid for its cost and expenses of any relocation, raising or lowering of its wires, required by the City, pursuant to this Section or Section V, only if such expenses or costs are reimbursable or payable to SPS or the City by the State of Texas, the United States or any governmental agency or subdivision of either, whether directly or indirectly. However, nothing herein shall impose any obligation on the City to pay such costs and expenses except to the extent it actually receives funds from the United States, the State of Texas, or any governmental agency or subdivision of either, for the reimbursement or payment of same. The provisions of this section shall not apply to improvements made by SPS on private easements purchased by SPS and recorded prior to any dedication of any street, alley or public way. In this latter event SPS shall be reimbursed its costs and expenses of relocating facilities.

V. Temporary Relocation

SPS, on written reasonable request of any responsible person, firm, corporation or governmental authority, shall relocate, raise or lower its wires, where located on, in, or over the streets, alleys and other public ways of City, temporarily to permit construction work in the vicinity thereof, or to permit the moving of houses or other bulky structures. The expense of such temporary relocation, raising or lowering of such wires shall be paid by the benefited party or parties, and SPS may require the payment in advance, being without obligation to remove, raise or lower its wires until such payment shall be made; provided, however, that no such payment shall be required of the City except as provided in Section IV. SPS shall be given not less than seventy-two (72) hours prior written notice to arrange for such temporary wire changes.

VI. Excavation of Sidewalks

If it becomes necessary in furnishing electricity as contemplated under this franchise, the City grants to SPS the right and privilege to take up pavements and sidewalks, if any, in and upon said streets, alleys and highways in said City for the purpose of making such excavation and installation as may be necessary; provided, however, that SPS shall not take up or excavate any pavement at any time without first securing the written permission of the City Manager or his designated representative, which permission will not be unreasonably withheld; and provided further, that all excavations and installations so made shall be performed in such manner as will cause the least reasonable inconvenience to the public, and SPS shall promptly restore or cause to be restored to as good condition as before working thereon all such pavements, sidewalks, streets, alleys or highways excavated by it to the reasonable satisfaction of the City Manager or his designated representative.

VII. Waiver

If any of the facilities installed by SPS hereunder shall be in any respect damaged or injured by the City or any of its officers, agents, representatives, or employees, in connection with the performance of any work or repairs that may be done upon the streets, avenues, alleys and other public places of the City of Lubbock, but not including work or repair for or related to the City's municipally owned electric utility, SPS shall not be entitled to prosecute or maintain a claim against the City of Lubbock for any such damage or injury so sustained by it, except where such damages are the result of willful acts or gross negligence of the officers, agents, representatives or employees of City, and said right is hereby waived; provided, however, this section shall not apply where such property is damaged or injured as a proximate result of installing, maintaining or removing City's equipment upon or from SPS's poles, or in or from SPS's ductlines, as provided in Section XI hereof.

VIII. City's Sovereignty

The City, by the granting of this franchise, does not surrender or to any extent lose, waive, imperil or lessen the lawful powers and rights now or hereinafter vested in the City under the Constitution and Statutes of the State of Texas and under the Charter of the City to regulate the rates for services of SPS; and SPS, by its acceptance of this franchise, agrees that all such lawful regulatory power and rights as the same may be from time to time vested in the City shall be in full force and effect and subject to the exercise thereof by the City at the City's discretion.

Notwithstanding anything contained in this ordinance to the contrary, all work done in connection with the construction, repair, maintenance and operation of all facilities of SPS is subject to the continuing police power of the City; and SPS shall

comply with all present and future laws, ordinances and regulations, except when such compliance is in conflict with that authority specifically surrendered by the City herein.

IX. Electric Service Provided

It shall be SPS's obligation hereunder to furnish efficient electrical service to meet standards of the industry for the area. SPS shall serve every eligible consumer in the franchise of SPS regardless of cost, amount of usage, customer deposits, return on investment, access and other reasonable factors. SPS shall not discriminate against any person, corporation, firm, or association in the charge for such electrical current or in the service rendered under like circumstances. SPS shall not directly or indirectly grant any discount or rebate, or give things of value to circumvent the rate schedule as approved by the appropriate regulatory authority. In order to meet competition, nothing herein shall prevent SPS from doing anything that is lawfully done by the City's municipally owned electric utility.

X. Non-exclusivity

Nothing contained in this Ordinance shall be construed as conferring upon SPS any exclusive rights or privileges of any nature whatsoever.

XI. City Use of SPS's Pole/Duct Space

In addition to the consideration set forth elsewhere in this ordinance, SPS shall hereafter hold itself ready to furnish free of charge, subject to the use of the City, such pole space as may be reasonably required from time to time for the installation of City-owned street light equipment, traffic, police and fire alarm system conductors, and alarm or other necessary signal boxes, data transmission and telecommunication equipment; provided that such space used by the City does not exceed the capacity of one cross-arm space on any one pole, and provided that such space is available on existing poles and has

been requested three (3) days in advance in writing by the City Manager or his designated representative prior to installation of SPS facilities hereunder placed within any street, alley or public way. The specific location of the street light equipment, and police and fire alarm conductors and boxes on SPS 's poles shall be determined by SPS, and will be allotted at the time specific applications for space are received from the City. Where a main underground ductline is hereafter constructed or installed between manholes by SPS, SPS shall, as a part of same, provide free space for the installation by City of its traffic, police or fire alarm cables, on request in writing by City Manager or his designated representative prior to construction, one top duct having one capped off entry channel and one capped off exit channel between each two manholes, such entry and exit channels leaving the duct bank enclosure outside of, but near to, such manholes, and no cable or other equipment of City shall enter SPS's manholes. SPS shall, prior to each addition by it to any duct now existing or hereafter constructed, notify the City Manager or his designated representative of City of the nature and location of such intended addition; further, SPS shall, along with its application for a permit to open a street for the purpose of laying a new duct, provide the City Manager and the City Engineer's Office each with a set of plans showing the type, number, and location in the street, of the ducts to be constructed. City, prior to the original installation by it of its equipment in any such top duct, shall notify SPS three (3) days in advance of the time and place it intends to make such entry and installation. All cables installed by the City in SPS ducts shall be of the non-metallic, sheathy type to prevent corrosive or electrolytic action between the City and SPS-owned cables. All City-owned conductors and cables, whether on poles or in ductlines, shall be constructed, maintained and operated in such manner as to not interfere with or create a hazard in the operation of SPS's electrical transmission and

distribution system. Further, all City-owned traffic, police and fire alarm conductors, and alarm boxes, and any City circuits on SPS poles, and all cables installed by City in ducts constructed by SPS, shall be installed in strict compliance with the applicable provisions of the National Electrical Safety Code and other applicable federal, state and local codes.

Provided further, that no part or portion of this Section shall ever be construed as requiring SPS to make any additional expenditure over and above its normal and ordinary cost, and if the City's requirements hereunder cause an additional cost or expense in enlarging, removing, adding to or otherwise changing SPS's facilities, City shall reimburse SPS for the full amount of such costs. SPS shall not in any case be liable for damages or claims of damages to any person or persons arising from or growing out of the attachment of City's equipment, or arising from or growing out of the construction, operation or maintenance of such facilities. The City further agrees to indemnify and hold SPS harmless from any and all damages or claims for damages by reason of the construction, maintenance or operation of the City's facilities as set forth in this Section.

XII. Annual Receipts Report/Right to Audit

SPS shall on the 1st day of February of each year of the life of this franchise, file or cause to be filed, a statement, certified by a duly qualified officer of SPS, showing the gross receipts of SPS within the City of Lubbock (as defined above) during the twelve months ending on the 31st day of December immediately preceding. For the purpose of determining the amount of the gross receipts of SPS, SPS shall keep in its office at the disposal of and open to inspection by any auditor authorized and appointed by City at all reasonable times, books of accounts and other records showing a full, true, complete and accurate account of the gross receipts of SPS from its electric lighting and power sales for consumption within the corporate limits of the City for the prior three calendar years.

XIII. Indemnification

SPS shall indemnify and save the City harmless from all claims, demands or causes of action brought against the City occasioned by or arising out of the construction, reconstruction, maintenance, or repair of SPS's electrical lighting and power system, or in any way growing out of the granting of this franchise either directly or indirectly; provided, however, that the provisions of this Section shall not be applicable to any claims, damages, actions or causes of actions proximately resulting from the use by City, its officers, agents, representatives or employees, of SPS's poles and ductlines for the installation, maintenance or removal of City's equipment, as provided in Section XI, or for which the City is otherwise liable as provided herein.

XIV. Authority

In granting this franchise it is understood that the lawful power vested by law in the City to require all persons or corporations to discharge the duties and undertaking for the performance of which this franchise was made, is reserved; this grant is made subject to all the rights, powers and authorities either of regulation or otherwise reserved to the City by its Charter or by the general laws of the State.

XV. Assignment/Transfer of Franchise

The rights, franchises and privileges hereby granted shall not be transferred or assigned by SPS except with the consent of the City Council of the City of Lubbock expressed by Ordinance passed by said City Council; provided, however, SPS may mortgage or pledge its rights hereunder for security or obligations owing by SPS; and provided further, that a transfer could be made in a merger, consolidation or re-organization proceeding to which SPS is a party or to a subsidiary corporation or affiliate corporation of SPS or wherein SPS sells its entire physical assets. It is specifically

recognized that under the Public Utility Regulatory Act, Chapter 39, Restructuring of Electric Utility Industry, it is anticipated that at some date in the future SPS will unbundle into a power generation company, a retail electric provider, and a transmission and distribution utility. At the time of such unbundling to comply with retail electric deregulation, the franchise granted herein will go with the distribution utility and the franchise fee thereafter will be calculated as provided in Section III of this franchise.

In the event of contemplated transfer of this franchise, under the terms of this section permitting transfer without consent of City Council, SPS shall notify the City of Lubbock of the contemplated transfer by written notice delivered to the City Secretary not less than sixty (60) days prior to accomplishment of any merger, consolidation or re-organization proceeding or transfer of its entire physical assets; and will provide the City Council an opportunity to confer with the proposed transferee concerning proper acceptance of the terms of this franchise.

Prior to exercising any rights hereunder, any purchaser or transferee of SPS shall file with the City Manager a written acceptance of this franchise setting forth an agreement to be bound by all terms and provisions hereof.

XVI. Tree Trimming

To the extent that the City has authority to do so, it gives to SPS , during the life of this franchise, the right, license, privilege and permission to trim trees upon and overhanging the streets, alleys, sidewalks and public places of City, so as to prevent the branches of such trees from coming in contact with the wires or other equipment of SPS. SPS agrees that it will fully protect and indemnify City from any and all claims, demands, actions, causes of actions, damages and expenses arising because of such trimming by SPS under the provisions of this Section.

XVII. Notice of Default

The franchise rights and privileges hereinabove granted to SPS, its successors and assigns are and shall be at all times, during the term and life of this franchise, contingent upon the faithful and punctual performance of and compliance with all acts, requirements and provisions of this Ordinance, and any amendment hereof, by SPS, its officers, agents and employees on its part to be performed, complied with and abided by, and if at any time SPS shall refuse or fail to keep, perform, comply with and abide by all and singular the acts, requirements and provisions of this Ordinance, or any amendment, within sixty (60) days from receipt of written notice from the City Manager acting by Order of the City Council setting forth in detail the facts constituting default of SPS and what is required to cure such default; and upon continued failure of SPS to keep, perform, comply with and abide by such acts, requirements and provisions of this Ordinance or any amendment or failure to cure the default set forth in such written notice, the City Council may terminate, at its option, this franchise and all privileges and rights herein granted to said SPS. The notice herein mentioned shall be sufficient, if given to the Manager of SPS in charge of its main office in the City of Lubbock.

XVIII. Removal of Dangerous Objects

The City shall have power at any time to require SPS to remove and abate at its own expense any installation or structure that is dangerous to life or property, and in case SPS, after reasonable notice, fails or refuses to act, the City shall have the power using reasonable means and methods to remove or abate the same at expense of SPS, all without compensation or liability for damages to SPS.

XIX. Severability

If any provision, section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, void or invalid (or for any reason unenforceable), the validity of the remaining portions of this Ordinance shall not be affected thereby.

XX. Right of First Refusal

In the event that SPS should desire to sell, market or advertise for sale, SPS's distribution system within the corporate limits of the City, then, and in that event, SPS shall, prior to selling its distribution system to any unaffiliated third party, notify the City of the availability of SPS 's distribution system. The City shall, within thirty (30) days of the receipt of such notice, provide SPS written notice of the City's intention to purchase SPS's distribution system. If the City provides SPS with written confirmation of its intention to purchase SPS's distribution system the City shall have an additional sixty (60) days to exercise due diligence and enter into a contract with SPS to purchase the entire distribution system belonging to SPS within the corporate limits of the City upon terms and conditions mutually agreeable to the City and SPS.

XXI. Prior Franchise Repealed and Release

This franchise replaces all former franchise ordinances granted to SPS or its predecessors, which are hereby repealed, which repeal is effective as of the time the franchise herein granted takes effect. There is specifically and particularly repealed, effective as of that time, Ordinance No. 8341 passed by the City of Lubbock on the second reading July 22, 1982, granting to Southwestern Public Service Company, its successors and assigns, a franchise for a period of twenty (20) years, as amended by Ordinance No. 9329 passed by the City of Lubbock on the second reading February 8, 1990.

The City and SPS further release, acquit and forever discharge the other party for any further claims or unresolved issues arising out of any audit conducted by the City regarding the prior franchise and the method of calculating the franchise fee for the period between the termination of the prior franchise and December 1, 2003, the effective date of new definitions to be used in calculating the franchise fee under this franchise. However, nothing contained herein relieves SPS of their obligation to continue to pay a franchise fee to the City under the terms of the prior franchise until the effective date of this franchise and as outlined in Section III above.

XXII. Final Passage/Acceptance

SPS shall, within thirty (30) days from the date of the final passage of this Ordinance by the City Council of the City of Lubbock, file with the City Secretary of Lubbock, a written statement signed in its name and behalf by an officer of SPS duly authorized by its Board of Directors in the following form:

"The Honorable Mayor and the City Council of the City of Lubbock:

"Southwestern Public Service Company, for itself, its successors and assigns, hereby accepts the attached Ordinance finally passed by the City Council of Lubbock, the _____day of _____, 2003, and agrees to be bound by all of its terms and provisions.

Southwestern Public Service Company

By: _____
(Office)

"Dated the _____ day of _____, 2003."

The full text of this Ordinance shall, after final passage by the City Council of the City of Lubbock, be published once each week for three (3) consecutive weeks in a newspaper of general circulation published in the City of Lubbock, and the expense of such publication shall be borne by SPS . Upon said publication being completed and the acceptance of this Ordinance by SPS as herein provided, this Ordinance shall take effect thirty (30) days after its last publication.

AND IT IS SO ORDERED.

Passed by City Council on first reading this 9th day of October, 2003.

Passed by City Council of second reading this 10th day of October, 2003.

Marc McDougal, Mayor

ATTEST:

Rebecca Garza, City Secretary

APPROVED AS TO CONTENT:

Quincy White, Assistant City Manager

APPROVED AS TO FORM:

Matthew L. Wade, Assistant City Attorney

I:\\ccdocs\SPS franchise - finala

STATE OF TEXAS §
§
COUNTY OF LUBBOCK §

To: The Honorable Mayor and the City Council of the City of Lubbock:

Southwestern Public Service Company, for itself, its successors and assigns, hereby accepts the attached Ordinance finally passed by the City Council of Lubbock, the 10TH day of OCTOBER, 2003, and agrees to be bound by all of its terms and provisions.

Southwestern Public Service Company

By: Gary L. Gibson
Gary Gibson
Title: PRESIDENT

Dated the 4TH day of NOVEMBER, 2003.

ORDINANCE NO. 420

FRANCHISE AGREEMENT

AN ORDINANCE GRANTING TO SOUTHWESTERN PUBLIC SERVICE COMPANY ("SPS") D/B/A XCEL ENERGY THE RIGHT, PRIVILEGE AND FRANCHISE TO CONDUCT WITHIN THE CITY OF WOLFFORTH, TEXAS, AN ELECTRICAL LIGHTING AND POWER BUSINESS AND TO ENTER UPON, ERECT, CONSTRUCT, MAINTAIN, EXTEND, REPAIR, REPLACE AND REMOVE IN, UNDER UPON, WITHIN, OVER, ABOVE, ACROSS AND ALONG ANY AND ALL OF THE PRESENT AND FUTURE PUBLIC ROADS, HIGHWAYS, STREETS, LANES, AND ALLEYS OF THE CITY OF WOLFFORTH, A SYSTEM OF POLES, POLE LINES, TOWERS, DISTRIBUTION LINES, TRANSMISSION LINES, WIRES, GUYS, CABLES, CONDUITS, TRANSFORMERS, AND OTHER DISTRIBUTION AND TRANSMISSION EQUIPMENT, FACILITIES AND APPURTENANCES NECESSARY OR PROPER FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRICITY INTO, IN, WITHIN, FROM, ACROSS, AND THROUGH THE CITY OF WOLFFORTH AS NOW EXISTING, OR AS SAID CITY LIMITS MAY HEREAFTER BE EXTENDED; AND GRANTING SPS, ITS SUCCESSORS AND ASSIGNS, THE AUTHORITY TO USE SUCH FOR THE PURPOSE OF TRANSMISSION, DISTRIBUTION, DELIVERY AND SALE OF ELECTRICITY TO THE CITY, AND TO THE INHABITANTS OF THE CITY, OR ANY OTHER PERSON OR PERSONS, FIRMS OR CORPORATIONS, WHEREVER LOCATED WITHIN OR WITHOUT THE CITY LIMITS OF WOLFFORTH, FOR USE BY SUCH PURCHASER OR PURCHASERS FOR ANY PURPOSE AUTHORIZED BY LAW FOR WHICH ELECTRICITY MAY BE USED OR FOR ANY OTHER PURPOSE OR USE WHICH IS OR MAY BECOME NORMAL OR CUSTOMARY IN THE RETAIL ELECTRIC INDUSTRY IN TEXAS; PROVIDING THAT THIS FRANCHISE SHALL BE EFFECTIVE FOR A PERIOD OF TWENTY (20) YEARS COMMENCING JULY 16, 2012; PROVIDING FOR THE TEMPORARY REMOVAL, RAISING OR LOWERING BY SPS OF ITS WIRES AND OTHER APPURTENANCES; PROVIDING FOR THE RIGHT TO, AND CONDITION OF, THE OPENING OF PAVEMENTS AND SIDEWALKS BY SPS; RETAINING ALL RIGHTS OF CITY TO REGULATE THE LOCATION OF SPS'S FACILITIES IN, UPON, ALONG, UNDER AND OVER THE STREETS, ALLEYS AND OTHER PUBLIC PLACES OF CITY, AS WELL AS TO REQUIRE THE RELOCATION OF SAME; PROVIDING FOR EFFICIENT

ELECTRICAL SERVICE AND THE MAINTAINING OF SPS'S FACILITIES; PROVIDING FOR THE USE BY CITY FOR THE PURPOSES SPECIFIED OF POLES AND CONDUITS OF SPS; PROVIDING COMPENSATION, AND METHOD OF PAYMENT OF SUCH, TO THE CITY FOR THE USE BY SPS OF THE STREETS, ALLEYS AND PUBLIC WAYS OF THE CITY; PROVIDING FOR THE MAINTAINING OF RECORDS BY SPS WITH RIGHT OF INSPECTION BY CITY RESERVING TO CITY ALL POWERS OF REGULATION; PROHIBITING ASSIGNMENT EXCEPT BY CONSENT BY CITY EXCEPT IN CERTAIN CASES; GIVING CITY'S CONSENT TO THE CUTTING AND TRIMMING BY SPS OF CONFLICTING TREES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING THAT THIS FRANCHISE SHALL NOT BE EXCLUSIVE; MAKING MISCELLANEOUS PROVISIONS RELATIVE TO THIS GRANT OF FRANCHISE; REPEALING ALL PREVIOUS ELECTRICAL LIGHTING AND POWER FRANCHISE ORDINANCES; PROVIDING FOR THE ACCEPTANCE OF THIS FRANCHISE ORDINANCE BY SPS.

WHEREAS, the City granted to Southwestern Public Service Company ("SPS") a franchise to operate and maintain an electric system in the City of Wolfforth.

WHEREAS, SPS has requested that the City Council of the City of Wolfforth, Texas, grant an electrical lighting and power franchise at this time, and it appearing to this Council that the renewal of the franchise will be of benefit to both SPS and the City of Wolfforth; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF Wolfforth, TEXAS:

I. Franchise Authorization

That subject to the terms, conditions, and provisions of this ordinance, the City of Wolfforth, Texas, hereinafter referred to as "City", does hereby grant unto Southwestern Public Service Company, a corporation incorporated under the laws of the State of New Mexico, having a permit to do business in the State of Texas, hereinafter referred to as

"SPS", its successors and assigns, the right, privilege and franchise to conduct an electrical lighting and power business within the boundaries of the City of Wolfforth, as such boundaries now exist or may hereafter be extended.

SPS shall have the right to enter upon, erect, construct, maintain, extend, repair, replace, and remove in, under, upon, within, over, above, across and along any and all of the present and future public roads, highways, streets, lanes, alleys and other public rights-of-way of the City now or hereafter owned or controlled by the City a system of poles, pole lines, towers, distribution lines, transmission lines, underground and above ground lines, wires, guys, cables, conduits, transformers, and other distribution and transmission equipment, facilities and appurtenances necessary, proper or reasonably needed for the transmission and distribution of electricity into, in, within, from, across and through the City as now existing or as the said City limits may hereafter be extended to the extent City is authorized to grant such right.

SPS, its successors and assigns, are authorized to use said poles, lines, towers, wires, guys, conduits, transformers, and other distribution and transmission equipment, facilities and appurtenances for the transmission, distribution, delivery and sale of electricity to the City and to the inhabitants of the City or any other person or persons, firms or corporations wherever located for use by such purchaser or purchasers for any purpose authorized by law for which electricity may be used or for any other purpose or use which is or may become normal or customary in the retail electric industry in Texas.

II. Term and Deregulation.

The franchise granted to SPS shall be for a term of Twenty (20) years from July 16, 2012. The franchise rights and privileges shall be in full force and effect thirty (30) days from the last publication of this Ordinance provided SPS has formally accepted this franchise as provided in Section XXII.

III. Franchise Fee/Payment

As compensation and rental for the use of the streets, alleys and public ways of City in the conduct of its business under this franchise, SPS shall pay the City for the life of this franchise a sum of money equal to five percent (5%) of its gross receipts. The term 'gross receipts' shall mean the total monies received by SPS from the sale of electric energy to its retail customers within the corporate limits of Wolfforth, Texas. A two percent (2%) franchise expense is currently embedded in SPS system wide rates, but all franchise expense in excess of two percent (2%) of gross receipts shall be surcharged by SPS to the customer's taking service within the corporate limits of the City. The franchise payments shall be due and payable within thirty (30) days following the end of each calendar quarter in which the gross receipts were collected. All money due and payable to City by SPS computed under the terms of the existing franchise shall be payable at the time that computation begins under this franchise. In other words, there shall be no gap in payments to the City between the termination of the existing franchise and the commencement of this franchise. Said quarterly payments above provided shall be exclusive of and in addition to ad valorem taxes. Any and all such payments made by SPS pursuant to this Section shall be credited on any amount imposed, levied or assessed against SPS by the City of Wolfforth, pursuant to ordinance or otherwise, at any time as a

charge (whether designated as rental, tax or otherwise) for the use by SPS of City's streets, alleys and public ways.

IV. Franchise Fee After Retail Competition

The franchise fee authorized herein shall form the basis on which any franchise fee is authorized and calculated according to state law after customer choice is authorized by the State of Texas in the region which encompasses the City of Wolfforth. If the Public Utility Regulatory Act, Sections 33.008(b) or 39.402(b) are changed, which change adversely impacts the franchise fee revenue the City of Wolfforth would have received, then SPS and the City of Wolfforth agree, to the extent allowed by law, to renegotiate the franchise fee provision in the preceding paragraph so as to allow the City of Wolfforth to receive the same revenues it would have received prior to such change in the law.

V. Pole Location.

Within the streets or other public rights-of-way of the City, the location and route of all poles, stubs, guys, anchors, lines, conduits, underground duct lines, manholes, and cables placed and constructed and to be placed and constructed by SPS in the construction and maintenance of its electrical lighting and power system in, within, through, or under the streets, alleys, or other public rights-of-way of the City shall be subject to reasonable and proper regulation, control and direction of the City, or of the City official to whom such duties have been or may be delegated.

All poles, guys or anchors erected by SPS shall be so set that they will not cause diversion of surface waters in any gutter or drain so as to cause damage to adjoining property, and so that the same will interfere as little as practicable with the ordinary travel

on the streets, sidewalks and other public rights-of-way of the City; the regulation and control herein reserved shall include, without limitation, the right of the City to require SPS, at SPS's expense, to relocate its poles, lines or conduits so as to permit the following activities undertaken by the City on its behalf:

a. The widening or straightening of any street, alley or public right-of-way located within the City.
b. The closing, opening or relocation of any street, alley or public right-of-way within the City.
c. The location or relocation of any water or sewer lines within the City.
d. The changing of grade of any street, alley, curb or sidewalk within the City.
e. The construction and maintenance of parks and other public improvements owned by the City of Wolfforth located within the City.

In all cases where SPS is required to relocate, change the route of or the position of the poles, lines or the conduits, as a result of a request by the City, the City shall furnish an alternate route on which poles and lines of like construction design may be built, and provide thirty (30) days advance written notice to SPS specifying the new location, route, or position of the poles, lines, or conduits involved. SPS shall be entitled to be paid for its cost and expenses of any relocation, raising or lowering of its wires, required by the City, pursuant to this Section or Section VI, only if such expenses or costs are reimbursable or payable to SPS or the City from any source including the State of Texas, the United States or any governmental agency or subdivision of either, whether directly or indirectly. However, nothing herein shall impose any obligation on the City to pay such costs and expenses except to the extent it actually receives funds from another source including the United States, the State of Texas, or any governmental agency or subdivision of either, for the reimbursement or payment of same. The provisions of this section shall not apply to improvements made by SPS on private easements purchased by

SPS and recorded prior to any dedication of any street, alley or public way. In this latter event City shall reimburse SPS its costs and expenses of relocating facilities.

VI. Temporary Relocation

SPS, on written reasonable request of any responsible person, firm, corporation or governmental authority, shall relocate, raise or lower its wires, where located on, in, or over the streets, alleys and other public ways of City, temporarily to permit construction work in the vicinity thereof, or to permit the moving of houses or other bulky structures. The expense of such temporary relocation, raising or lowering of such wires shall be paid by the benefited party or parties, and SPS may require the payment in advance, being without obligation to remove, raise or lower its wires until such payment shall be made; provided, however, that no such payment shall be required of the City except as provided in Section V. SPS shall be given not less than seventy-two (72) hours prior written notice to arrange for such temporary wire changes.

VII. Excavation of Sidewalks

If it becomes necessary in furnishing electricity as contemplated under this franchise, the City grants to SPS the right and privilege to take up pavements and sidewalks, if any, in and upon said streets, alleys and highways in said City for the purpose of making such excavation and installation as may be necessary; provided, however, that SPS shall not take up or excavate any pavement at any time without first securing the written permission of the City Manager or his designated representative, which permission will not be unreasonably withheld; and provided further, that all excavations and installations so made shall be performed in a reasonable manner as will

cause the least inconvenience to the public, and SPS shall promptly restore or cause to be restored to as good condition as before working thereon all such pavements, sidewalks, streets, alleys or highways excavated by it to the reasonable satisfaction of the City Manager or his designated representative.

VIII. Facilities Damage

If any facilities of the City of Wolfforth shall be in any respect damaged or injured by SPS or any of its officers, agents, or employees in connection with the performance of work done under this Franchise Agreement, SPS shall pay for such damage. Conversely, if any of the facilities installed by SPS hereunder shall be in any respect damaged or injured by the City or any of its officers, agents, representatives, or employees, in connection with the performance of any work or repairs that may be done upon the streets, avenues, alleys and other public places of the City of Wolfforth, the City of Wolfforth shall pay for such damage.

IX. City's Sovereignty

The City, by the granting of this franchise, does not surrender or to any extent lose, waive, imperil or lessen the lawful powers and rights now or hereinafter vested in the City under the Constitution and Statutes of the State of Texas and under the Charter of the City to regulate the rates for services of SPS; and SPS, by its acceptance of this franchise, agrees that all such lawful regulatory power and rights as the same may be from time to time vested in the City shall be in full force and effect and subject to the exercise thereof by the City at the City's discretion.

Notwithstanding anything contained in this Ordinance to the contrary, all work done in connection with the construction, repair, maintenance and operation of all

facilities of SPS is subject to the continuing police power of the City; and SPS shall comply with all present and future laws, ordinances and regulations, except when such compliance is in conflict with that authority specifically surrendered by the City herein.

X. Electric Service Provided

It shall be SPS's obligation hereunder to furnish efficient electrical service to meet standards of the industry for the area. SPS shall serve every eligible consumer in the franchise area that requests service, subject to lawful policies and rules of SPS regarding cost, customer deposits, return on investment, access and other reasonable factors. SPS shall not discriminate against any person, corporation, firm, or association in the charge for such electrical current or in the service rendered under like circumstances. SPS shall not directly or indirectly grant any discount or rebate, or give things of value to circumvent the rate schedule as approved by the appropriate regulatory authority.

XI. Nonexclusive

Nothing contained in this Ordinance shall be construed as conferring upon SPS any exclusive rights or privileges of any nature whatsoever.

XII. City Use of SPS's Pole/Duct Space

In addition to the consideration set forth elsewhere in this ordinance, SPS shall hereafter hold itself ready to furnish free of charge, subject to the use of the City, such pole space as may be reasonably required from time to time for the installation of City-owned street light equipment, traffic, police and fire alarm system conductors, and alarm or other necessary signal boxes, data transmission or telecommunication equipment (solely for the City's own use) provided that such space used by the City does not exceed the capacity of one cross-arm space on any one pole, and provided that such space is

available on existing poles and has been requested three (3) days in advance in writing by the City Manager or his designated representative prior to installation of SPS facilities hereunder placed within any street, alley or public way. The specific location of the street light equipment, and police and fire alarm conductors and boxes on SPS's poles shall be determined by SPS, and will be allotted at the time specific applications for space are received from the City. Where a main underground ductline is hereafter constructed or installed between manholes by SPS, SPS shall, as a part of same, provide free space for the installation by City of its traffic, police or fire alarm cables, data transmission or telecommunication equipment (solely for the City's own use) on request in writing by City Manager or his designated representative prior to construction, one top duct having one capped off entry channel and one capped off exit channel between each two manholes, such entry and exit channels leaving the duct bank enclosure outside of, but near to, such manholes, and no cable or other equipment of City shall enter SPS's manholes. SPS shall, prior to each addition by it to any duct now existing or hereafter constructed, notify the City Manager or his designated representative of City of the nature and location of such intended addition; further, SPS shall, along with its application for a permit to open a street for the purpose of laying a new duct, provide the City Manager and the City Engineer's Office each with a set of plans showing the type, number, and location in the street, of the ducts to be constructed. City, prior to the original installation by it of its equipment in any such top duct, shall notify SPS three (3) days in advance of the time and place it intends to make such entry and installation. All cables installed by the City in SPS ducts shall be of the non-metallic, sheathy type to prevent corrosive or electrolytic action between the City and SPS-owned cables. All City-owned conductors

and cables, whether on poles or in ductlines, shall be constructed, maintained and operated in such manner as to not interfere with or create a hazard in the operation of SPS's electrical transmission and distribution system. Further, all City-owned traffic, police and fire alarm conductors, and alarm boxes, and any City circuits on SPS poles and all cables installed by City in ducts constructed by SPS, shall be installed in strict compliance with the applicable provisions of the National Electrical Safety Code and other applicable federal, state and local codes.

Provided further, that no part or portion of this Section shall ever be construed as requiring SPS to make any additional expenditure over and above its normal and ordinary cost, and if the City's requirements hereunder cause an additional cost or expense in enlarging, removing, adding to or otherwise changing SPS's facilities, City shall reimburse SPS for the full amount of such costs. SPS shall not in any case be liable for damages or claims of damages to any person or persons arising from or growing out of the attachment of City's equipment, or arising from or growing out of the construction, operation or maintenance of such facilities. The City further agrees to indemnify and hold SPS harmless from any and all damages or claims for damages by reason of the construction, maintenance or operation of the City's facilities as set forth in this Section.

XIII. Annual Receipts Report/Right to Audit

On request by the Wolfforth City Manager, SPS shall provide a statement, certified by a duly qualified officer of SPS, showing the gross receipts of SPS within the City of Wolfforth (as defined above). For the purpose of determining the amount of the gross receipts of SPS at all times during the continuance of the rights herein granted, SPS shall keep at the disposal of and open to inspection by any auditor authorized and

appointed by City at all reasonable times, books of accounts and other records showing a full, true, complete and accurate account of the gross receipts of SPS from its electric lighting and power sales for consumption within the corporate limits of the City for the prior three calendar years.

XIV . Indemnification

SPS shall indemnify and save the City harmless from all claims, demands or causes of action brought against the City occasioned by or arising out of the construction, reconstruction, maintenance, or repair of SPS's electrical lighting and power system, or in any way growing out of the granting of this franchise either directly or indirectly; provided, however, that the provisions of this Section shall not be applicable to any claims, damages, actions or causes of actions proximately resulting from the use by City, its officers, agents, representatives or employees, of SPS's poles and ductlines for the installation, maintenance or removal of City's equipment, as provided in Section XII, or for which the City is otherwise liable as provided herein.

XV. Authority

In granting this franchise it is understood that the lawful power vested by law in the City to require all persons or corporations to discharge the duties and undertaking for the performance of which this franchise was made, is reserved; this grant is made subject to all the rights, powers and authorities either of regulation or otherwise reserved to the City by its Charter or by the general laws of the State.

XVI. Assignment/Transfer of Franchise

The rights, franchises and privileges hereby granted shall not be transferred or assigned by SPS except with the consent of the City Council of the City of Wolfforth

expressed by Ordinance passed by said City Council; provided, however, SPS may mortgage or pledge its rights hereunder for security or obligations owing by SPS; and provided further, that a transfer could be made in a merger, consolidation or re-organization proceeding to which SPS is a party or to a subsidiary corporation or affiliate corporation of SPS or wherein SPS sells its entire physical assets. It is specifically recognized that under the Public Utility Regulatory Act, Chapter 39 Restructuring of Electric Utility Industry, it is anticipated that at some date in the future SPS will unbundle into a power generation company, a retail electric provider, and a transmission and distribution utility. At the time of such unbundling to comply with retail electric deregulation, the franchise granted herein will go with the distribution utility and the franchise fee thereafter will be calculated as provided in Section III of this franchise.

In the event of contemplated transfer of this franchise, under the terms of this section permitting transfer without consent of City Council, SPS shall notify the City of Wolfforth of the contemplated transfer by written notice delivered to the City Secretary not less than sixty (60) days prior to accomplishment of any merger, consolidation or re-organization proceeding or transfer of its entire physical assets; and will provide the City Council an opportunity to confer with the proposed transferee concerning proper acceptance of the terms of this franchise.

Prior to exercising any rights hereunder, any purchaser or transferee of SPS shall file with the City Manager a written acceptance of this franchise setting forth an agreement to be bound by all terms and provisions hereof.

XVII. Tree Trimming

To the extent that the City has authority to do so, it gives to SPS, during the life of this franchise, the right, license, privilege and permission to trim trees upon and overhanging the streets, alleys, sidewalks and public places of City, so as to prevent the branches of such trees from coming in contact with the wires or other equipment of SPS. SPS agrees that it will fully protect and indemnify City from any and all claims, demands, actions, causes of actions, damages and expenses arising because of such trimming by SPS under the provisions of this Section.

XVIII. Notice of Default

The franchise rights and privileges hereinabove granted to SPS, its successors and assigns are and shall be at all times, during the term and life of this franchise, contingent upon the faithful and punctual performance of and compliance with all acts, requirements and provisions of this Ordinance, and any amendment hereof, by SPS, its officers, agents and employees on its part to be performed, complied with and abided by, and if at any time SPS shall refuse or fail to keep, perform, comply with and abide by all and singular the acts, requirements and provisions of this Ordinance, or any amendment, within sixty (60) days from receipt of written notice from the City Manager acting by Order of the City Council setting forth in detail the facts constituting default of SPS and what is required to cure such default; and upon continued failure of SPS to keep, perform, comply with and abide by such acts, requirements and provisions of this Ordinance or any amendment or failure to cure the default set forth in such written notice, the City Council may terminate, at its option, this franchise and all privileges and rights herein granted to said SPS. The notice herein mentioned shall be sufficient, if given to the Director of Community Services for SPS located in Amarillo, Texas.

XIX . Removal of Dangerous Objects

The City shall have power at any time to require SPS to remove and abate at its own expense any installation or structure that is dangerous to life or property, and in case SPS, after reasonable notice, fails or refuses to act, the City shall have the power using reasonable means and methods to remove or abate the same at expense of SPS, all without compensation or liability for damages to SPS.

XX . Severability

If any provision, section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, void or invalid (or for any reason unenforceable), the validity of the remaining portions of this Ordinance shall not be affected thereby.

XXI. Prior Franchise Repealed

This franchise replaces all former franchise ordinances granted to SPS or its predecessors, which are hereby repealed, which repeal is effective as of the time the franchise herein granted takes effect. There is specifically and particularly repealed, effective as of that time, that certain Ordinance No. 237 passed by the City of Wolfforth, granting to Southwestern Public Service Company, its successors and assigns, a franchise for a period of ten years.

XXII. Final Passage/Acceptance

SPS shall, within thirty (30) days from the date of the final passage of this Ordinance by the City Council of the City of Wolfforth, file with the City Secretary of Wolfforth, a written statement signed in its name and behalf by an officer of SPS duly authorized by its Board of Directors in the following form:

"The Honorable Mayor and the City Council of the City of Wolfforth:

Southwestern Public Service Company, for itself, its successors and assigns, hereby accepts the attached Ordinance finally passed by the City Council of Wolfforth, the 2 day of April, 2012, and agrees to be bound by all of its terms and provisions.

Southwestern Public Service Company

By: Kiley Hill
President & CEO

Dated the 11 day of April, 2012."

AND IT IS SO ORDERED.

Passed by City Council this 2 day of April, 2012.

CITY OF WOLFFORTH

R.C. Chellas
Mayor

ATTEST:
Debra Youngblood
City Secretary

ATTACHMENT 4

OVERSIZED SPREADSHEET

Page 1 of 1

2013 SPP Transmission Expansion Plan Report

January 29, 2013

Engineering

SPP Southwest Power Pool

Revision History

Date	Author	Change Description
1/7/2013	Staff	Version Draft
1/15/2013	Staff	Endorsed by MOPC
1/22/2013	Staff	Changes to reflect modifications in the 2013 ITPNT Study Updated Figure 1 to correct data discrepancy and reflect 2013 ITPNT revisions.
1/29/2013	Staff	Approved by BOD

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Executive Summary

The 2013 SPP Transmission Expansion Plan (STEP) is a comprehensive listing of all transmission projects in SPP for the twenty-year planning horizon. Projects in the 2013 STEP include: 1) upgrades required to satisfy requests for transmission service; 2) upgrades required to satisfy requests for generation interconnection; 3) approved projects from the 20-Year Assessment, 10-Year Assessment, and Near Term Assessment (ITP Upgrades); 4) upgrades within approved Balanced Portfolios; 5) approved high priority upgrades; and 6) endorsed Sponsored Upgrades.

The 2013 STEP consists of 439 upgrades with a total cost of $6.7 billion. Figure 1 illustrates the cost distribution of the 2013 STEP based on project type. More detail on the total portfolio is listed in Appendix A.

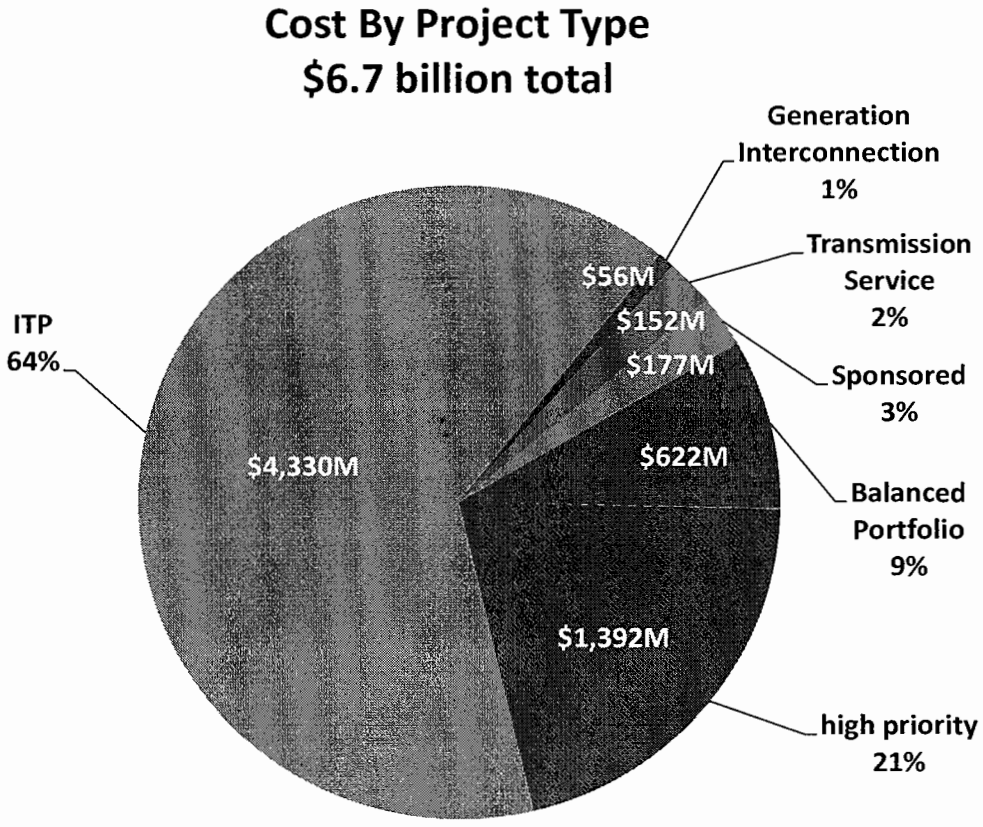


Figure 1: 2013 STEP Cost by Upgrade Type

(APPENDIX A includes a breakdown of projects in the 20-year horizon)

After the Board approves transmission expansion projects, or once appropriate agreements are filed with FERC, SPP issues Notifications to Construct (NTC) letters to appropriate Transmission Owners. In 2012, SPP issued 26 NTC letters with estimated construction costs of $1.52 billion.

SPP actively monitors the progress of approved projects by soliciting feedback from project owners. Eighty-two upgrades were completed as of November 30, 2012. The breakdown includes:

- **44 ITP - $306.4 million**
- **19 Transmission Service - $270.6 million**
- **4 Generation Interconnection - $34.3 million**
- **5 Balanced Portfolio - $208.2**
- **10 Sponsored - $26.1 million**

Major 345 kV Projects completed in 2012
ITC Great Plains and Nebraska Public Power District
• 125 miles of 345 kV transmission line from Post Rock (Knoll) in west Kansas to Axtell in southern Nebraska
ITC Great Plains
• 19 miles of 345 kV transmission line from Hugo Power Station to Valliant in southeast Oklahoma
• 90 miles of 345 kV transmission line from Spearville to Post Rock (Knoll) in west Kansas
Oklahoma Gas and Electric
• 120 miles of 345 kV transmission line from Hugo to Sunnyside in southern Oklahoma
American Electric Power
• 33 miles of 345 kV transmission line from Turk in southwest Arkansas to Northwest Texarkana in northeast Texas

Major 345 kV projects with NTCs in the 2013 STEP
American Electric Power
• 76 miles of 345 kV transmission line from Northwest Texarkana to Valliant in southeast Oklahoma
• 18 miles of 345 kV transmission line from Flint Creek to Shipe Road in northwest Arkansas
• 55 miles of 345 kV transmission line from Shipe Road to Osage Creek (passing near East Rogers) in northwest Arkansas
American Electric Power and Oklahoma Gas & Electric Company
• 93 miles of 345 kV transmission line from Elk City to Gracemont in western Oklahoma
Kansas City Power & Light
• 30 miles of 345 kV transmission line from Iatan to Nashua in northwest Missouri
KCP&L Greater Missouri Operation Company and Omaha Public Power District
• 181 miles of 345 kV transmission line from Sibley to Maryville to Nebraska City in northwest Missouri and southeast Nebraska
ITC Great Plains
• 114 miles 345 kV double circuit transmission line from Spearville to Clark Co to Thistle in southwest Kansas
ITC Great Plains and Westar Energy
• 58 miles of 345 kV transmission line from Elm Creek to Summit in north central Kansas
Nebraska Public Power District
• 222 miles of 345 kV transmission line from Gentleman to Cherry County to Holt County in northwestern Nebraska
• 40 miles of 345 kV transmission line from Neligh to Hoskins in north central Nebraska
Prairie Wind Transmission
• 78 miles double circuit 345 kV transmission line from Thistle to Wichita in south Kansas
Oklahoma Gas and Electric Company and Prairie Wind Transmission
• 110 miles of double circuit 345 kV transmission line from Thistle to Woodward District EHV in northwest Oklahoma and southwest Kansas
Oklahoma Gas and Electric
• 36 miles of 345 kV transmission line from Sooner to Cleveland in central Oklahoma
• 100 miles of 345 kV transmission line from Seminole to Muskogee in central Oklahoma
• 5 miles of 345 kV transmission line from Arcadia to Redbud in central Oklahoma

• 126 miles of 345 kV transmission line from Woodward District EHV to Tatonga to Mathweson to Cimarron in northwestern Oklahoma
Oklahoma Gas and Electric and Southwestern Public Service Company
• 250 miles of 345 kV transmission line from Woodward District EHV in west Oklahoma to Oklahoma/Texas Stateline to Tuco in west Texas • 122 miles of double circuit 345 kV transmission line from Hitchland to Woodward EHV in northwest Oklahoma
Southwestern Public Service Company
• 15 miles of 345 kV transmission line from Tuco to New Deal in west Texas • 167 miles of 345 kV transmission line from Tuco to Amoco to Hobbs in west Texas

Section 1:Transmission Services

1.1: Transmission Service 2012 Overview

Staff conducts studies to determine if the SPP transmission system can accommodate activity over and above that which is currently in use. Whenever new transmission transactions or modifications to existing transmission transactions are made SPP performs feasibility and system impact studies.

Upgrade Type	2013 STEP ($Millon)	2012 STEP ($ Million)	2010 STEP ($ Million)
(TSR) transmission service*	$152	$433	$550

*Regional reliability upgrades associated with transmission service are included in the ITP subtotal in this report

During 2012, SPP's Tariff Studies staff posted Aggregate Facility Studies to meet 60-day study completion deadlines and posted Facilities Studies to meet FERC Order 890 metric requirements. Order 890 requires Transmission Providers to file notice with FERC if more than 20% of the System Impact and Facilities studies in any two consecutive calendar quarters are not completed in the 60-day study window. In 2012 SPP was not required to file with FERC, as there were no two consecutive quarters in which more than 20% of the studies were late. This was due in large part to the timely submission of documentation by Transmission Owners. SPP posted 21 Aggregate Studies in 2012, as compared to 12 in 2011.

Transmission Service Projects Completed in 2012

NTC ID	Project ID	Project Owner	Project Name	Current Cost Estimate
20016	288	AEP	Line - Valliant Substation - Install 345 kV terminal equipmentLine -	$3,480,000
	30142	AEP	Turk - NW Texarkana 345 kV	$44,200,000
	30152	AEP	Line - Linwood - Powell Street 138 kV	$456,000
	30156	AEP	Line - SE Texarkana - Texarkana Plant 69 kV	$128,000
	30157	AEP	Line - South Texarkana REC - Texarkana Plant 69 kV	$8,193,000
20017	30161	OGE	Multi - Hugo - Sunnyside 345 kV (OGE)	$157,000,000
20018	313	ITCGP	Line - Valliant - Hugo 345 kV	$22,230,000
	314	ITCGP	XFR - Hugo 345/138 kV	$6,328,605
	30165	ITCGP	Line - Hugo - Sunnyside 345 kV	$6,620,096
20068	908	WR	Line - Macarthur - Oatville 69 kV Ckt 1	$50,200
20059	30225	WR	Device - Allen 69 kV Capacitor	$954,830
20091	30224	WR	Multi - Green - Coffey County No. 3 - Burlington Junction - Wolf Creek 69 kV	$1,693,501
20108	30289	WR	Line - East Manhattan - NW Manhattan 230 kV Ckt 1	$700,000
20110	670	OGE	XFR - 3rd Arcadia 345/138 kV	$10,900,000
20139	316	MIDW	Line - Hays Plant - South Hayes 115 kV Ckt 1	$35,000
200161	349	AEP	Multi - McNab REC - Turk 115 kV	$7,310,000

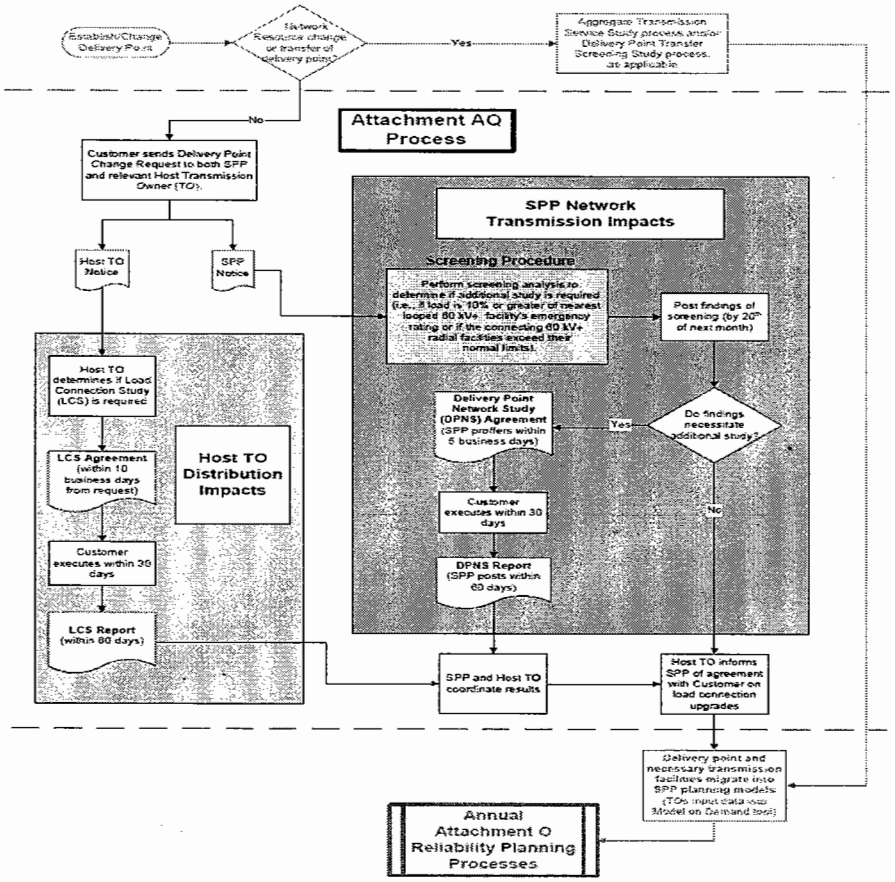
1.2: Tariff Attachments AQ and AR

During 2010, SPP Tariff attachments AQ and AR were approved by FERC. Attachment AQ became effective in May 2010. Attachment AQ defines a process through which delivery point additions, modifications, or abandonments can be studied without having to go through the Aggregate Study process. Delivery points submitted through the process are examined in an initial assessment to determine if a project is likely to have a significant effect on the transmission system. If necessary, a full study is then performed on the requested delivery points to determine any necessary upgrades. There were two NTCs issued in 2012 as a result of the AQ process. These were the first NTCs issued as a result of the AQ process.

The number of requests increased significantly in 2012. The increase in required studies was driven primarily by oil and gas drilling in Oklahoma and Kansas. This is summarized in the following table.

Study Year	Delivery Point Requests	Full Studies Required	Load Increase
2011	84	9	550 MW
2012	156	51	1.2 GW

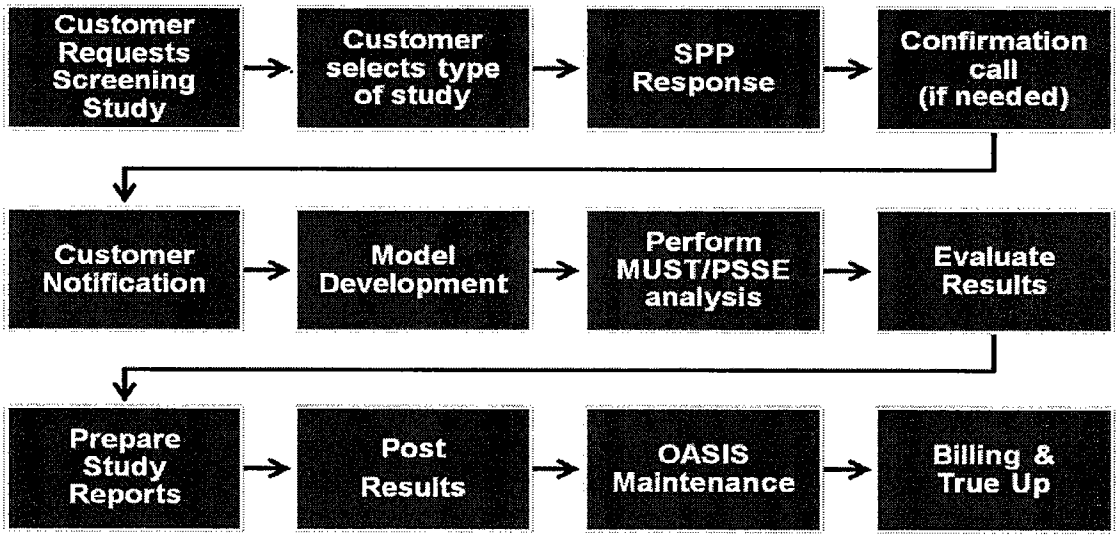
Flow chart diagram for AQ Studies



Attachment AR

SPP Tariff attachment AR became effective in February 2010. Attachment AR defines a screening process used to evaluate potential Long-Term Service Request (LTSR) options or proposed Delivery Point Transfers (DPT). The LTSR option provides customers with a tool to determine which LTSR to pursue in the Aggregate Study process. The DPT option enables customers to implement a DPT via issuance of a service agreement more expediently pending the results of the screening. Both of these screening tools allow for a more streamlined aggregate study process by reducing the number of requests in the studies. During 2012, three DPT requests were made, two of which were granted service. Three LTSR studies were requested and posted.

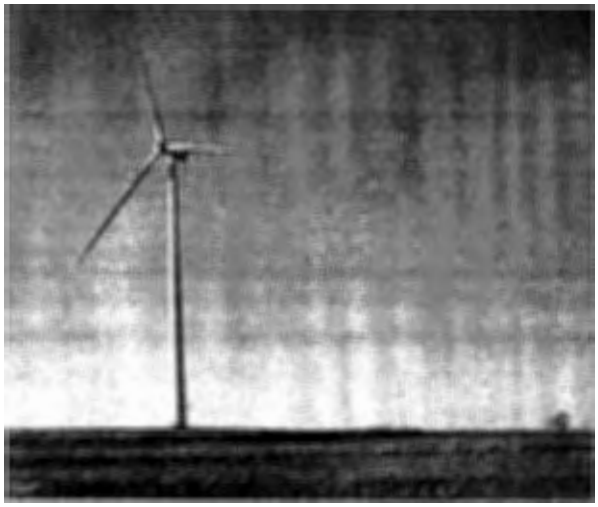
Flow Chart for AR process



Section 2:Generation Interconnection

2.1: Generation Interconnection 2012 Overview

A Generation Interconnection (GI) study is conducted whenever new generation is requested to connect to the SPP Transmission System. GI studies are conducted by transmission providers in collaboration with affected transmission owners to determine the required modifications to the transmission system, including cost and scheduled completion date required to provide the service.



As of October 30, 2012, SPP received 50 GI requests, similar to the 64 received through the same period in 2011. As of that date, there were 81 active queue requests for 12,720MW under study.

Upgrade Type	2013 STEP ($Millon)	2012 STEP ($ Million)	2010 STEP ($ Million)
(GI) Generation Interconnection	$56	$69	$103

The approval of Priority Projects has facilitated the study process for Generation Interconnection. About 6,500MW of additional generation interconnection agreements were approved based on the existence of Priority Projects and Balanced Portfolio.

GI Projects Completed in 2012

NTC ID	Project ID	Project Owner	Upgrade Name	Current Cost Estimate
NA	231	AEP	Line - Turk - SE Texarkana - 138 kV	$25,590,000
NA	30360	WFEC	Line - Washita - Gracemont 138 kv ckt 2	$4,740,546
NA	30382	WFEC	SUB - SLICK HILLS 138KV	$1,500,000
NA	30383	MIDW	MULTI - RICE - CIRCLE 230KV CONVERSION	$2,473,404

Section 3: Integrated Transmission Planning

3.1: What is Integrated Transmission Planning?

The Integrated Transmission Plan (ITP) is a three-year study process which assesses the SPP region's transmission needs in the long and near-term with the intention of creating a cost-effective, flexible, and robust transmission network that will improve access to the region's diverse generating resources. The ITP process promotes transmission investment that will meet reliability, economic, and public policy needs[1].

The first phase of the ITP process was completed with the Board of Directors' acceptance of the ITP20 Report on January 25, 2011. The next phases of the ITP process were developed concurrently (ITP10 and ITPNT) in 2011 with the Board of Directors' acceptance on January 31, 2012.

Upgrade Type	2013 STEP ($Million)	2012 STEP ($ Million)	2010 STEP ($ Million)
ITP – Base Plan	$2,819	$2,494	$1,222
ITP - Other	$1,511	$1,592	$245*
ITP SUBTOTAL	**$4,330**	**$4,086**	**$1,467**

*The 2010 STEP totals did not include the 2010 ITP20 projects

3.2: 2010 ITP20

The 20-Year Integrated Transmission Plan (ITP20) is SPP's long-term planning process which incorporates value metrics that allow transmission to become an enabling solution to regional and national issues and extend the study horizon from ten year s to twenty years.

The first ITP20[2] study focused on the year 2030 (20 years from 2010). The ITP20 study focused on the continued design of the SPP region's EHV system and development of a backbone system that provides flexibility and value to SPP's members. No NTCs were issued as part of this process.

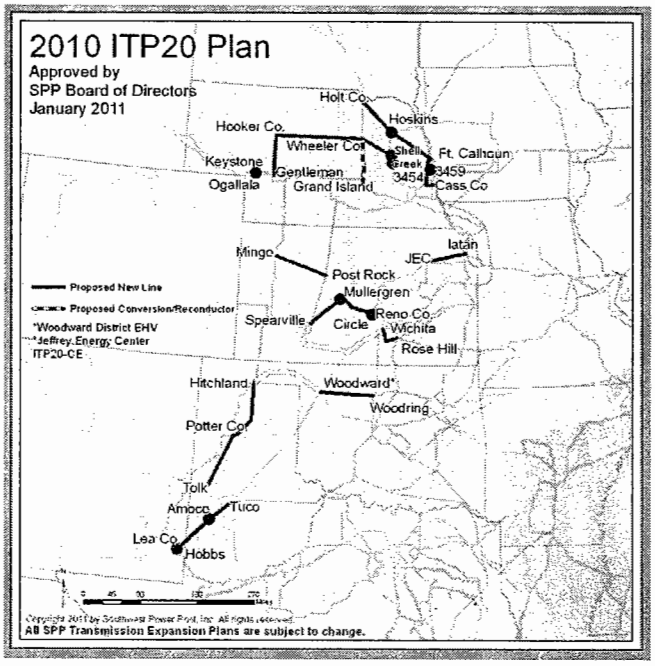


Figure 2:2010 ITP20 Plan

[1] The Highway/Byway cost allocation approving order is *Sw. Power Pool, Inc.*, 131 FERC ¶ 61,252 (2010). The approving order for ITP is *Sw. Power Pool, Inc.*, 132 FERC ¶ 61,042 (2010).

[2] For more information on the 2010 ITP20 Study, see the full report (SPP.org > Engineering > Transmission Planning).

3.3: 2012 ITP10

The second phase of the ITP study process included the ITP 10-Year (ITP10) Assessment performed under the requirements of OATT Attachment O, Section III. The approved portfolio included projects ranging from comprehensive regional solutions to local reliability upgrades to address the expected reliability, economic, and policy needs of the studied 1 0-year horizon.

The approved 2012 ITP10[3] portfolio shown in the figure 3 was estimated at $1.5 billion engineering and construction cost and includes projects needed to meet potential reliability, economic, and policy requirements. No projects from the 2012 ITP10 are complete.

Figure 3:2010 ITP10 Plan

2010 ITP10 Portfolio

NTC ID	Project ID	Project Owner	Upgrade Name	Need Date	Current Cost Estimate
200182	30367	WR	Multi - Elm Creek - Summit 345 kV	3/1/2018	$62,110,152
200183	30361	AEP	Multi - Elk City - Gracemont 345 kV	3/1/2018	$99,575,392
200184	1140	SPS	Multi - Tuco - Stanton 345 kV	6/1/2018	$37,490,796
200184	30355	SPS	Line - Grassland - Wolfforth 230 kV	3/1/2018	$50,068,309
200184	30376	SPS	Multi - Tuco - Amoco - Hobbs 345 kV	1/1/2020	$181,415,883
200185	30361	OGE	Multi - Elk City - Gracemont 345 kV	3/1/2018	$75,486,000
200185	30364	OGE	Multi - Woodward EHV - Tatonga - Matthewson - Cimarron 345 kV	3/1/2021	$206,966,741
200186	30374	NPPD	Multi - Hoskins - Neligh 345 kV	3/1/2019	$96,702,400
200186	30375	NPPD	Multi - Gentleman - Cherry - Holt 345 kV	1/1/2018	$289,280,000
200187	30367	ITCGP	Multi - Elm Creek - Summit 345 kV	3/1/2018	$42,697,637

[3] For more information on the 2012 ITP10, see the full report (SPP.org > Engineering > Transmission Planning).

3.4: 2013 ITP Near-Term (ITPNT)

The 2013 ITPNT analyzed the SPP region's immediate transmission needs. The ITPNT assessed: (a) regional upgrades required to maintain reliability in accordance with the NERC Reliability Standards and SPP Criteria in the near term horizon, (b) zonal upgrades required to maintain reliability in accordance with more stringent individual Transmission Owner planning criteria in the near term horizon, and (c) coordinated projects with neighboring Transmission Providers.

ITPNT projects are reviewed by SPP's Transmission Working Group (TWG), Markets and Operations Policy Committee (MOPC) and approved by the Board of Directors. Following Board of Directors' approval, staff will issue Notification to Construct (NTC) letters for projects needed within the four-year financial commitment timeframe.

SPP developed models for the 2013 ITPNT analysis based on the SPP Model Development Working Group (MDWG) models, for which transmission owners and balancing authorities provided generation dispatch and load information. The study scope – approved by the TWG on May 9, 2012 – contains:

- The years and seasons to be modeled, including 2013, 2014, and 2018
- Treatment of upgrades in the models
- Scenario cases to be evaluated
- Description of the contingency analysis and monitored facilities
- Any new special conditions that are modeled or evaluated for the study including developing the 2018 summer peak model for CBA dispatch

SPP performed reliability analyses identifying potential bulk power system problems. These findings were presented to Transmission Owners and stakeholders to solicit transmission solutions. Also considered were transmission options from other SPP studies, such as the Aggregate Study and Generation Interconnection processes. From the resulting list of potential solutions, staff identified the best regional solutions for potential reliability violations. Staff presented these solutions for member and stakeholder review at SPP's August 2012 planning summit. Through this process, SPP developed a draft list of 69 kV and above solutions necessary to ensure the reliability in the SPP region in the near-term.

The 2013 ITPNT draft project plan includes 83 new upgrades, 9 modified upgrades, and 22 withdrawn upgrades. The new upgrades include 140 miles of new line: 15 miles of 230 kV, 4 miles of 161 kV, and 50 miles of 138 kV, 71 miles of 115 kV. The project plan also includes 194 miles of reconductor/re-build projects: 15 miles of 161 kV, 42 miles of 138 kV, 86 miles of 115 kV, and 53 miles of 69 kV. Additionally, there are 16 new transformer upgrades.

The total cost of the 2013 ITPNT Project Plan is estimated to be $747.2 million for upgrades that will receive an, NTC, NTC-C, or NTC Modify. Of that total, $657.9 million comes from new projects identified in the 2013 ITPNT Assessment. Upgrades recommended for an NTC Modify account for $93.1 million of the total project plan cost. $80.9 million of transmission upgrades are recommended for withdrawal.

ITPNT Projects Completed in 2012 (note: this table reflects the portion of the project completed in 2012)

NTC ID	Project ID	Facility Owner	Project Name	Current Cost Estimate
20000	113	AEP	Multi - Wallace Lake - Port Robson - RedPoint 138 kV	$28,962,000

20030	135	WFEC	Multi - Lindsay - Lindsay SW and Bradley-Rush Springs	$3,577,500
20031	156	SPS	Multi - Hitchland - Texas Co. 230 kV and 115 kV	$36,926,444
20007	166	SEPC	Line - Holcomb - Plymell 115 kV	$3,986,076
20030	239	WFEC	Line - WFEC Snyder - AEP Snyder	$839,770
20086	267	WR	Line - Halstead - Mud Creek Jct. - 69 kV	$3,775,803
20001	301	GRDA	XFR - Sallisaw 161/69 kV Auto #2	$3,000,000
20006	321	WR	Line - Oaklawn - Oliver 69 kV	$2,686,996
20014	367	SEPC	Line - Plymell - Pioneer Tap 115 kV	$5,534,364
20000	387	AEP	Line - Riverside - Okmulgee 138 kV	$125,000
20122	391	AEP	Line - Lone Star South - Pittsburg 138kV Ckt 1	$300,000
20027	392	AEP	Line - Howell - Kilgore 69 kV	$3,986,000
20003	400	WFEC	Line - Pharoah - Weleetka 138 kV	$225,000
20003	401	WFEC	Line - WFEC Russell - AEP Altus Jct Tap 138 kV	$50,000
20055	523	OGE	Line - Rose Hill - Sooner 345 kV (OGE)	$44,700,000
20059	529	WR	Line - Rose Hill - Sooner 345 kV Ckt 1 (WR)	$84,379,298
20031	554	SPS	Multi: Dallam - Channing - Tascosa -Potter	$9,130,978
20118	554	SPS	Multi: Dallam - Channing - Tascosa -Potter	$18,262,290
20118	554	SPS	Multi: Dallam - Channing - Tascosa -Potter	$3,410,040
20033	618	WR	Multi - NW Manhattan	$27,144,000
20075	638	EDE	Line - Sub 170 Nichols - Sub 80 Sedalia 69 kV	$4,500,000
20085	672	WFEC	Line - El Reno - El Reno SW 69 kV	$1.950,000
20080	749	NPPD	Line - Maloney - North Platte 115 kV	$1,749,395
20073	767	AEP	Multi - Canadian River - McAlester City - Dustin 138 kV	$4,096,000
20080	818	NPPD	Line - Loup City - North Loup 115 kV	$1,828,267
20130	1002	SPS	Line - OXY Permian Sub - Sanger SW Station 115 kV Ckt 1 Reconductor	$295,313
20128	1095	OGE	Line - OGE Alva - WFEC Alva 69 kV Ckt 1	$392,000
19985	30041	WFEC	Device - Comanche	$350,000
20003	30079	WFEC	Device - Carter Cap 69 kV	$324,000
20001	30086	GRDA	Device - Jay Cap 69 kV	$800,000
20078	30176	MIDW	Device - Kinsley Capacitor 115 kV	$907,563

20085	30178	WFEC	Device - Electra 69 kV Capacitor	$240,000
20080	30206	NPPD	Device - Gordon 115 kV	$673,574
20083	30234	SEPC	Device - Johnson Corner 115 kV Capacitor	$740,000
20083	30235	SEPC	Device - Johnson Corner 115 kV 2nd Capacitor	$370,000
20080	30236	NPPD	Device - Kearney 115 kV	$786,495
20128	30305	OGE	Device - Little River Lake 69 kV	$352,350
200175	30336	WR	Device - Northwest Manhattan 115 kV Capacitor	$957,660
200172	30358	MIDW	Multi - Ellsworth - Bushton - Rice 115 kV	$4,102,384

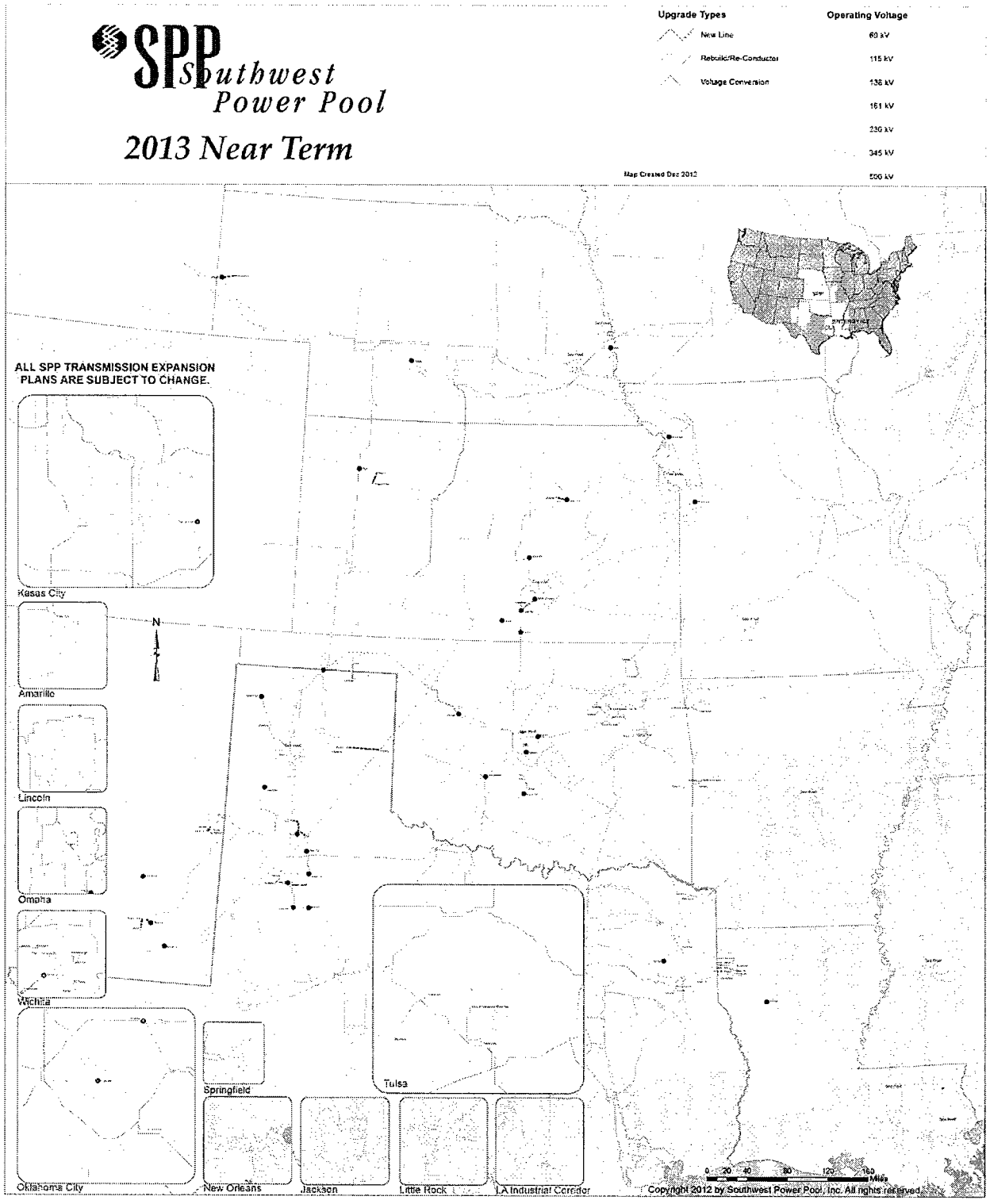


Figure 4:2013 ITPNT Plan

Section 4: Balanced Portfolio

The SPP Board of Directors approved the Balanced Portfolio[4] projects in April 2009, and directed staff to finalize the Balanced Portfolio Report in accordance with the SPP Tariff and then issue Notification To Construct letters. The Notifications To Construct were issued in June 2009.

The Balanced Portfolio was an initiative to develop a group of economic transmission upgrades that benefit the entire SPP region, and to allocate those project costs regionally. The benefits of this group of 345 kV transmission upgrades have been demonstrated by model analysis to outweigh the costs, and the regional cost sharing creates balance across the SPP region.

Upgrade Type	2013 STEP ($Millon)	2012 STEP ($ Million)	2010 STEP ($ Million)
Balanced Portfolio	$622	$870	$821

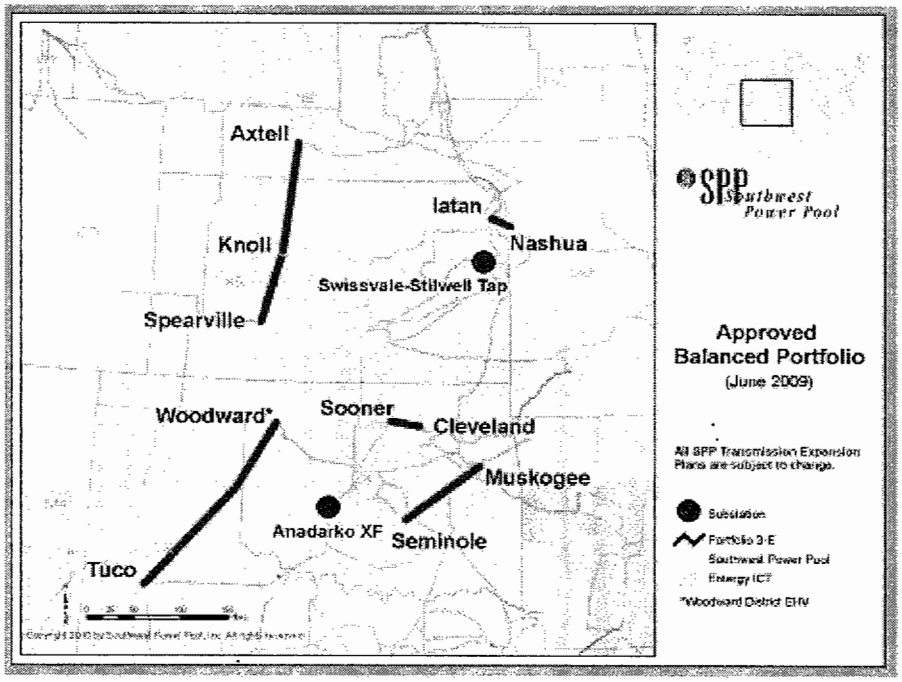


Figure 5: Balanced Portfolio Plan

Balanced Portolio Projects Completed in 2012

NTC ID	Project ID	Facility Owner	Project Name	Current Cost Estimate
20044	705	WFEC	Tap Anadarko - Washita 138 kV line into Gracemont 345 kV	$966,210
20046	707	ITCGP	Multi - Axtell - Post Rock - Spearville 345 kV	$148,000,000
20047	708	ITCGP	Line - Axtell - Kansas Border 345 kV (NPPD)	$59,194,981

[4] For more information on the Balanced Portfolio, see the full report (SPP.org > Engineering > Transmission Planning > Balanced Portfolio).

Section 5:High Priority Studies

In 2010 the SPP Board of Directors and Members Committee approved for construction a group of "priority" high voltage electric transmission projects[5] estimated to bring benefits of at least $3.7 billion to the SPP region over 40 years. The projects will improve the regional electric grid by reducing congestion on the power lines, better integrating SPP"s east and west regions, improving SPP members" ability to deliver power to customers, and facilitating the addition of new renewable and non-renewable generation to the electric grid.

Upgrade Type	2013 STEP ($Millon)	2012 STEP ($ Million)	2010 STEP ($ Million)
Priority Projects	$1,392	$1,444	$1,418

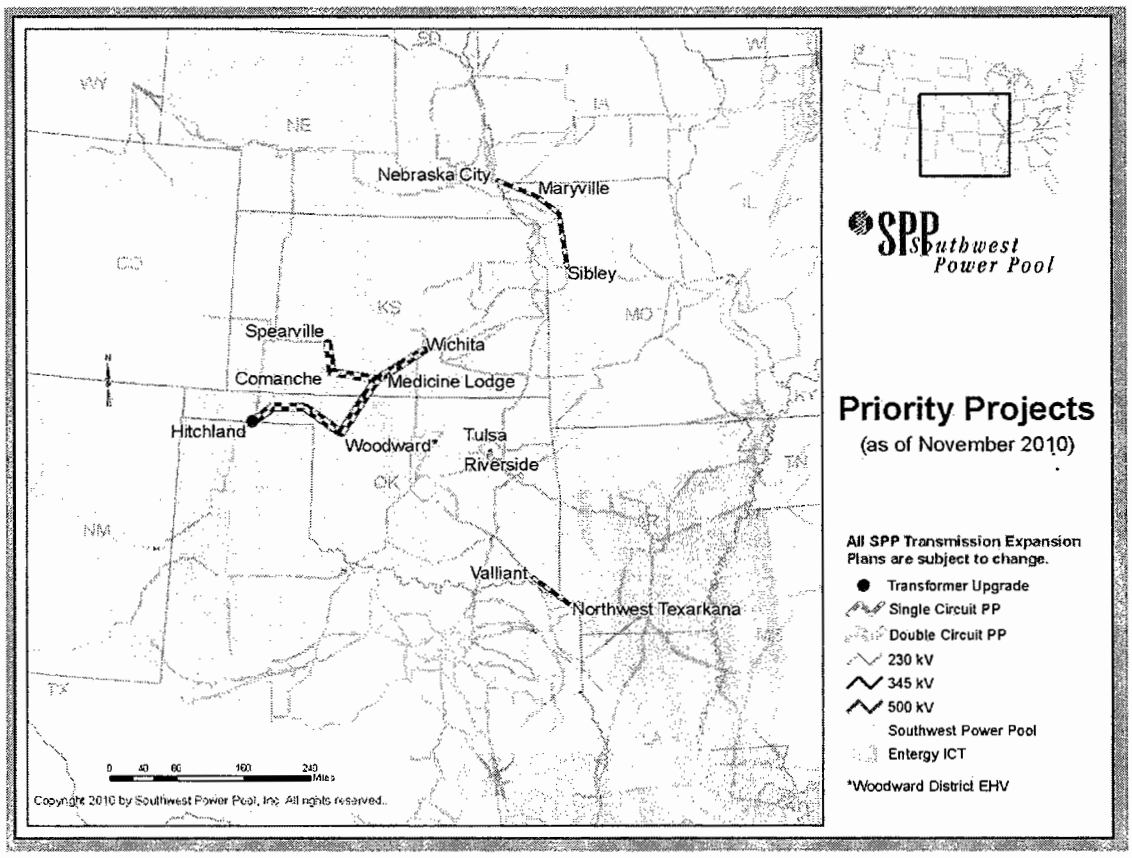


Figure 6:High Priority Studies Plan

[5] For for information on Priority Projects, see the full report (SPP.org > Engineering > Transmission Planning > Local Area Planning and High Priority Studies).

Completed High Priority Projects to Date

NTC ID	Project ID	Facility Owner	Project Name	Current Cost Estimate
20096	937	AEP	Tulsa Power Station 138 kV reactor	$960,895

Section 6: Sponsored Upgrades

Sponsored upgrades are Network Upgrades requested by a Transmission Customer or other entity which do not meet the definition of any other category of Network Upgrades. Any entity may request that a Sponsored Upgrade be built. SPP will evaluate the impact of any Sponsored Upgrade on Transmission System reliability and identify any necessary mitigation of these impacts.

The Project Sponser must be willing to assume the cost of the Sponsored Upgrade, study costs, and any cost associated with necessary mitigation. The proposed Sponsored Upgrade will be submitted to the proper stakeholder working group for their review as a part of the transmission planning process.

Projects Completed in 2012

NTC ID	Project ID	Project Owner	Project Name	Current Cost Estimate
NA	279	KCPL	Line - Craig - Lenexa 161 kV	$112,449
NA	897	OGE	Multi - 36 & Meridian - WRAirport - Pennsylvania 138 kV Ckt 1	$510,000
NA	1041	SPS	Multi - Randall County Interchange - Palo Duro Sub 115 kV Ckt 1 Reconductor	$13,776,330
NA	30199	NPPD	Device - Oneill 69 kV	$364,500
NA	30344	LES	Line - 57 & Garland - 84 & Leighton 115 kV Ckt 1	$2,372,000
NA	30387	WR	Multi - Creswell - BellePlain 138 kV	$7,467,188
NA	30409	GMO	Device - Alabama 161 kV Cap	$1,500,000

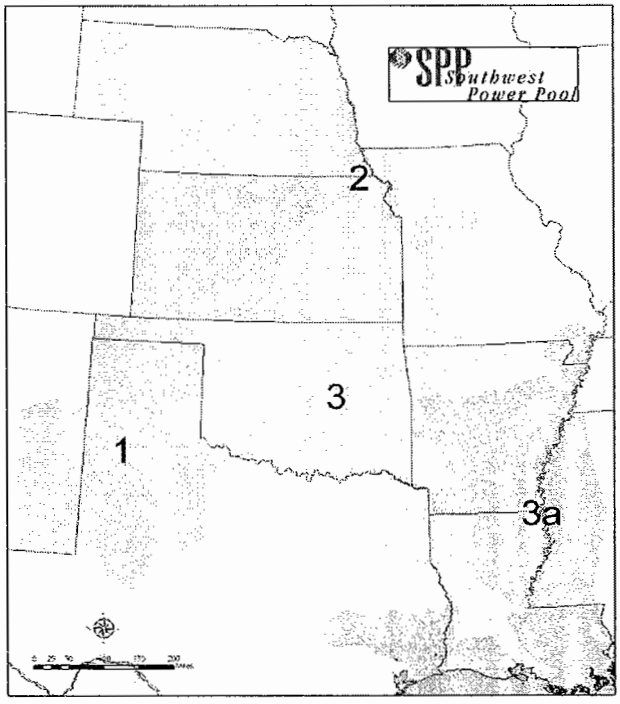
Section 7: Sub-Regional Planning

Based on FERC Order 890 and Section III.2.b of Attachment O of the OATT, sub-regional areas were defined and local area planning meetings were held during 2012. To reduce travel requirements on members, all SPP sub-regional meetings were conducted in conjunction with the SPP planning summits. In addition, SPP staff attended local meetings held by members.

The purpose of local area planning meetings is to identify unresolved local issues and transmission solutions at a more granular level than can be accomplished at general regional planning meetings. Local area planning meetings provide stakeholders with local needs the opportunity to give advice and recommendations to the Transmission Provider and Transmission Owners. Local area planning meetings are open, coordinated, and transparent, providing a forum to review local area planning criteria as specified in Section II of the OATT, Attachment O. Feedback offered at each sub-regional meeting is taken into consideration by SPP staff when developing the regional reliability plan.

7.1: Stakeholders Process and Forums

Notices for the sub-regional planning meetings are posted on SPP.org and distributed to email distribution lists. Sub-regional planning meetings are open to all entities. Any regulatory agency having utility rates or services jurisdiction over an SPP member is invited and encouraged to fully participate.



The map above represents the SPP region broken into three local areas. Local Area 3 has two components (3 and 3a) – the SPP RTO and SPP Independent Coordinator of Transmission (Entergy) footprints.

7.2: 2012 Sub-regional Meetings

On August 22, 2012, SPP held a sub-regional planning meeting in Little Rock, AR. Meetings for all sub-regions were held concurrently in breakout sessions during the SPP spring planning summit. Subject matter experts from SPP staff were present at all of the meetings to receive suggestions, answer questions, and discuss any concerns that stakeholders had about the transmission needs in their respective region. The next rond of sub-regional planning meetings were held on December 4, 2012. These meetings took place in Little Rock as well.

On September 10, 2012, SPP representatives attended a local planning meeting hosted by Southwestern Public Service Company (SPS) in Amarillo, TX. SPS representatives provided several presentations which included updates on their construction plans.

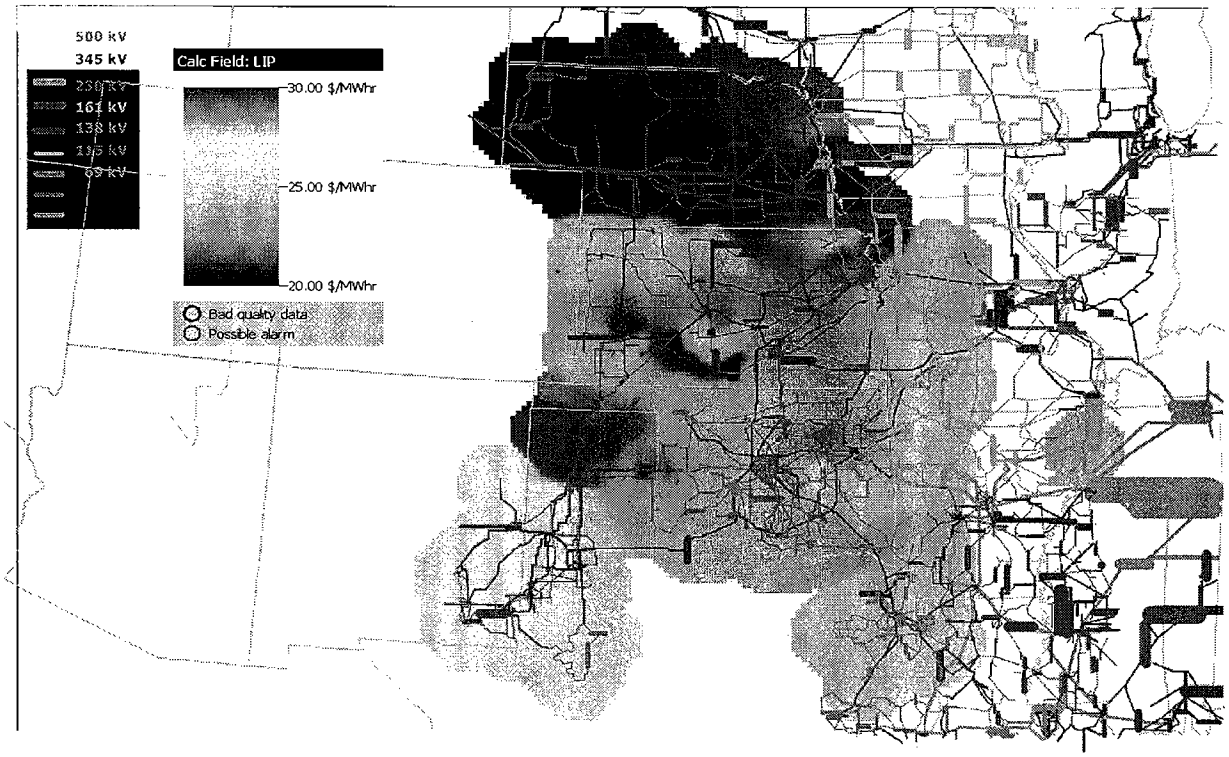
SPP staff participated in additional meetings and provided updates on current SPP planning activities and also fielded questions from meeting attendees. On March 28, 2012 SPP staff attended a Spring joint planning summit with representatives from East Texas Electric Cooperative, Northeast Texas Electric Cooperative, Tex-La Electric Cooperative of Texas and AEP. SPP staff attended a meeting with the same participants on October 3, 2012.

Section 8: Transmission Congestion and Top Flowgates

8.1: SPP 2012 Transmission Congestion

SPP staff identifies congested areas by monitoring flowgates and analyzing their causes and effects. The graphic below is a typical Energy Imbalance Services market price contour map for the SPP footprint. The map is from the November 2012 Monthly State of the Market Report and shows the average Locational Imbalance Prices (LIPs) from December 2011 to November 2012. The regions with the brighter shades (red, orange, and yellow) have higher LIPs. The areas with transmission congestion, on this annual basis, occur at the points between different shades of colors. Note that market prices vary over time and that the graphic shows the average price at the nodes.

12 Month EIS Price Contour Map



8.2: SPP Top 10 Flowgates

SPP monitors more than 260 flowgates. From these, the 10 SPP flowgates with the highest "shadow price" over the previous twelve months are shown in SPP's Monthly State of the Market Reports posted on www.spp.org>Market and Operations>Market Reports. A shadow price is the amount of value, measured in dollars, of relieving a constraint by a small amount. The value of relieving a constraint is generally that lower-priced power can be used, so the value is reflected in the difference in Locational Imbalance Prices on either side of the constraint.

The table below shows the annual top 10 flowgates from the November 2012 Monthly State of the Market Report. This table includes a list of projects that are expected to provide some positive mitigation to the flowgates. This list of projects is sorted by the estimated in-service date. As described by the upgrade type, the upgrades were planned to provide one or more benefits, such as reliability or regional economic enhancements, but not necessarily to directly solve all congestion on the particular flowgate listed. SPP has directed project owners to begin construction on the projects shown in this table via NTCs. For more information about these projects, please refer to the Project Tracking & NTCs page on www.spp.org.

Region	Flowgate Name	Flowgate Location (kV)	Average Hourly Shadow Price ($/MWh)	Total % Intervals (Breached or Binding)	Projects Expected to Provide Some Positive Mitigation (Estimated In Service Date – Upgrade Type)
Texas Panhandle	OSGCANBUSDEA	Osage Switch - Canyon East (115) ftlo Bushland - Deaf Smith (230) [SPS]	$ 10.81	15.0%	1. Tuco Int. – Woodward 345 kV line (May 2014 - Balanced Portfolio) 2. Castro County Int. – Newhart 115 kV line (April 2015 - Regional Reliability) 3. Tuco Int. – Amoco – Hobbs 345 lines (January 2020 – ITP10)
	SPSNORTH_STH	5 element PTDF flowgate north to south through west Texas	$ 2.94	16.8%	1. Tuco Int. – Woodward 345 kV line (May 2014 – Balanced Portfolio)
	GRAXFRSWEELK	Grapevine Xfmr (230/115) [SPS] ftlo Sweetwater – Elk City (230) [CSWS]	$ 2.70	1.2%	1. Bowers – Howard 115 kV line (June 2016 – ITPNT) 2. Altus Jct Tap – Russell 138 kV

Kansas City Area – Omaha Corridor	**PENMUNSTRCRA**	Pentagon – Mund (115) [WR] ftlo Stranger Creek – Craig (345) [WR-KCPL]	$ 6.76	5.5%	1. Tap existing Swissvale – Stilwell 345 kV line at West Gardner (Dec 2012 - Balanced Portfolio) 2. Terminal upgrade for Pentagon – Mund 115 kV line (TBD – ITPNT) 3. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio)
	CIRKNGIATSTJ	Circleville - King Hill [WR] (115) ftlo Iatan - St. Joe (345) [KCPL]	$ 4.24	1.0%	1. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio)
	LAKALASTJHAW	Lake Road – Alabama [GMOC] (161) ftlo St. Joe – Hawthorn [GMOC] (345)	$ 2.64	1.0%	1. Axtell – Post Rock – Spearville 345 kV line, two Spearville – Comanche – Flat Ridge – Woodward 345 kV lines, and two Flat Ridge – Wichita 345 kV lines (Dec 2014 - Balanced Portfolio/Priority Projects) 2. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio) 3. Nebraska City – Maryville – Sibley 345 kV line (June 2017 - Priority Projects) 4. Eastowne Transformer (345/161) and decommission of Lake Road – Alabama 161 kV line (Jan 2013 – not NTC but is sponsored)
	IASCLKNASJHA*	Iatan – Stranger Creek (345) [KCPL/WR] ftlo Lake Road – Alabama (161) [KCPL/GMOC]; St. Joe – Hawthorn (345) [GMOC/KCPL]	$ 2.47	10.8%	1. Axtell – Post Rock – Spearville 345 kV line, two Spearville – Comanche – Flat Ridge – Woodward 345 kV lines, and two Flat Ridge – Wichita 345 kV lines (Dec 2014 - Balanced Portfolio/Priority Projects) 2. Iatan – Nashua 345 kV line (June 2015 - Balanced Portfolio) 3. Nebraska City – Maryville – Sibley 345 kV line (June 2017 - Priority Projects)
	SUBTEKFTCRAU*	Sub 1226 - Tekamah (161) ftlo Fort Calhoun - Raun (345) [OPPD/MEC]	$ 2.46	0.5%	1. Nebraska City – Maryville – Sibley 345 kV line (June 2017 - Priority Projects)

Western Kansas	**MINXFRMINSET**	Mingo Xfmr (345/115) ftlo Mingo - Setab (345) [SECI]	$ 3.16	4.6%	1. Axtell-Post Rock-Spearville 345 kV (June 2013 – Balanced Portfolio 2. Hitchland – Woodward 345 kV (July 2014 – High Priority)
South Central Kansas	**MEDXFRREDMIN**	Medicine Lodge Xfmr (138/115) ftlo Red Willow – Mingo (345) [SECI – NPPD]	$ 2.40	2.3%	1. Axtell – Post Rock – Spearville 345 kV lines (June 2013 - Balanced Portfolio)

Section 9: Interregional Coordination

As SPP pursues its strategy of building a robust transmission system, coordination between SPP and systems neighboring our footprint will become increasingly critical. In 2010, MOPC formed the Seams Steering Committee (SSC) to provide direction regarding development and implementation of SPP's seams agreements. The SSC has continued to focus on further development of seams coordination, particularly improved modeling of neighboring transmission systems, coordinated development of interregional solutions, and sharing costs of projects that comprise interregional solutions.

To achieve a robust transmission grid, transmission expansion at or near SPP's seams will be necessary. Interregional funding will be necessary to achieve these objectives. SPP staff needs to be fully engaged in these efforts.

9.1: Entergy/SPP Regional Planning Process

In accordance with FERC Order 890, SPP OATT Attachment O, and Entergy OATT Attachment K, the Entergy SPP RTO Regional Planning Process (ESRPP) was created to identify system enhancements that may relieve regional congestion between Entergy and Southwest Power Pool. The process shares system plans to ensure that they are simultaneously feasible and otherwise use consistent assumptions and data.

For the 2012 ESRPP Cycle, three studies were scoped as DC powerflow studies (Step 1 studies). Two studies were scoped for AC analysis (Step 2 studies) and more-detailed facility cost estimates and transmission designs. For the three Step 1 studies, power transfers from SPP South to Entergy Louisiana, Entergy to OG&E, and AEP to Entergy Louisiana were performed. All three high level studies showed required upgrades to reach the desired transfer capability. The transfer from Entergy to OG&E had the least cost ($59.35 M) to obtain the desired transfer amount. The SPP South to Entergy Louisiana and AEP to Entergy Louisiana both transfer required significant upgrades ($82.2 M) to reach the desired transfer capability. The cost per MW of the 1,021 MW transfer capability increase from SPP South to Entergy Louisiana was shown to be $80,488 per MW. The Entergy to OG&E study allowed an increased transfer of 790 MW, at $75,127 per MW. The AEP to Entergy Louisiana study allowed an increased transfer of 1,254 MW, at $65,533 per MW. In all, the three high level transfer studies required major transmission improvements to transfer the desired amounts of power across the seam.

The detailed analysis (STEP 2) for the 2012 ESRPP Cycle involved transfer of power between the Entergy and EMDE as well as between Nebraska and Entergy. The cost to construct and design the projects to allow the Entergy to EMDE transfer was $181.5M. For the Nebraska to Entergy transfer, the additional projects needed to increase the transfer capability between the areas are estimated to cost $818.8M.

Details of the 2012 ESRPP can be found on Oasis.[6]

9.2: AECI Interaction

SPP and AECI performed a joint transmission study as required under the SPP-AECI JOA. This study consisted of a five and ten year reliability assessment of the region along the SPP-AECI seam. The assumptions for this study were similar to those used in the 2013 ITPNT. The study was guided by SPP

[6] https://www.oasis.oati.com/woa/docs/EES/EESdocs/EntergySPPRTORegionalPlanningProcess.htm

and AECI stakeholders through the SPP-AECI IPSAC which met via conference calls several times throughout the study.

SPP performed the five-year assessment and AECI performed the ten-year assessment. The results were reviewed by both regions. The results of the assessmenets identified potential issues on each party's system; however, there were not any issues identified that could be addressed by a transmission solution that would provide value to both SPP and MISO.

Since no potential opportunities for coordination on a joint project were identified in the reliability assessments, AECI and SPP worked with the respective stakeholders to deteremine if there were additional opportunities that were not evident in the reliability assessments. Several items were proposed by both SPP and AECI stakeholders. These issues were reviewed and narrowed down to the items that both parties were interested in persuing. AECI plans to provide SPP with potential solutions for these issues by the end of 2012. SPP will then evaluate these solutions in 2013.

9.3: MISO Joint Future Coordination

Through a desire to better model each other's systems, SPP and MISO decided to coordinated in the development of a joint future model. This joint future model will use the same assumptions and required approval of the assumptions by both the SPP Economic Studies Working Group (ESWG) and the MISO Planning Advisory Committee (PAC). The assumptions in the joint future are similar to each regions business as usual future. The joint future in the SPP planning process is the 2013 ITP20 Future 5. MISO is using the joint future as a sensitivity in the MISO Transmission Expansion Plan (MTEP).

The development of the joint future has been challenging and has taken a considerable amount of time to develop. This has delayed the development of the joint future model compared to the models for the ITP20 futures 1 through 4. There are significant challenges associated with merging two different models. This effort has provided an opportunity to identify hurdles and challenges that will be experienced under the new interregional planning process that is being developed in response to FERC Order 1000.

SPP will use the joint future as a part of the 2013 ITP20. The joint future, future 5, has a weight of 10% in the 2013 ITP20.

9.4: WAPA Interaction

In the 2012 ITP10 SPP identified a transmission solution that would interconnect with a WAPA owned facility. The ITP10 project is the Cherry County – Holt County 345 kV line. This proposed line would interconnect with the WAPA owned Fort Thompson – Grand Island 345 kV line at a new substation at Holt County. SPP has worked with Nebraska Public Power District and WAPA on meeting the WAPA requirements to interconnect and determine what the impacts will be to the WAPA system.

In 2012 SPP and WAPA executed a new JOA. This JOA provides for enhanced interregional coordination between the two regions, including a requirement to perform a joint transmission study ever two years.

9.5: Eastern Interconnection Planning Collaborative

The Eastern Interconnection Planning Collaborative (EIPC) represents the entire Eastern Interconnection and was initiated by a coalition of NERC-registered regional Planning Authorities. The EIPC was founded to be a broad-based, transparent collaborative process among all interested stakeholders:

- State and federal policy makers

- Consumer and environmental interests
- Transmission Planning Authorities
- Market participants within the Eastern Interconnection

The EIPC builds on the regional expansion plans developed each year by regional stakeholders in collaboration with their respective NERC Planning Authorities. This approach provides coordinated interregional analysis for the entire Eastern Interconnection guided by the consensus input of an open and transparent stakeholder process.

The EIPC represents a first of its kind effort to involve Eastern Interconnection Planning Authorities in modeling the impact on the grid of various policy options determined to be of interest by state, provincial, and federal policy makers and other stakeholders. This work will build on, rather than replace, current local and regional transmission planning processes developed by the Planning Authorities and associated regional stakeholder groups within the Eastern Interconnection. Those processes will be informed by EIPC efforts, including the interconnection-wide review of existing regional plans and development of transmission options associated with the various policy options.

The EIPC throughout 2012 established a processes for aggregating the entire Eastern Interconnection' s modeling and regional transmission plans. The EIPC also established processes for performing interregional analyses to identify potential opportunities for efficiencies between regions in serving the needs of electrical customers. This interconnection-wide analysis served as the reference case for modeling alternative grid expansions based on scenarios guided by stakeholder input and consensus recommendations of a multi-constituency stakeholder steering committee.

Stakeholders participating in the EIPC efforts identified three scenarios and developed a transmission solution portfolio for each of the scenarios.

- Scenario 1: Nationally implemented Federal Carbon Constraint with Increased Energy Efficiency and Demand Response. Two 2030 models will be built for this scenario, peak and off-peak.
- Scenario 2: Regionally Implemented National Renewable Portfolio Standard (30%). Two models will be built for this scenario, peak and off-peak.
- Scenario 3: Business as Usual. One peak model.

The build-out for the scenario 3 would require $1.1 to $1.2 billion of transmission costs in SPP. The build-out for the scenario 2 would require $13.9 - $24 billion. The scenario 1 would require $19.5 – $34.4 billion.

SPP Engineering Involvement

The SPP Engineering department has been actively involved in multiple aspects of the EIPC effort. Having participated in the construction of the steady state load flow models, the Steady State Model Load Flow Working Group (SSMLFWG) submitted their work to the EIPC at the end of 2010. In 2011, SPP participated in quarterly Stakeholder Planning Committee (SPC) meetings and provided input and advice during the macroeconomic resource expansion analysis. This analysis produced more than 80 possible scenarios, from which three were selected in 2011 for transmission build-out in 2012. SPP actively participated in the modeling and solution development efforts.

Section 10: Project Tracking

Business Practice 7060
Applicable to projects issued a NTC on or after January 1, 2012, the MOPC approved Business Practice 7060 on March 27, 2012. The Business Practice commenced a cost estimation process defined by a tiered approach for project cost estimates based upon the level of project definition that is known. It also introduced the Notification to Construct with Conditions (NTC-C) issued to Applicable Projects, projects with an estimated cost $20 Million or greater and a nominal operating voltage greater than 100 kV. The table below lists the cost estimate stage definitions.

Cost Estimate Stage Definition Overview

Estimate Name*	Stage		End Usage	Precision Bandwidth
	Projects > 100 kV & > $20 Million	All other BOD Approved Projects		
Conceptual	1	1	Concept screening for ITP20/ITP10	-50% to + 100%
Study	2	2	Study of feasibility and plan development for ITP10/ITPNT	-30% to +30%
	NTC-C Issued	*NTC Issued*		
NTC-C Project (CPE)	3	N/A	Final baseline (NTC-C)**	-20% to +20%
	New NTC Issued			
NTC Project (NPE)	N/A	3	Final baseline (NTC)**	-20% to +20%
Design & Construction	4	4	Design after NTC issued and build the project	-20% to +20%***

* The Conceptual Estimate will be prepared by SPP. All subsequent estimates will be prepared by the DTO(s).
**BOD approval required to reset the baseline.
***Actual cost is expected to be within +/-20% of final baseline estimate.

The precision bandwidths defined in Business Practice 7060 are used as guidelines for NTC review triggers. For a project that is issued a NTC-C, an automatic review of the project is initiated if the ±20% precision bandwidth of the cost estimate that is received after NTC-C issuance, called the NTC-C Project Estimate (CPE), exceeds the ±30% bandwidth of the cost estimate previously submitted during the study phase of the project, titled the Study Estimate. SPP staff issued NTC-Cs for 9 Applicable Projects during 2012.

Project Cost Working Group
Business Practice 7060 also defined the role of the Project Cost Working Group (PCWG) for reviewing projects that have experienced a cost variance that exceeds ±20% of the established baseline estimate.

The PCWG will initially be responsible for only Applicable Projects. If the PCWG recommends a restudy and/or changes or revocation of a NTC, the recommendation to the MOPC would follow SPP's existing processes for approval to the BOD. The BOD will make the final determination on whether to restudy and/or change or revoke the NTC.

The PCWG is also responsible for maintaining the Standardized Cost Estimate Reporting Template (SCERT) developed to provide consistency of cost estimates and facilitate the Project Tracking process. The SCERT is to be utilized by Transmission Owners for all project cost estimates and applicable monthly/quarterly updates.

NTC Letters Issued in 2012

The NTC, previously called a Letter of Authorization, informs transmission project owners of their responsibility for constructing BOD approved network upgrades. NTCs were requested by project owners to assist them in the regulatory and cost recovery process. In 2012, 26 NTCs were issued with current estimated engineering and construction costs of $1.53 billion. Of this $1.53 billion, $1.45 billion was identified for regional reliability, $12 million for transmission service, $3 million for zonal reliability, and $5 million for generation interconnection. Two of the 26 NTCs were issued for a Balanced Portfolio project with an estimated cost of $54 million, but these were modified NTCs to reflect the new ownership of the project between Kansas City Power & Light and KCP&L Greater Missouri Operations.

Projects Completed in 2012

As of the fourth quarter of 2012, 85 upgrades had been completed. Of the upgrades completed in 2012, 43 were identified for regional reliability, 11 for zonal- sponsored/zonal reliability needs, 19 for transmission service, four (4) for generation interconnection agreements, three (3) for regional reliability-non OATT, and five (5) for Balanced Portfolio.

The total estimated engineering and construction cost for upgrades completed in 2012 was $858.5 million, with $305.5 million for regional reliability, $270.6 million for transmission service, $27.1 million for zonal-sponsored/reliability upgrades, $34.3 million for generation interconnection agreements, $12.9 million for regional reliability-non OATT, and $208.2 for Balanced Portfolio.

NTCs Issued in 2012

NTC ID	Project ID	Facility Owner	Project Name	Current Cost Estimate
200167	502	AEP	Line - Northwest Henderson - Poynter 69 kV	$7,815,833
	503	AEP	Line - Diana - Perdue 138 kV	$1,004,187
	882	AEP	Line - Carthage - Rock Hill 69 kV Ckt 1 rebuild	$11,830,128
	1012	AEP	Line - Diana - Perdue 138 kV Reconductor	$18,805,489
	30346	AEP	Sub - Cornville 138 kV	$21,664,838
	30354	AEP	Device - Coweta 69 kV Capacitor	$1,428,440
200183	30361	AEP	Multi - Elk City - Gracemont 345 kV	$99,575,392
200189	703	GMO	Multi - Iatan - Nashua 345 kV	$48,438,919
200168	549	GRDA	Maid - Pryor Foundry South 69 kV Ckt 1	$1,374,534
	550	GRDA	Maid - Redden 69 kV Ckt 1	$1,419,469
200187	30367	ITCGP	Multi - Elm Creek - Summit 345 kV	$42,697,637
200169	1135	KCPL	Loma Vista East - Winchester Junction North 161 kV Ckt 1	$190,860
200188	703	KCPL	Iatan - Nashua 345 kV Ckt 1 (KCPL)	$12,130,261
200171	30352	LES	Folsom & Pleasant Hill - Sheldon 115 kV Rebuild Ckt 2	$6,382,777
200172	30358	MIDW	Multi - Ellsworth - Bushton - Rice 115 kV	$4,102,384
200173	30347	MKEC	Haggard - Ingalls 115 kV Ckt 1	$23,377,556
	30358	MKEC	Multi - Ellsworth - Bushton - Rice 115 kV	$21,735,118
200170	816	NPPD	Albion - Genoa 115 kV Ckt 1	$1,240,000

	30237	NPPD	Holdrege 115 kV	$1,193,000
	30286	NPPD	Multi - Stegall 345/230 kV Transformer Ckt 2	$5,239,000
200186	30374	NPPD	Multi - Hoskins - Neligh 345 kV	$96,702,400
	30375	NPPD	Multi - Gentleman - Cherry - Holt 345 kV	$289,280,000
200174	30092	OGE	Device - Kolache 69 kV Capacitor	$523,888
	30302	OGE	Paoli 138/69 kV Transformer Ckt 1 (OGE)	$2,090,660
	30357	OGE	Lula 69 kV	$377,797
200185	30361	OGE	Multi - Elk City - Gracemont 345 kV	$75,486,000
	30364	OGE	Multi - Woodward EHV - Tatonga - Matthewson - Cimarron 345 kV	$206,966,741
200194	30481	OGE	Line - El Reno - Service PL El Reno 69 kV CKT 1	$10,000
	30485	OGE	XFR - Northwest 345/138 kV transformer CKT 3 accelerated	$2,260,299
200198	858	OGE	Multi - Cushing Area 138 kV	$15,000,000
200199	30486	OGE	Multi - Renfrow 345/138 kV substation and Renfrow - Grant 138 kV line	$28,563,915
200166	151	SPS	XFR - Tuco 115/69 kV Transformer Ckt 3	$2,633,003
	461	SPS	Line - Curry - Bailey 115kV	$35,099,588
	805	SPS	Multi - Bowers - Howard 115 kV Ckt 1	$25,557,920
	836	SPS	Sub - Convert Muleshoe East 69 kV to 115 kV	$2,917,236
	839	SPS	Multi - Kress Interchange - Kiser - Cox 115 kV	$26,205,991
	884	SPS	XFR - Eddy County 230/115 kV Transformer Ckt 2	$4,863,725
	1003	SPS	XFR - Grassland 230/115 kV Transformer Ckt 1	$3,914,401
	1033	SPS	Line - Randall - South Georgia 115 kV reconductor	$3,816,651
	1034	SPS	Line - Hereford - Northeast Hereford 115 kV Ckt 1	$4,139,406
	1141	SPS	XFR - Spearman 115/69/13.2 Ckt 1 Upgrade	$2,351,378
	30087	SPS	Device - Bushland Interchange 230 kV Capacitor	$1,714,505
	30332	SPS	Device - Drinkard 115 kV Capacitor	$2,225,089
	30351	SPS	Device - Crosby 115 kV Capacitor	$985,519
	30353	SPS	Sub - Move lines from Lea Co 230/115 kV sub to Hobbs Interchange 230/115 kV	$10,608,509
	30356	SPS	Multi - Cedar Lake Interchange 115 kV	$13,224,520
200184	1149	SPS	Multi - Tuco - Stanton 345 kV	$37,490,796
	30355	SPS	Line - Grassland - Wolfforth 230 kV	$50,068,309
	30376	SPS	Multi - Tuco - Amoco - Hobbs 345 kV	$181,415,883
200193	1000	SPS	Line - Jones Station Bus#2 - Lubbock South Interchange 230 kV CKT 2 terminal upgrade	$345,942
	30422	SPS	XFR - Deaf Smith County Interchange 230/115 kV transformer CKT 1	$4,273,633
200175	624	WR	Line - Fort Junction - West Junction City 115 kV	$6,969,136
	30335	WR	Device - Wheatland 115 kV Capacitor	$957,660
	30336	WR	Device - Northwest Manhattan 115 kV Capacitor	$957,660
	30339	WR	Mund - Pentagon 115 kV	$278,300
	30348	WR	Line - Cowskin - Centennial 138 kV rebuild	$3,676,071
	30350	WR	Device - Elk River 69 kV Capacitor	$1,007,160
200176	30383	WR	MULTI - RICE - CIRCLE 230KV CONVERSION	$5,095,881
200179	30349	WR	XFR - Auburn Road 230/115 kV Transformer Ckt 1	$29,507,894
200181	30369	WR	XFR - Moundridge 138/115 kV	$18,063,183
200182	30367	WR	Multi - Elm Creek - Summit 345 kV	$62,110,152
200197	30406	WR	Line - Greenleaf - Knob Hill 115 kV CKT 1 WR	$456,403
	30431	WR	Line - El Paso - Farber 138kV CKT 1	$5,561,163

Section 11: Appendix A

Appendix A includes a comprehensive listing of transmission projects identified by the SPP RTO. Not all projects in Appendix A have been approved by the Board, but all Board-approved projects are included in the list. Appendix A also includes Tariff study projects, economic projects, zonal projects, and associated interregional projects.

Projects in Appendix A are categorized in the column labeled "Project Type" by the following designations:

Balanced Portfolio – Projects identified through the Balanced Portfolio process

Generation Interconnect – Projects associated with a FERC-filed Generation Interconnection Agreement

Interregional – Projects developed with neighboring Transmission Providers

High priority – Projects identified in the high priority process

ITP – Projects needed to meet regional reliability, economic, or policy needs in the ITP study processes

ITP – non-OATT – Projects to maintain reliability for SPP members not participating under the SPP OATT

Transmission service – Projects associated with a FERC-filed Service Agreement

Zonal Reliability – Projects identified to meet more stringent local Transmission Owner criteria

Zonal – sponsored – Projects sponsored by facility owner with no Project Sponsor Agreement

The complete Network Upgrade list includes two dates.

1. In-service: Date Transmission Owner has identified as the date the upgrade is planned to be in-service.

2. SPP Need Date: Date upgrade was identified as needed based on the latest ITP assessments or aggregate study.

The cost estimates highlighted in yellow were estimated by SPP.

Facility owner abbreviations used in Appendix A:

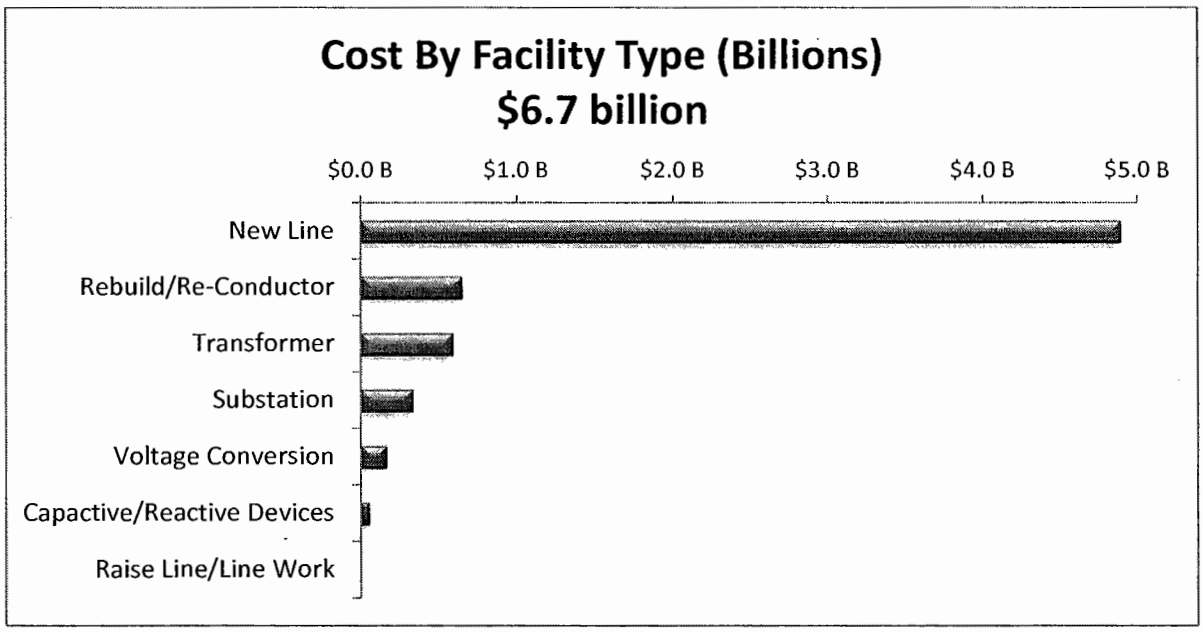
Abbreviation and Identification	
AECC	Arkansas Electric Cooperatives
AECI	Associated Electric Cooperative, Incorporated
AEP	American Electric Power
CUS	City Utilities, Springfield Missouri
DETEC	Deep East Texas Electric Cooperative
EDE	Empire District Electric Company
GMO	KCP&L Greater Missouri Operations Company
GRDA	Grand River Dam Authority
GRIS	Grand Island Electric Department (GRIS)
INDN	City Power & Light, Independence, Missouri
ITCGP	ITC Great Plains
KCPL	Kansas City Power and Light Company
LEA	Leạ County Cooperative
LES	Lincoln Electric System
MIDW	Midwest Energy, Incorporated
MKEC	Mid-Kansas Electric Company
NPPD	Nebraska Public Power District
OGE	Oklahoma Gas and Electric Company
OMPA	Oklahoma Municipal Power Authority
OPPD	Omaha Public Power District
PW	Prairie Wind Transmission
RCEC	Rayburn Electric Cooperative
SEPC	Sunflower Electric Power Corporation
SPS	Southwestern Public Service Company
SWPA	Southwestern Power Administration
WFEC	Western Farmers Electric Cooperative
WR	Westar Energy

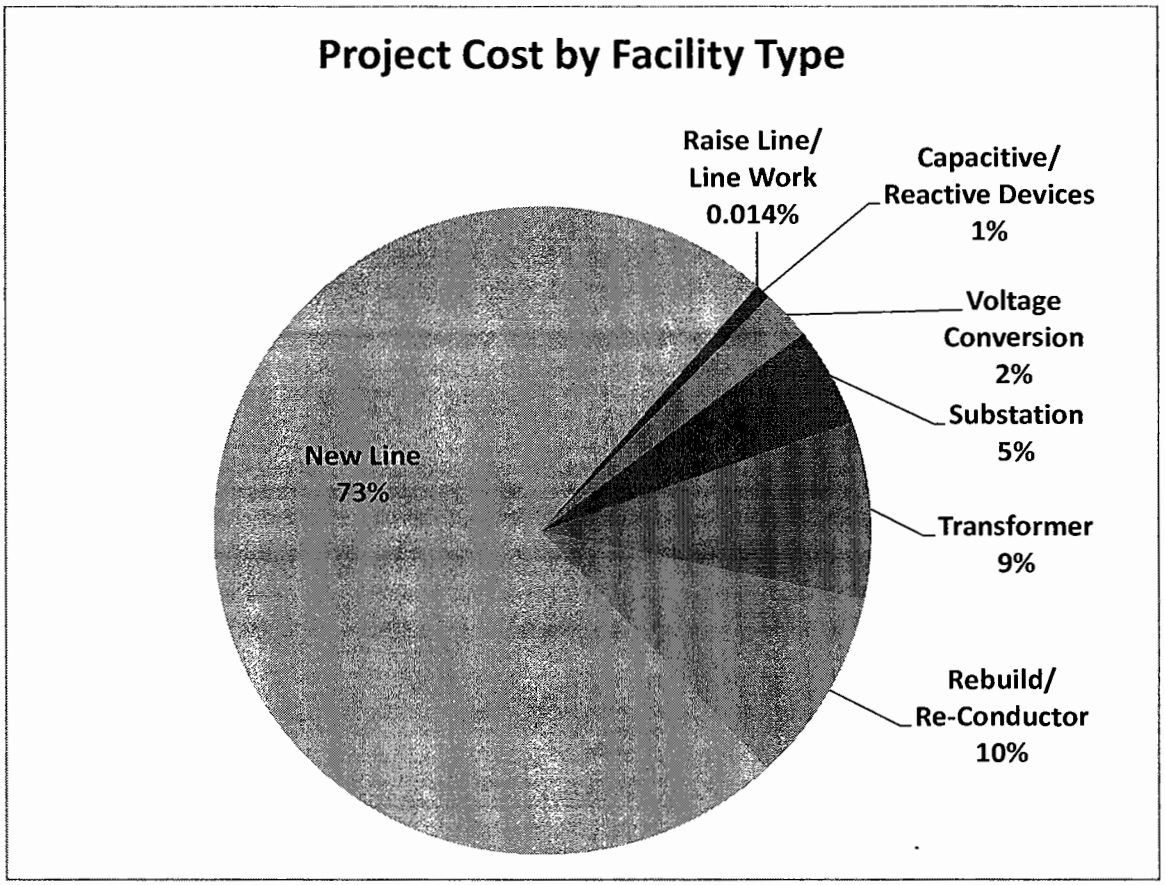
Appendix A Summaries

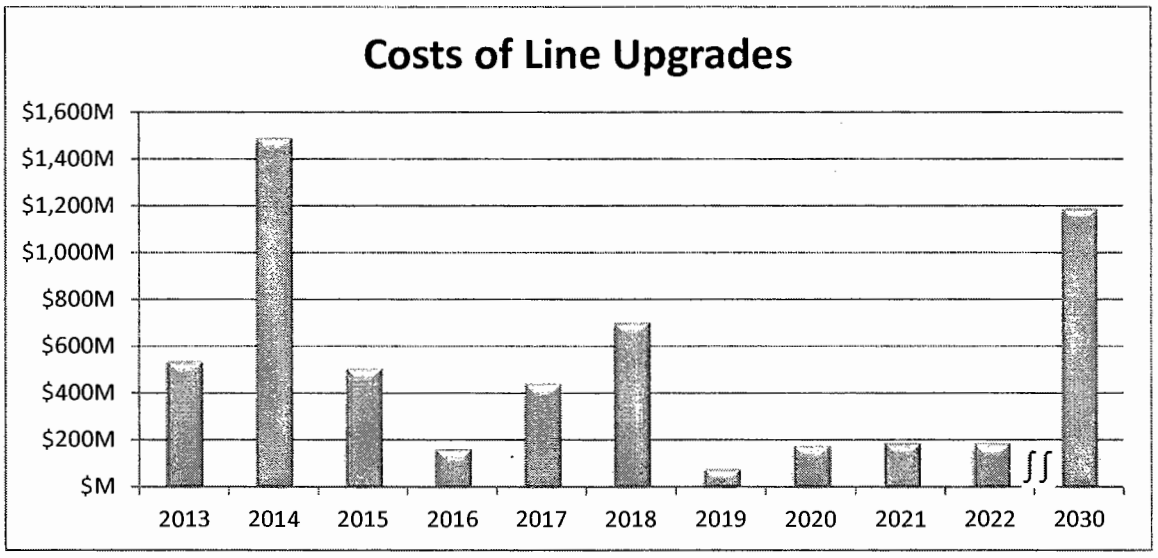
2013 STEP (Nearest 10 Million)	Upgrade Type
$1,390	2010 Priority Projects
$620	2009 Balanced Portfolio
$210	Transmission Service Request and Generation Interconnection Service Agreements
$2,820	ITP - Base Plan
$1,510	ITP - Other
$180	Sponsored Upgrades
$6.7B	SPP Subtotal
$100	non-OATT upgrades*
$6.8B	Appendix A - TOTAL

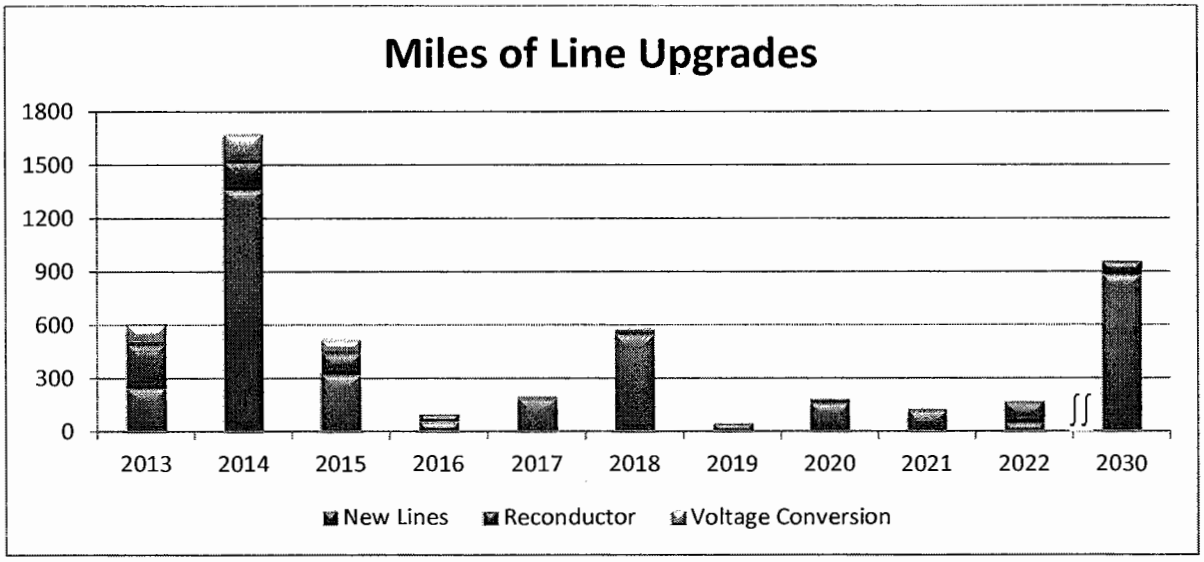
* Includes Southwestern Power Administration projects

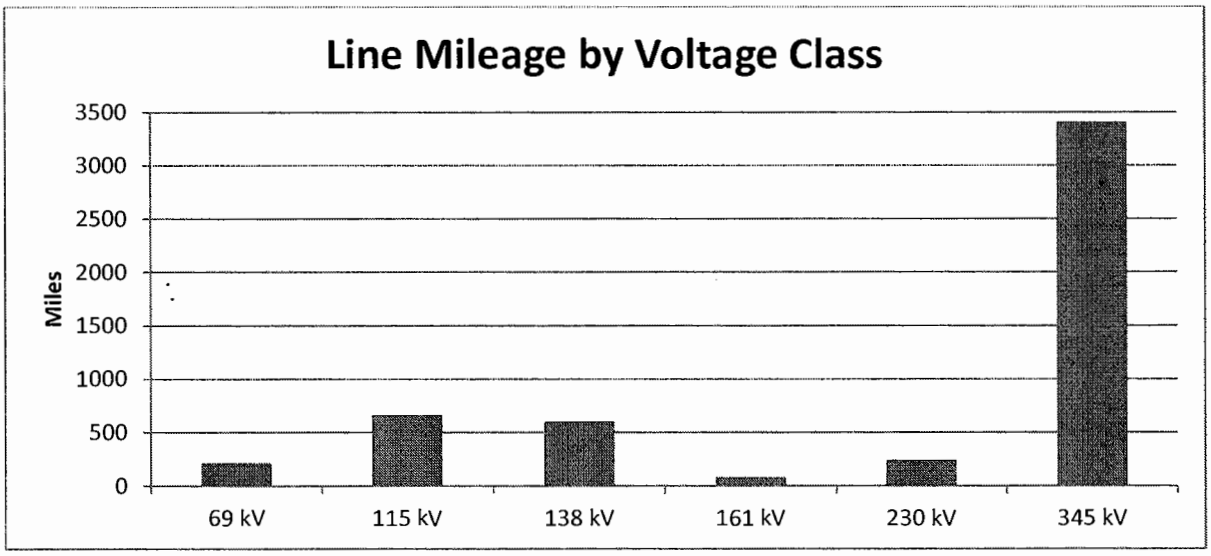
Has filed Service Agreement or is Board-approved

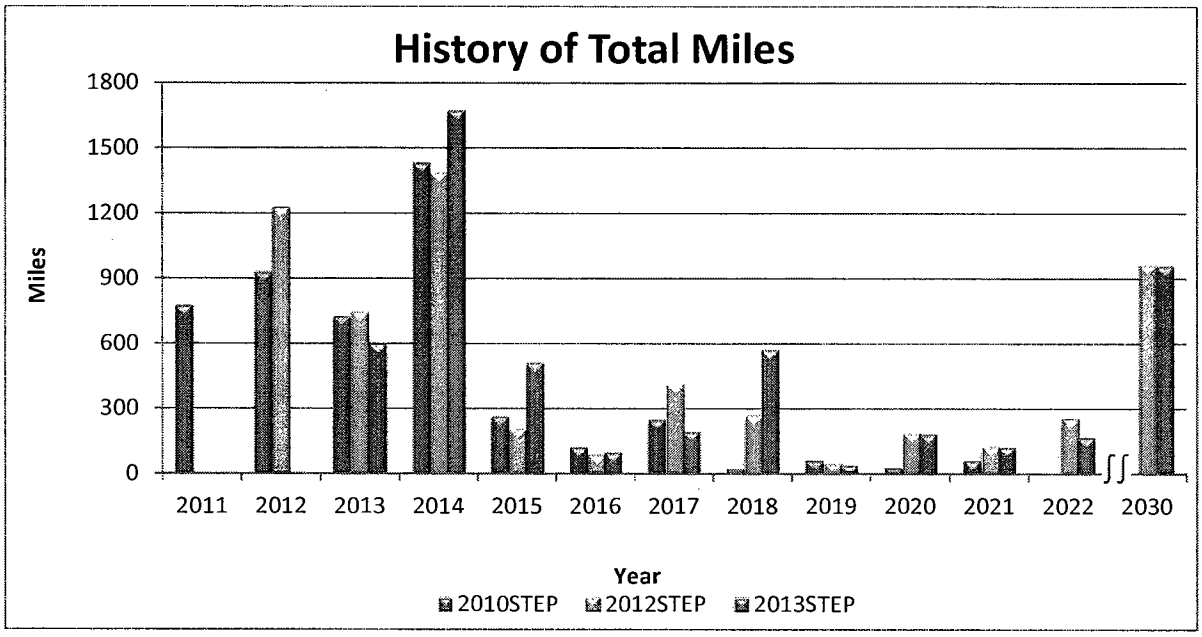


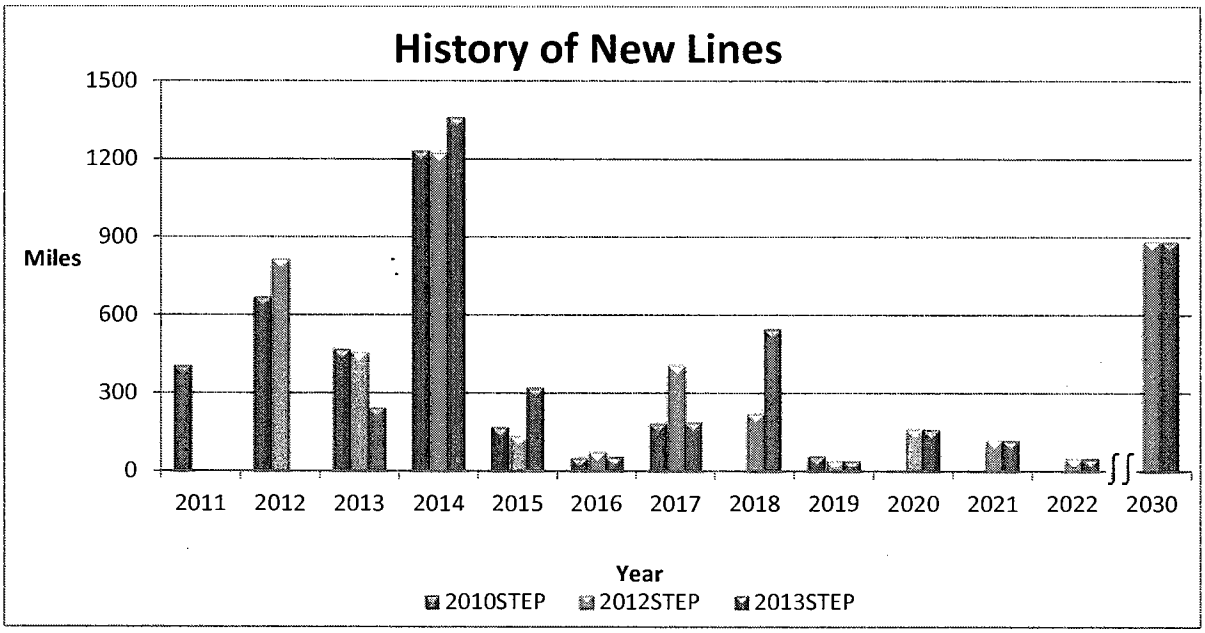

Project Cost by Facility Type
Raise Line/
Line Work
0.014%
Capacitive/
Reactive Devices
1%
Voltage
Conversion
2%
Substation
5%
Transformer
9%
Rebuild/
Re-Conductor
10%
New Line
73%

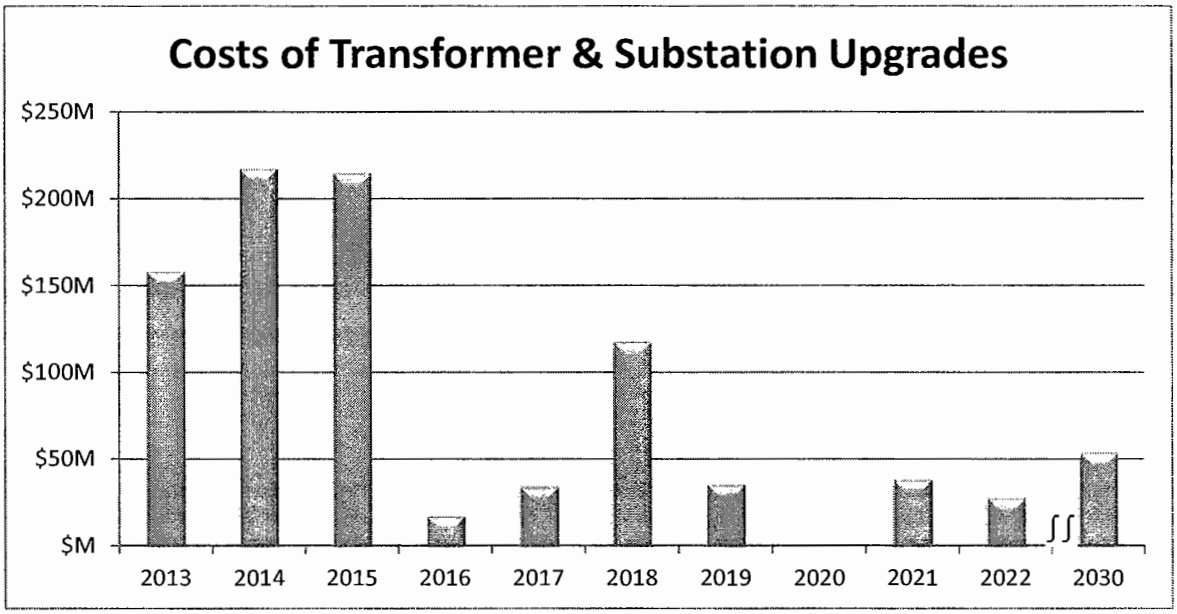

Costs of Line Upgrades
$1,600M
$1,400M
$1,200M
$1,000M
$800M
$600M
$400M
$200M
$M
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030

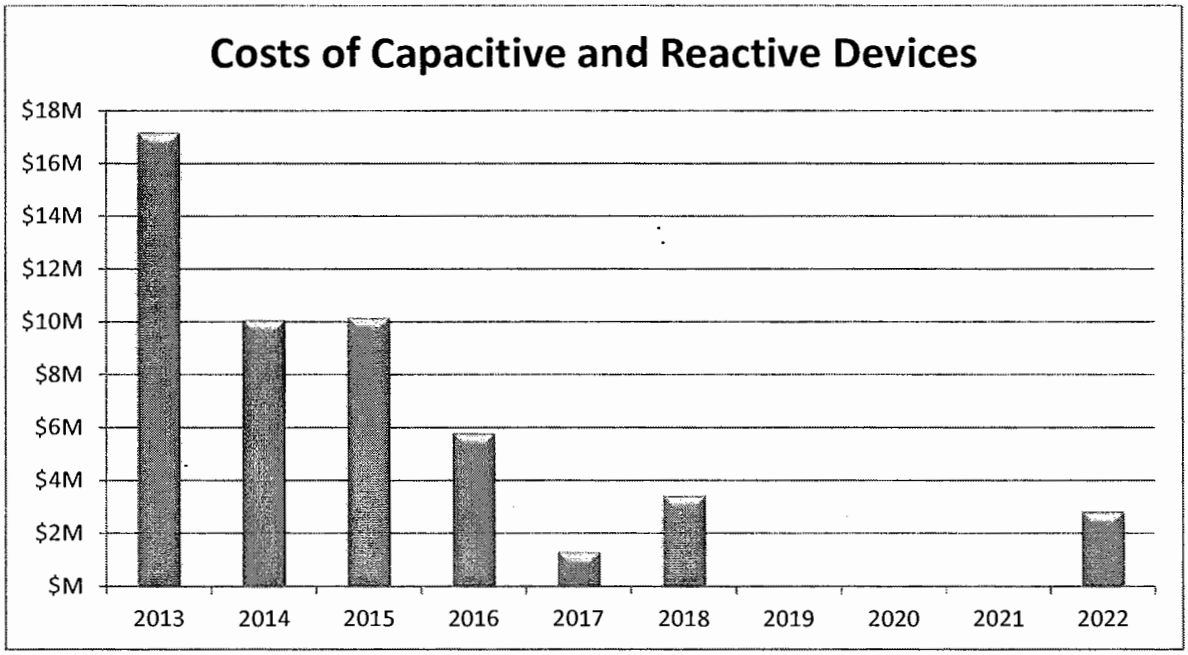

Miles of Line Upgrades
1800
1500
1200
900
600
300
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
New Lines
Reconductor
Voltage Conversion


Line Mileage by Voltage Class
Miles
3500
3000
2500
2000
1500
1000
500
0
69 kV
115 kV
138 kV
161 kV
230 kV
345 kV


History of Total Miles
1800
1500
1200
900
600
300
0
Miles
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
Year
2010STEP
2012STEP
2013STEP


History of New Lines
1500
1200
900
600
300
0
Miles
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030
Year
2010STEP
2012STEP
2013STEP


Costs of Transformer & Substation Upgrades
$250M
$200M
$150M
$100M
$50M
$M
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2030


Costs of Capacitive and Reactive Devices
$18M
$16M
$14M
$12M
$10M
$8M
$6M
$4M
$2M
$M
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022

Appendix A - Complete List of Network Upgrades

NTC ID	PID	UID	Facility Owner	2013 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
2013																				
	283	10367	AECI	inter-regional	$86,017,699	AECI	The proposed line connects to the Morgan - Neosho 345kV line near the Kansas border -- This is the proposed Blackberry sub. From Blackberry the 108 mile 345kV line connects to Chouteau 345 kV bus which connects via a 5 mile 345kV circuit to GRDA 1 bus (GRDA 2 gen). At the Chouteau 345kV bus a 345/161 transformer connects to Chouteau 161kV sub.	04/01/13			300739	Blackberry	300740	Sportsmans Acres	1	345		108		1369/1369
20027	443	10575	AEP	ITP	$2,000,000	AEP	Tap the South Springdale-East Fayetteville 161 kV line and build 1.5 miles of 161 kV to new Osbourne station.	06/01/13	06/01/13	24	506984	Osborne Tap	506985	Osborne	1	161		1.5		428/636
20073	767	11011	AEP	ITP	$24,965,000	AEP	Convert 17 mile Canadian River - McAlester City line from 69 kV to 138 kV.	06/01/13	06/01/10	36	510946	Canadian River 138	510908	McALESTER City SOUTH	1	138			17	321/443
20073	767	11012	AEP	ITP	$9,513,000	AEP	Tap Pittsburg - Muskogee 345 kV about 33 miles north of the Pittsburg station and step down to 138 kV with a 450 MVA autotransformer.	06/01/13	06/01/10	36	515422	Canadian river 345kv	510946	Canadian River 138	1	345/138				450/495
20073	767	11184	AEP	ITP	$4,096,000	AEP	Rebuild McAlester City Tap, double circuiting existing line, eliminate the 'T' at McAlester City North Tap.	06/01/13	06/01/10	36	510908	McALESTER City SOUTH	510909	MCALESTER CITY NORTH TAP	1	138	5.73			96/105
20064	770	11015	AEP	ITP	$2,500,000	AEP	Rebuild 2.45 miles of 795 ACSR with 1590 ACSR and reset relays.	06/01/13	06/01/13	12	504124	ASHDOWN WEST	510890	CRAIG JUNCTION	1	138	2.45			265/287
20112	1023	11347	AEP	transmission service	$7,200,000	AEP	Rebuild 7.11 miles of 397.5 ACSR with 1272 ACSR	06/01/13	06/01/12		507759	SOUTHWEST SHREVEPORT 138KV	507757	SPRINGRIDGE PAN-HARR REC	1	138	7.11			287/287
20112	1024	11348	AEP	transmission service	$2,800,000	AEP	Rebuild 2.49 miles with 1590 ACSR. Replace wavetrap and jumpers at Whitney. Replace metering CT at Eastex.	06/01/13	06/01/12		508575	WHITNEY 138KV	508582	TEXAS EASTMAN	1	138	2.49			320/380
20122	1081	11421	AEP	ITP	$2,100,000	AEP	Rebuild 1.68-mile Hooks - Lone Star Ordinance Tap 69 kV line. Replace switch 6006 at Lone Star Ordinance.	06/01/13	06/01/13	18	508057	HOOKS	508063	LONESTAR ORDINANCE TAP	1	69	1.68			143/143
20122	30148	50156	AEP	ITP	$6,600,000	AEP	Rebuild Bann - Lone Star Ordinance 69 kV with 1272 ACSR (5.4 miles). Replace jumpers, upgrade CT ratios and adjust relay settings at Bann. Replace 69 kV switch at Lone Star Ordinance Tap with a minimum 800 amp emergency rating.	06/01/13	06/01/13	21	508053	BANN 69KV	508063	LONESTAR ORDINANCE TAP	1	69	5.4			90/121
20135	30316	50375	AEP	transmission service	$5,500,000	AEP	Replace auto with new 450 MVA.	06/01/13	06/01/13	20	508832	DIANA 345KV	508831	DIANA 138KV	3	345/138				450/495
20135	30319	50365	AEP	ITP	$900,000	AEP	Reset CT, Replace Breaker and Switch	06/01/13	06/01/13		508562	PIRKEY 138KV	508575	WHITNEY 138KV	1	138				
20034	646	10847	GMO	ITP	$2,000,000	GMO	Replace Clinton 161/69 kV transformer #1 with new 100/125 MVA to match transformer #2.	11/01/13	06/01/13	12	541303	Clinton 69 KV	541242	Clinton 161 KV	1	161/69				100/125
20087	715	10952	GMO	ITP	$800,000	KCPL	Reconductor GMO portion of Glenare - Liberty 69 kV for 70/79 MVA rating.	06/01/13	06/01/13	24	543081	GLENARE 69 KV	541262	Liberty 69 KV	1	69	0.19			70/79
	30366	50424	GMO	zonal - sponsored	$12,809,443	KCPL	Install new 345/161 kV transformer at new Eastowne sub, tapping the Iatan - St. Joe 345 kV and connecting to the existing 161 kV in the area, switching out Lake Rd. - Alabama 161 kV.	04/15/13	01/01/20	12	541400	Eastowne 345 kV	541401	Eastowne 161 kV	1	345/161				400/440
	30408	50501	GMO	zonal - sponsored	$1,100,000	GMO	New Clinton Plant 16.8 Mvar capacitor bank at 69kV	06/01/13		12						69				16.8 Mvar
20021	299	10385	GRDA	ITP	$4,372,000	GRDA	Reconductor line to 1590 ACSR, A = 347, B = 403. $255K/mile @ 8.8 mi.	08/01/13	06/01/12	24	512714	KANSAS TAP 161	512642	WEST SILOAM SPRINGS 161	1	161	8.8			347/403
20021	299	10386	GRDA	ITP	$1,831,000	GRDA	Reconductor line to 1590 ACSR, A = 347, B = 403. $255K/mile @ 4.2 mi.	08/01/13	06/01/12	24	512642	WEST SILOAM SPRINGS 161	512643	SILOAM CITY 161	1	161	4.2			347/403
	302	10389	GRDA	zonal - sponsored	$3,210,200	GRDA	Tap the GRDA 1-Flint Creek 345 kV line and build a 345/161 transformer at Toneece. Then build a 161 kV line down to Siloam Springs.	01/01/13		24	512751	TONNECE161	512643	SILOAM CITY 161	1	161		7		347/347
	302	10390	GRDA	zonal - sponsored	$8,019,000	GRDA	Tap the GRDA 1-Flint Creek 345 kV line and build a 345/161 transformer. Then build a 161 kV line down to Siloam Springs.	01/01/13		24	512750	TONNECE345	512751	TONNECE161	1	345/161				250/280
200168	549	10698	GRDA	ITP	$1,374,534	GRDA	Reconductor 1.3-mile Maid - Pryor Foundry South 69 kV line and replace 600A switches with 1200A switches.	06/01/13	06/01/12	12	512626	MAID69	512681	PRYOR FOUNDRY SOUTH 69	1	69	1.3			130/143
200168	550	10699	GRDA	ITP	$1,419,469	GRDA	Reconductor 1.4 mile Maid-Redden 69 kV line and replace 600A switches with 1200A switches.	06/01/13	06/01/12	12	512626	MAID69	512698	REDDEN 69	1	69	1.4			130/143
20028	30071	50077	GRDA	ITP	$374,000	GRDA	Add 7.2 Mvar capacitor at Sallisaw 69 kV.	06/01/13	06/01/11	12	512652	SALLISAW 69				69				7.2 Mvar
	30379	50459	GRDA	Generation Interconnect	$2,500,000	GRDA	New GRDA 138 kV switching station at Pawnee. New 138 kV three breaker ring bus substation containing 3 138 kV circuit breakers, associated disconnect switches, structures, relaying, grounding, fencing, and all associated and miscellaneous equipment. Required in mitigation of SPP Affected Facilities from new AECI GI project located near Burbank, OK. SPP STUDY ID - ASGI-2010-006	12/31/13			700001					138				
20042	702	10934	KCPL	Balanced Portfolio	$1,922,840	KCPL	West Gardner 345kV bus cut-in to Swissvale-Stillwell 345 kV line	03/31/13			542965	WEST GARDNER 345 KV				345				
	1039	11376	KCPL	zonal - sponsored	$2,963,000	KCPL	Rebuild 4.2 mile Olathe - Switzer 161kV line.	06/01/13		18	543036	OLATHE 161 KV	543045	SWITZER 161 KV	1	161	4.2			558/558
	30493	50604	KCPL	zonal - sponsored	$500,000	KCPL	Reconductor 2.07-mile 161 kV line from Overland Park - Brookridge using 1192 ACSS. Upgrade terminal equipment to 2000 amps.	12/31/13			543047	OVERLAND PARK 161 KV	543033	BROOKRIDGE 161 KV	1	161	2.07			
	30342	50388	LES	zonal - sponsored	$17,318,000	LES	Add 3.25-mile 115 kV line from 17th & Holdrege to 30th & A.	09/13/13			650219	17th & Holdrege	650252	30th & A	1	115		3.25		240/255

Appendix A - Complete List of Network Upgrades

NTC ID	PID	UID	Facility Owner	2013 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
	30343	50389	LES	zonal - sponsored	$9,980,000	LES	Add 2 mile 115 kV line from 30th & A to 56th & Everett.	09/13/13			650252	30th & A	650256	56th & Everett	1	115		2		240/255
200171	30352	50403	LES	ITP	$6,382,777	LES	Rebuild 12 miles of 115 kV Ckt 2 between Sheldon and Folsom/Pleasant Hill.	05/15/13	01/01/12	24	650242	SW7th & Pleasant Hill	640278	Sheldon	2	115	12			240/240
	30384	50466	MIDW	Generation Interconnect	$6,390,000	MIDW	Rebuild and extend 115 kV transmission line from existing Rice Co. substation to new Rice Co. substation, including engineering, surveying, and modification of existing easements as required.	04/01/13			530623	RICE COUNTY 115 KV	530620	LYONS 115 KV	1	115	11.08	1		
	30494	50606	MIDW	ITP	$4,734,006	MIDW	Rebuild 3.25 miles of 115 kV from Hays Plant to South Hays.		06/01/13	24	530562	HAYS PLANT 115 KV	530553	SOUTH HAYS 115 KV	1	115	3.25			164/199
20067	903	11200	MKEC	transmission service	$6,063,189	MKEC	Rebuild 14.4 miles	01/31/13	06/01/11	36	539656	Clifton 115 KV	539665	Greenleaf 115 KV	1	115	14.4			217/261
20067	904	11201	MKEC	transmission service	$4,004,423	MKEC	Rebuild 8.05 mile line	12/31/13	01/01/10	36	539638	Flat Ridge Tap	539674	Medicine Lodge 138 KV	1	138	8.05			261/314
20067	905	11202	MKEC	transmission service	$11,048,967	MKEC	Rebuild 24.15 mile line	06/15/13	01/01/10	36	539638	Flat Ridge Tap	539668	Harper 138 KV	1	138	24.15			261/314
20107	1020	11342	MKEC	transmission service	$5,354,646	MKEC	Rebuild MKEC ownership of 20.9 mile Greenleaf- Knob Hill 115 kV line.	01/31/13	06/01/12	24	539665	Greenleaf 115 KV	533332	KNOB HILL 115 KV	1	115	20.9			239/239
20007	30098	50104	MKEC	ITP	$1,500,000	MKEC	Install 20 Mvar capacitor bank at Plainville 115 kV.	03/01/13	06/01/12	12	539686	Plainville 115 KV				115				20 Mvar
	30210	10993	MKEC	ITP	$385,244	MKEC	Replace wave trap at Harper substation.	12/31/13	04/01/13	12	539668	Harper 138 KV	539675	Milan Tap 138 KV		138				110/110
20067	30211	10994	MKEC	transmission service	$8,627,726	MKEC	Upgrade transformer	02/01/13	01/01/10		539674	Medicine Lodge 138 KV	539673	Medicine Lodge 115 KV	1	138/115				200/250
	30447	50543	MKEC	ITP	$10,485,402	SEPC	Rebuild the Haggard - Gray County Tap - West Dodge 115 kV line		04/01/13						1	115	21			202.2/248.8
20080	817	11079	NPPD	ITP	$1,977,010	NPPD	Uprate conductor and substation equipment to 100 Degree rating.	06/01/13	06/01/13	24	640054	Albion	640347	Spalding	1	115				174/174
20117	1094	11438	NPPD	ITP	$3,500,000	NPPD	Increase clearances to 100 Deg C and upgrade terminal equipment (PCB, DISC, WVTRP, CT, BUS) to effect higher rating.	06/01/13	12/01/10	24	640103	Canaday	640256	Lexington	1	115				137/137
20081	235	10300	OGE	ITP	$2,100,000	OGE	Reconductor 2.2 miles of Fort Smith - Colony 161 kV line to 1590 kcmil ACSR and change terminal equipment at Ft. Smith and Colony substations to 2000A.	06/01/13	06/01/13	24	515300	FT SMITH 161	515345	COLONY 161	1	161	2.2			472/542
20029	642	10843	OGE	ITP	$10,000	OGE	Remove wavetrap at VBI.	06/01/13	06/01/13	9	515335	KILGORE 69	515336	VBI 69	1	69				72/72
	669	10875	OGE	ITP	$2,591,900	OGE	Reconductor 4.07 miles of 161 kV. Increase CT ratios at Pecan Creek to 2000A. Replace 2 wave traps, 1-161kV breaker, 3 switches at Five Tribes plus increase CTR.	12/01/13	06/01/13	18	515234	PECAN CREEK 161	515228	5 TRIBES 161	1	161	4.07			441/542
20041	699	10929	OGE	Balanced Portfolio	$46,000,000	OGE	Build new 345 kV line from Sooner to Cleveland. Install terminal equipment at Sooner.	01/31/13		32	514803	Sooner 345 kV	512694	Cleveland 345 kV	1	345		36		1195/1195
20041	700	10930	OGE	Balanced Portfolio	$176,100,000	OGE	Build new 345 kV line from Seminole to Muskogee	12/31/13		40	515045	SEMINOLE 345	515224	MUSKOGEE 345	1	345		100		1200/1200
200198	858	11133	OGE	ITP		OGE	Build new Greenwood substation and tap existing Cushing - Bristow 138 kV line into this substation.		03/01/13		515033	CUSHING 138	515035	BRISTOW 138	1	138				120/120
200198	858	11134	OGE	ITP		OGE	Tap existing Oak Grove - Hwy 99 Tap 69 kV circuit into new Greenwood substation.		03/01/13		515021	OAKGROVE 69	515019	HIGHWAY 99 TAP 69	1	69				52/66
200198	858	50594	OGE	ITP	$15,000,000	OGE	Install 138/69 kV transformer at new Greenwood substation.		03/01/13						1	138/69				60/60
200198	858	11129	OGE	ITP		OGE	Convert 14-mile Mehan - Cushing 69 kV line to 138 kV.		06/01/14	36	515513	Mehan 138 kV	515033	CUSHING 138	1	138			14	
200198	858	11130	OGE	ITP		OGE	Convert 6-mile Stillwater - Spring Valley 69 kV line to 138 kV.		06/01/14		515011	STILLWATER 138	515512	Spring Valley 138kV	1	138			5.98	
200198	858	11131	OGE	ITP		OGE	Convert 3-mile Spring Valley - Mehan 69 kV line to 138 kV.		06/01/14		515512	Spring Valley 138kV	515513	Mehan 138 kV	1	138			3	
200198	858	11132	OGE	ITP		OGE	Convert 8.7-mile Spring Valley - Knipe 69 kV line to 138 kV.		06/01/14		515512	Spring Valley 138kV	515514	Knipe 138 kV	1	138			8.69	268/286
20081	892	11182	OGE	ITP	$7,100,000	OGE	Install Canadian River 345 kV terminal equipment at new Canadian River substation tapping the Pittsburg - Muskogee line.	02/15/13	06/01/10	30	515422	Canadian river 345kv				345				1095/1095
	928	11228	OGE	zonal - sponsored	$6,700,000	SPP	Trans Canadian Pipeline pump 32	03/01/13			515033	CUSHING 138	515401	Pump Station 32	1	138		7.47		268/308
	1017	11339	OGE	ITP	$161,204	OGE	Replace 800 amp CT and wave trap at Classen substation.	06/01/13	06/01/13	12	514922	CLASSEN 138	514921	SW STAP 138	1	138				268/287
200174	30092	50098	OGE	ITP	$523,888	OGE	Add Mvar support at Kolache 69 kV substation to have a total of 9 Mvar at this location.	07/15/13	06/01/12	12	515079	KOLACHE 69				69				6 Mvar
200174	30302	50346	OGE	ITP	$2,090,660	OGE	Increase size of Paoli 138/69 kV bus and upgrade necessary terminal equipment.	05/10/13	06/01/12	12	515100	PAOLI 138	515099	PAOLI 69	1	138/69				62/67
200174	30357	50408	OGE	ITP	$377,797	OGE	Install 9 Mvar capacitor at Lula 69 kV.	06/01/13	06/01/12	12	515191	LULA 69				69				9 Mvar
	30381	50461	OGE	Generation Interconnect	$399,000	AEP/OGE	Add 3 138 kV circuit breakers to Shidler substation and convert to a 4 breaker ring. Provide a new terminal for line to Fairfax. This new line will be part of a reconfiguration of the existing Fairfax Tap. The Fairfax Tap will be dissolved and the line will be extended and terminated into the Shidler substation. Also included in the cost is the replacement of a relay panel on line to OGE OSAGE and 138 kV meter transformers at Shidler. Required in mitigation of SPP Affected Facilities from new AECI GI project located near Burbank, OK. SPP STUDY ID - ASGI-2010-006	02/14/13			510403	SHIDLER				138				
	30433	50529	OGE	ITP	$1,010,523	OGE	Upgrade 345 kV 2000 amp breakers and associated switches to 3000 amp at Arcadia Sub. This will give Arcadia - Redbud 345 kV Ckt1 and Ckt2 a summer emergency rating of 1426 and a Summer Normal rating of 1248.	06/01/13	06/01/13	12	514908	ARCADIA 345	514909	REDBUD 345	1	345				1248/1426

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NTC ID	PID	UID	Facility Owner	2013 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
	30445	50540	OGE	ITP	$3,500,452	OGE	Install a 30 Mvar reactor at the Tatonga 345 kV bus on the Tatonga - Woodward District 345 kV line	04/01/13	04/01/13	24	515407	Tatonga 345kv	515375	Woodward EHV 345kv	1	345				30 Mvar
200199	30486	50586	OGE	ITP	$3,079,700	OGE	Build 400 MVA 345/138 kV bus tie transformer at Renfrow.		03/01/13						1	345/138				400/400
	30479	50575	OPPD	ITP	$11,067,000	OPPD	Add a new 161 kV substation 1366 and shift the load from two 69 kV subs (Subs 904 & 915) to the new 1366 sub. Install 3.37 miles of 161 kV taping into line S1244-S1258 161 kV line.	06/01/13	06/01/13	36	646366	SUB 1366 161kV				161		3.7		298/298
20138	899	11195	SEPC	ITP	$6,025,790	SEPC	Rebuild 11.1 miles of the 18.3 mile Fletcher - Holcomb 115 kV line with 954 ACSR Cardinal	12/31/13	06/01/13	36	531448	HOLCOMB	531420	FLETCHER	1	115	11.1			214/246
20111	156	10330	SPS	ITP	$18,712,349	SPS	Add 230 kV line from Hitchland to Ochilltree - 541 MVA.	02/01/13	06/01/09	48	523095	Hitchland Interchange 230 kV	523155	Ochilltree Interchange 230 kV	1	230		35		492/541
20111	156	10331	SPS	ITP	$7,812,964	SPS	Add 2-Winding 230/115 kV transformer at Ochilltree 172.5 MVA	02/01/13	06/01/09	24	523154	Ochilltree Interchange 115 kV	523155	Ochilltree Interchange 230 kV	1	230/115				150/173
	486	10629	SPS	ITP	$3,644,914	SPS	Upgrade Chaves 230/115 kV to 225/258 MVA.		06/01/13	24	527483	Chaves County Interchange 230 kV	527482	Chaves County Interchange 115 kV	2	230/115				250/250
20031	633	10828	SPS	ITP	$2,000,000	SPS	Build new 3 mile 69 kV line from Artesia Town - Artesia South Rural 69 kV.	12/31/13	06/01/09	36	527747	Artesia Town Sub 69 kV	527775	Artesia South Rural Sub 69 kV	1	69		3		179/197
20031	696	10829	SPS	ITP	$7,000,000	SPS	Convert 11.8 miles of 69 kV line to 115 kV from Chaves County - Price - Central Valley REC-Pine Lodge - Capitan - Roswell. SPS-provided mitigation was verified by SPP staff until 12/2012 when the conversion will be completed.	06/01/13	06/01/09		527482	Chaves County Interchange 115 kV	527564	Roswell Interchange 115 kV	1	115			11.18	120/154
20084	704	11085	SPS	Balanced Portfolio	$15,752,640	SPS	Add second 345/230 kV Tuco Interchange 515/560 MVA transformer. Expand 345 kV bus at Tuco.	03/31/13	06/01/12	24	525832	TUCO Interchange 345 kV	525830	TUCO Interchange 230 kV	2	345/230				515/560
20084	774	11019	SPS	ITP	$679,000	SPS	Tap Potter - Harrington West 230 kV line at Cherry and bring 230 kV into Cherry substation.	12/30/13	06/01/10	20	524010	Cherry Sub 230 kV	523959	Potter County Interchange 230 kV	1	230		0.1		478/502
20084	774	11020	SPS	ITP	$8,515,623	SPS	New 230/115 kV Autotransformer at Cherry Substation.	06/30/13	06/01/10	20	524010	Cherry Sub 230 kV	524009	Cherry Sub 115 kV	1	230/115				218/239
20084	774	11021	SPS	ITP	$5,062,500	SPP	Convert Hastings Sub from 69 kV to 115 kV	06/30/13	06/01/10	30	524136	Hastings Sub 115 kV				115				
20084	774	11023	SPS	ITP	$1,700,000	SPP	Build new 3.7 mile Hastings - East Plant 115kV line.	12/31/13	06/01/10	4	524136	Hastings Sub 115 kV	524162	East Plant Interchange 115 kV	1	115		3.7		157/173
20130	774	11378	SPS	ITP	$1,771,875	SPP	Construct approximately 3.5 miles of 115 kV line from Cherry Street substation to Hastings substation	12/30/13	06/01/13	12	524009	Cherry Sub 115 kV	524136	Hastings Sub 115 kV	1	115		3.5		174/192
20084	783	11033	SPS	ITP	$7,357,000	SPS	Install second 230/115 kV transformer in Randall substation.	04/30/13	06/01/10	20	524365	Randall County Interchange 230 kV	524364	Randall County Interchange 115 kV	2	230/115				250/287
20084	789	11038	SPS	ITP	$308,000	SPS	Reconductor .27 mile Roswell interchange - Brasher Tap 115 kV with 397 kcmil conductor.	12/31/13	06/01/12	12	527564	Roswell Interchange 115 kV	527534	Brasher Sub Tap 115 kV	1	115	0.27			160/160
20130	792	11046	SPS	ITP	$3,607,000	SPP	Reconductor 8.5-mile Cunningham Station - Buckeye Tap 115 kV line with 795 ACSR	06/01/13	06/01/13	18	527864	Cunningham Station 115 kV	528348	Buckeye Tap 115 kV	1	115	8.55			226/249
20084	829	11096	SPS	ITP	$5,200,000	SPS	Install a second 115/69 kV transformer rated 75/86 MVA at Kingsmill.	05/31/13	06/01/11	24	523711	Kingsmill Interchange 69 kV	523712	Kingsmill Interchange 115 kV	2	115/69				75/86
20084	851	11121	SPS	ITP	$271,440	SPP	Replace existing wave trap and jumpers on Harrington and Randal 230 kV.	04/30/13	06/01/10	12	523978	Harrington Station Mid Bus 230 kV	524365	Randall County Interchange 230 kV	1	230				478/502
20084	888	11177	SPS	ITP	$18,000,000	SPS	Build new 20 mile Randall Co - Amarillo South 230 kV line.	04/30/13	06/01/10	36	524365	Randall County Interchange 230 kV	524415	Amarillo South Interchange 230 kV	1	230		20		492/541
20113	1025	11349	SPS	transmission service	$500,000	SPP	Replace wavetrap at Harrington East	12/30/13	06/01/13		524010	Cherry Sub 230 kV	523977	Harrington Station West Bus 230 kV	2	230				502/502
20130	1029	11353	SPS	ITP	$4,489,314	SPS	Convert Lynn County Substation to 115 kV service	12/31/13	06/01/12	12	526656	Lynn County Interchange 115 kV				115				
200166	1034	11359	SPS	ITP	$4,139,406	SPS	Convert Hereford Interchange - Northeast Hereford Interchange 69 kV line to 115 kV service.	06/01/13	06/01/12	18	524606	Hereford Interchange 115 kV	524567	Northeast Hereford Interchange 115 kV	1	115			4.5	87/95
200166	30087	50093	SPS	ITP	$1,714,505	SPS	Install two 50 Mvar capacitors at Bushland Interchange 230 kV.	12/30/13	06/01/12	24	524267	Bushland Interchange 230 kV (POI: Wildorado Wind, 160MW)				230				100 Mvar
20084	30244	50257	SPS	ITP	$225,000	SPP	Replace 800 A wave trap with 1200 A at Harrington Station Mid Bus 230 kV	03/31/13	06/01/10	12	523978	Harrington Station Mid Bus 230 kV	524365	Randall County Interchange 230 kV	1	230				798/798
	30310	50354	SPS	zonal - sponsored	$1,475,255	SPS	Install 2 stages of 5 MVAR and 2 stages of 10 MVAR reactor at Norton Switching Station	06/01/13		24	524502	Norton Switching Station, 115 kV (POI: Caprock Wind, 80MW)				115				-30 Mvar
200166	30353	50402	SPS	ITP	$10,608,509	SPS	Modify Hobbs 230 kV bus to provide termination points for moving 230 kV lines from Lea County Sub to Hobbs. Retire Lea County 230/115 kV transformer. Install new 230/115 kV transformer at Hobbs.	12/31/13	01/01/14	24	527894	Hobbs Interchange 230 kV	527891	Hobbs Interchange 115 kV	2	230/115		1.11		240/240
	30428	50521	SPS	ITP	$2,791,331	SPS	Install two 14.4 MVAR 115 kV capacitors at Red Bluff substation.	06/01/13	06/01/13	12	528018	Red Bluff 115 kV				115				28.8 Mvar
	30452	50547	SPS	ITP	$1,567,971	SPS	Rebuild 0.5 miles of 115 kV line Oxy Permian Substation-Sanger Switching Station 115 kV	06/01/13	06/01/17	18	528575	OXY Permian Sub 115	528463	Sanger Switching Station 115 kV	1	115	0.55			276/303
20003	136	10174	WFEC	ITP	$6,674,000	SPP	Build new 10 mile Meeker - Hammett 138 kV and install terminal equipment.	12/01/13	06/01/08	10	520994	MEEKER	520951	HAMMETT269.0	1	138		10		219/235
20003	138	10176	WFEC	ITP	$1,050,000	SPP	Upgrade WFEC Woodward sub to 1200 A and reconductor from 336.4 ACSR to 795 ACSR; new rating 91/110 MVA.	12/01/13	04/01/09	12	514782	WOODWARD 69	521096	WOODWARD	1	69	3.5			91/114
19985	140	10179	WFEC	ITP	$912,000	WFEC	Reconductor 3.8 miles from 3/0 ACSR to 795 ACSR. Rate A=81MVA, Rate B=106MVA	12/01/13	06/01/08	8	520802	ACME	521095	WEST NORMAN	1	69	3.8			81/106
20003	311	10402	WFEC	ITP	$1,601,000	SPP	Convert 4 mile West Norman - Acme from 69 kV to 138 kV.	12/31/13	06/01/10	12	520802.1	ACME	521095	WEST NORMAN	1	138			3.8	183/228
20003	402	10522	WFEC	ITP	$1,125,000	SPP	Convert 3 miles of 69 kV to 138 kV from Indiahoma to Grandfield.	06/01/13	06/01/12	12	521106	Grandfield	520954	INDIAHOMA	1	138			3	183/228
20003	402	10523	WFEC	ITP	$7,306,000	SPP	Tap Cache to Paradise 138 kV and install 13.7 miles of 138 kV from Cache to Indiahoma.	06/01/13	06/01/12	24	520954	INDIAHOMA	521105	CACHE 4	1	138		13.7		183/228
20003	402	10524	WFEC	ITP	$5,000,000	SPP	Install new 138/69 kV transformer at Grandfield	06/01/13	06/01/12	24	521106	Grandfield	520926	GRANDFIELD	1	138/69				70/70
20030	616	10795	WFEC	ITP	$5,315,700	SPP	Convert 12.6 mile Dover - Twin Lakes from 69 kV to 138 kV.	12/31/13	06/01/10	24	520879	DOVER	521073	TWIN LAKES	1	138			12.6	144/179
20030	616	10796	WFEC	ITP	$3,164,000	SPP	Convert 7.5 mile Twin Lakes - Cashion from 69 kV to 138 kV.	12/31/13	06/01/10	24	521073	TWIN LAKES	520847	CASHION	1	138			7.5	144/179
20132	659	10865	WFEC	ITP	$1,971,000	WFEC	Convert 7-mile Reeding - Twin Lakes Switchyard 69 kV line to 138 kV.	04/01/13	06/01/12	12	521037	REEDING	520847	CASHION	1	138			7	144/179

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	909	11205	WFEC	ITP	$1,705,000	WFEC	Rebuild and convert the 4 miles of 69 kV between OU Switchyard and Cole Substation to 138kV (R)and install terminal equipment in OU Switchyard.	10/31/13	06/01/13	12	521104	OU SWITCH 4	520861	COLE	1	138			4	144/179
	909	11425	WFEC	ITP	$1,400,000	WFEC	Convert 10.2 mile Cole-Criner 69 kV to 138 kV. Cole substation conversion.	11/27/13	06/01/13	12	520861	COLE	520868	CRINER	1	138			10.2	144/179
	909	50579	WFEC	ITP	$3,000,000	WFEC	Convert Criner to the new Payne Switching Station from 69 kV to 138 kV. Install necessary terminal equipment.	11/27/13	06/01/13	24	520868	CRINER	520888	Payne Switching Station 138 kV	1	138			10.72	144/178
	909	50580	WFEC	ITP	$250,000	WFEC	Tap the Paoli-Cornville Tap 138 kV and install switching station at Payne. The new switching station will terminate the Payne-Criner-Cole-Oklahoma University 138 kV line.	11/27/13	06/01/13	24	520888	Payne Switching Station 138 kV				138				286/286
20132	1084	11424	WFEC	ITP	$6,243,750	SPP	Rebuild 18.5-mile Alva - Freedom 69 kV line from 3/0 to 556.5	06/01/13	06/01/11	24	520806	ALVA	520915	FREEDOM	1	69	18.5			72/89
20132	1085	11429	WFEC	ITP	$50,000	WFEC	Upgrade relaying at OU Switchyard and Lindsay Switchyard; close the normally open Criner - Lindsay 69 kV line	06/01/13	06/01/11	6	520868	CRINER	520977	LINDSAY	1	69				72/89
20136	30320	50366	WFEC	transmission service	$4,800,000	WFEC	UPGRADE CANTON TO TALOGA TO 336.4	06/01/13	06/01/11		521064	TALOGA	520843	CANTON	1	69	9.7			106/132
20136	30321	50367	WFEC	transmission service	$1,000,000	WFEC	Replace Taloga 138/69 kV auto transformer with 112 MVA.	06/01/13	06/01/11		521065	TALOGA	521064	TALOGA	1	138/69				112/112
20006	172	10221	WR	ITP	$5,423,701	WR	Convert TEC-Midland from 161 kV to 115 kV	06/01/13	06/01/12	6	533180	TECUMSEH ENERGY CENTER 115 KV	533252	MIDLAND JUNCTION 115 KV	1	115			19.33	117/117
20059	182	10231	WR	ITP	$6,066,000	WR	Rebuild approximately 7.5 miles Chase - White Junction 69 kV line. Replace existing 2/0 copper conductor to achieve a minimum 600 amp emergency rating.	06/01/13	06/01/10	12	533588	CHASE 69 KV	533605	WHITE JUNCTION 69 KV	1	69	7.3			72/72
20140	374	10487	WR	transmission service	$1,500,000	WR	Replace jumpers and bus, and reset CTs and relaying on Creswell to Oak 69 kV line. Rebuild substations.	12/31/13	06/01/11	6	533543	CRESWELL 69 KV	533547	OAK 69 KV	1	69				107/107
19964	375	10488	WR	transmission service	$10,387,399	WR	Install 3rd Rose Hill 345/138 kV TRANSFORMER.	06/01/13	06/01/11	24	532794	ROSE HILL 345 KV	533062	ROSE HILL 138 KV	3	345/138				400/440
20033	412	10538	WR	ITP	$4,104,097	WR	Rebuild 2.65 miles Eastborogh - 64th 69 kV line.		06/01/13	18	533792	EASTBOROUGH 69 KV	533842	SIXTY-FOURTH (64TH) 69 KV	1	69	2.65			131/143
20086	467	10603	WR	ITP	$118,341	WR	Replace wavetraps on Gill - Interstate 138 kV line for a new rating of 232/256 MVA.	12/01/13	06/01/13	18	533044	GILL ENERGY CENTER EAST 138 KV	533051	INTERSTATE 138 KV	1	138				232/232
20063	563	10713	WR	ITP	$154,336	WR	Replace 69 kV disconnect switches at Aquarius with a minimum 600 amp emergency rating	06/01/13	06/01/13	12	533765	LITCHFIELD 69 KV	533756	AQUARIUS 69 KV	1	69				80/80
	563	10714	WR	zonal - sponsored	$150,000	SPP	Replace 69 kV disconnect switches at Aquarius.	06/01/13			533764	HUDSON JUNCTION 69 KV	533756	AQUARIUS 69 KV	1	69				80/80
200175	624	10812	WR	ITP	$6,969,136	WR	Rebuild 1.83-mile Fort Junction - West Junction City 115 kV line that follows the path of the Jeffery Energy Center - Summit 345 kV line. Remove old double circuit and West Junction City Junction (East) - West Junction City 115 kV line.	06/01/13	06/01/15	24	533328	FORT JUNCTION SWITCHING STATION 1	533342	WEST JUNCTION CITY 115 KV	1	115	1.83			240/240
20091	30224	50234	WR	transmission service	$3,458,116	WR	Rebuild approximately 4 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	06/01/13	01/01/13	24	533626	BURLINGTON JUNCTION 69 KV	533653	WOLF CREEK 69 KV	1	69	4.1			134/147
20091	30224	50236	WR	transmission service	$6,024,876	WR	Rebuild approximately 9 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	12/15/13	04/01/14	24	533636	GREEN 69 KV	533630	COFFEY COUNTY NO. 3 WESTPHALIA 69	1	69	9.22			134/147
20059	30227	50231	WR	transmission service	$1,026,734	WR	Add 15 Mvar Cap bank at Athens	12/01/13	06/01/13	12	533623	ATHENS SWITCHING STATION 69 KV				69				15 Mvar
20068	30271	50284	WR	transmission service	$1,215,000	WR	Dearing 138 kV 20 MVAR Capacitor Addition	06/01/13	06/01/12	18	533002	DEARING 138 KV				138				20 Mvar
20140	30324	50370	WR	Zonal Reliability	$873,461	WR	Install 14.4 MVAR capacitor at Chapman Junction 115 kV	10/01/13	10/01/12		533362	CHAPMAN 115 KV				115				14.4 Mvar
200175	30348	50397	WR	ITP	$3,676,071	WR	Rebuild 3.4-mile Cowskin to Centennial 138 kV line.	06/01/13	06/01/12	12	533038	COWSKIN 138 KV	533034	CENTENNIAL 138 KV	1	138	3.4			287/287
200197	30431	50526	WR	ITP	$5,561,163	WR	Tear down and rebuild 3.1-mile El Paso-Farber 138 kV line.		06/01/13	18	533039	EL PASO 138 KV	533042	FARBER 138 KV	1	138	3.1			245/245
	30487	50593	WR	Zonal Reliability	$724,896	WR	Install 9.6 Mvar capacitor bank on Potwin 69 kV bus		06/01/13		533601	POTWIN 69 KV				69				9.6 Mvar
		2014																		
20000	450	10582	AEP	ITP	$11,962,000	AEP	Install 9 miles of 161 kV from new Shipe Road Substation to East Centerton Substation.	06/01/14	06/01/14	60	506980	Shipe Road 161	506929	EAST CENTERTON 161KV	1	161		9		520/729
20000	450	10584	AEP	ITP	$13,104,000	AEP	Install 345/161 kV transformer at Shipe Road.	06/01/14	06/01/14	48	506979	Shipe Road 345	506980	Shipe Road 161	1	345/161				675/743
20000	450	10585	AEP	ITP	$34,085,000	AEP	Install 18 miles of new 345 kV, 2-954 ACSR line.	06/01/14	06/01/14	60	506935	FLINT CREEK 345KV	506979	Shipe Road 345	1	345		18		1011/1176
200167	502	10647	AEP	ITP	$7,815,833	AEP	Reconductor 3.25-mile Northwest Henderson - Poynter 69 kV line with 1272 ACSR.	06/01/14	06/01/13	24	509075	NORTHWEST HENDERSON 69KV	509081	POYNTER	1	69	3.25			140/143
200167	503	10648	AEP	ITP	$1,004,187	AEP	Replace two breakers, jumpers, and wave traps at Perdue substation. Replace wave traps at Diana substation.	06/01/14	06/01/13	15	508351	PERDUE 138KV	508831	DIANA 138KV	1	138				261/303
20027	649	10853	AEP	ITP	$2,150,000	AEP	Reconductor 2.15 mile section of 115 kV line with 795 ACSR.	06/01/14	06/01/14	24	510399	LONE STAR	510423	LOCUST GROVE	1	115	2.15			120/120
200167	882	11171	AEP	ITP	$11,830,128	AEP	Rebuild or reconductor 11.4-mile Rock Hill - Carthage line from 336 ACSR to 1272 ACSR and remove switches in middle of line. Upgrade breaker, switches, CT ratios, and relay settings at Carthage substation. Upgrade jumpers, switches, CT ratios, and relay settings at Rock Hill substation.	06/01/14	06/01/14	24	509082	ROCK HILL 69	509056	CARTHAGE	1	69	11.4			123/143
200167	1012	11331	AEP	ITP	$18,805,489	AEP	Rebuild 21.85-mile Diana to Perdue 138 kV line. Replace switches, jumpers, and upgrade CT ratios at Diana and Perdue substations. Upgrade relay settings at Diana substation.	06/01/14	06/01/13	30	508351	PERDUE 138KV	508831	DIANA 138KV	1	138	22			455/478
	30346	50392	AEP	zonal - sponsored	$9,585,000	SPP	Rebuild and convert the 17.04 mile Cornville to Alex Bradley 69 kV line to 138 kV.	12/31/14		12	511450	CORNVILLE 69KV	511516	ALEX BRADLEY	1	138			17.04	320/444

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	30346	50393	AEP	zonal - sponsored	$4,770,000	SPP	Rebuild and convert the 8.48 mile Alex Bradley to Texas Pump 69 kV line to 138 kV.	12/31/14		12	511516	ALEX BRADLEY	511515	TEXAS PUMP	1	138			8.48	320/444
	30346	50394	AEP	zonal - sponsored	$911,250	SPP	Rebuild and convert the 1.62 mile Texas Pump to Phillips 69 kV line to 138 kV.	12/31/14		12	511515	TEXAS PUMP	511514	PHILLIPS	1	138			1.62	320/444
	30346	50395	AEP	zonal - sponsored	$3,155,625	SPP	Rebuild and convert the 5.61 mile Phillips to Lindsay Water Flood 69 kV line to 138 kV.	12/31/14		12	511514	PHILLIPS	511513	LINDSAY WATER	1	138			5.61	320/444
200167	30346	50438	AEP	ITP	$21,664,838	AEP	Upgrade the Cornville 138 kV bus to breaker-and-a-half configuration in preparation for the 138 kV line conversion to Lindsay Water substation.	12/31/14	06/01/12	12	511449	CORNVILLE 138KV				138				
200167	30354	50405	AEP	ITP	$1,428,440	AEP	Install 6 Mvar capacitor at Coweta 69 kV.	06/01/14	06/01/14	12	509719	COWETA				69				6 Mvar
	287	10373	DETEC	zonal - sponsored	$8,864,000	SPP	Build 12 miles of 138 kV from Etoile - Chireno	06/01/14			97813	Etoile 138 kV			1	138		12		215/225
	648	10849	DETEC	zonal - sponsored	$11,454,960	SPP	Convert Martinsville - Shady Grove from 69 kV to 138 kV.	06/01/14							1	138			12.31	215/225
	648	10850	DETEC	zonal - sponsored		SPP	Convert Shady Grove - Central Heights from 69 kV to 138 kV	06/01/14							1	138			6.77	215/225
	648	10851	DETEC	zonal - sponsored		SPP	Convert Central Heights - Fitze from 69 kV to 138 kV	06/01/14							1	138			12.61	215/225
	648	10852	DETEC	zonal - sponsored		SPP	Convert Fitze - Timpson from 69 kV to 138 kV.	06/01/14							1	138			12.65	215/225
	30419	50512	GMO	ITP	$440,733	GMO	Install 6% series reactor on the Midway - St. Joseph 161 kV line. Reactor will be installed at the St. Joseph bus.	06/01/14	06/01/13		541253	ST Joe 161 KV	541369	MIDWAY 161 KV	1	161				
	30380	50460	GRDA	Generation Interconnect	$11,900,000	GRDA	Build new Fairfax (AECI) - Pawnee 138 kV line and rebuild existing 69 kV line from Fairfax - Pawnee, approximately 19.5 miles with double circuit towers for double circuit 138 kV line. One side will be operated at 69 kV. Required in mitigation of SPP Affected Facilities from new New GI project near Burbank, OK. SPP study ID - ASGI-2010-006	06/30/14			300139	Fairfax	700001		1	138		19.5		
200162	945	11252	ITCGP	high priority	$46,764,321	ITCGP	Build a new 36 mile double circuit 345 kV line with at least 3000 A capacity from the Spearville substation to the new Clark County substation. Build the Comanche County 345 kV substation with a ring bus and necessary terminal equipment.	12/31/14			531469	SPEARVILLE	539800	Clark Co 345 kV	1	345		27.5		1792/1792
200162	945	11253	ITCGP	high priority	$46,764,321	ITCGP	Build a new 36 mile double circuit 345 kV line with at least 3000 A capacity from the Spearville substation to the new Clark County substation. Build the Clark County 345 kV substation with a ring bus and necessary terminal equipment.	12/31/14			531469	SPEARVILLE	539800	Clark Co 345 kV	2	345		27.5		1792/1792
200162	945	11254	ITCGP	high priority	$94,410,174	ITCGP	Build a new 86 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle 345 kV substation to the new Clark County substation. Build a new 345 kV substation at Thistle near Flat Ridge with the necessary breakers and terminal equipment for connecting the Spearville-Thistle-Wichita double circuit transmission lines and for connecting to the Woodward District EHV 345 kV double circuit transmission lines.	12/31/14			539800	Clark Co 345 kV	539801	Flat Ridge 345 kV	1	345		86		1792/1792
200162	945	11255	ITCGP	high priority	$94,410,174	ITCGP	Build a new 86 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle 345 kV substation to the new Clark County substation. Build a new 345 kV substation at Thistle near Flat Ridge with the necessary breakers and terminal equipment for connecting the Spearville-Thistle-Wichita double circuit transmission lines and for connecting to the Woodward District EHV 345 kV double circuit transmission lines.	12/31/14			539800	Clark Co 345 kV	539801	Flat Ridge 345 kV	2	345		86		1792/1792
200162	945	11260	ITCGP	high priority	$6,585,986	ITCGP	Install a 400 MVA 345/138 kV transformer at the new 345 kV Thistle substation.	12/31/14			539801	Flat Ridge 345 kV	539674	Medicine Lodge 138 KV	1	345/138				400/400
200162	945	50384	ITCGP	high priority	$5,776,280	ITCGP	Build 1 mile 138 kV line from new Thistle substation to Flat Ridge substation.	12/31/14								138		1		
	30385	50468	KCPL	zonal - sponsored	$1,518,750	SPP	Rebuild 3 mile Overland Park - Merriam 161 kV line.	12/31/14			543032	MERRIAM 161 KV	543047	OVERLAND PARK 161 KV	1	161	3			229/334
	30426	50519	MIDW	ITP	$10,794,325	MIDW	Build new 10 mile 115 kV line from Pheasant Run - Seguin and install new terminal equipment at Pheasant Run and Seguin	06/01/14	06/01/14	36	530559	PHEASANT RUN 115 KV	530683		1	115		19.3		164/199
20079	653	10858	MKEC	ITP	$15,582,071	MKEC	Rebuild 21.9 mile St. John - Pratt 115 kV line with 795 ACSR conductor.	03/01/14	06/01/13	24	539696	St John 115 KV	539687	Pratt 115 KV	1	115	21.9			165/198
20067	906	11203	MKEC	transmission service	$11,277,390	MKEC	Rebuild 26 mile line	06/15/14	01/01/10		539673	Medicine Lodge 115 KV	539687	Pratt 115 KV	1	115	26			165/198
20119	1096	11440	MKEC	ITP	$100,000	MKEC	Replace CTs and relays at Pratt substation and St John substation	03/01/14	06/01/11	36	539687	Pratt 115 KV	539696	St John 115 KV	1	115				165/198
	30416	50509	MKEC	Generation Interconnect	$15,389,639	MKEC	Build approximately 20 miles of 115 kV to serve as second circuit between North Ft Dodge and Spearville. Reroute Ft. Dodge - Greensburg 115 kV to North Ft. Dodge Substation. Build second circuit between Ft. Dodge and North Ft Dodge (these stations are very close to each other).	11/08/14		36						115		20		
	30417	50510	MKEC	Generation Interconnect	$19,612,658	MKEC	Add 345/115 kV transformer at Spearville. Needed as Network Upgrade for GEN-2008-079 but cost shared with GEN-2006-006 & GEN-2009-062.	11/08/14		36	531469	SPEARVILLE	539694	Spearville 115 KV	1	345/115				

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200170	816	11078	NPPD	ITP	$1,240,000	NPPD	Uprate conductor and substation equipment to 100 degrees Celsius.	06/01/14	06/01/14	24	640054	Albion	640181	Genoa	1	115				137/137
	30207	50214	NPPD	ITP	$677,370	NPPD	18 Mvar 115 KV CAP BANK AT COZAD	06/01/14	06/01/14	24	640144	Cozad				115				18 Mvar
200170	30237	50249	NPPD	ITP	$1,193,000	NPPD	Install a 18 Mvar capacitor bank at Holdrege substation 115 kV.	06/01/14	06/01/14	24	640224	Holdrege				115				18 Mvar
20117	30285	50319	NPPD	ITP	$5,645,881	NPPD	Replace 187MVA Ogallala transformer with 336MVA Ogallala transformer	06/01/14	06/01/10	36	659132	OGALLALLA	640302	Ogallala	1	230/115				336/336
20029	615	10792	OGE	ITP	$8,100,000	OGE	Convert 13.64 miles of 69 kV to 138 kV from Crescent to Cottonwood Creek and install terminal equipment at Cottonwood Creek, completing loop from Crescent to Twin Lakes (WFEC).	06/01/14	06/01/10	18	515377	Crescent 138kv	514827	COTTONWOOD CREEK 138	1	138			13.64	84/104
20041	701	10932	OGE	Balanced Portfolio	$147,000,000	OGE	Build new 345 kV line from Woodward EHV to Border	05/19/14		40	515458	Border	515375	Woodward EHV 345kv	1	345		125		1475/1623
20041	701	10933	OGE	Balanced Portfolio		OGE	Install 2nd 345/138 kV transformer at Woodward EHV	05/19/14		24	515376	Woodward EHV 138kv	515375	Woodward EHV 345kv	2	345/138				448/493
20043	701	10937	OGE	Balanced Portfolio		OGE	Build midpoint reactor station at interception point of Woodward to Tuco line.	05/19/14			515458	Border				345				560/560
20100	941	11244	OGE	high priority	$172,000,000	OGE	Build a new 92 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the SPS interception from the Hitchland substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	06/30/14		40	523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	1	345		92		1792/1792
20100	941	11245	OGE	high priority		OGE	Build a new 92 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the SPS interception from the Hitchland substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	06/30/14		40	523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	2	345		92		1792/1792
20121	942	11246	OGE	high priority	$145,040,000	OGE	Build a new 79 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the Kansas/Oklahoma state border towards the Medicine Lodge substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	12/31/14		40	539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	1	345		79		1792/1792
20121	942	11247	OGE	high priority		OGE	Build a new 79 mile double circuit 345 kV line with at least 3000 A capacity from the Woodward District EHV substation to the Kansas/Oklahoma state border towards the Medicine Lodge substation. Upgrade the Woodward District EHV substation with the necessary breakers and terminal equipment.	12/31/14		40	539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	2	345		79		1792/1792
200199	30486	50587	OGE	ITP	$11,659,600	OGE	Build substation at Renfrow and tap Woodring-Wichita 345 kV line.	11/01/14	03/01/13							345		0.06		
200199	30486	50588	OGE	ITP	$4,998,388	OGE	Build Grant County substation on the 69 kV line between the Koch and Medford substations.	11/01/14	03/01/13							138				
200199	30486	50589	OGE	ITP	$1,173,170	OGE	Install a 138/69 kV transformer at Grant County substation.	11/01/14	03/01/13						1	138/69				100/100
200199	30486	50590	OGE	ITP	$7,081,847	OGE	Build 138 kV line from Renfrow to Grant County substation.	11/01/14	03/01/13							138		11		
200199	30486	50592	OGE	ITP	$571,210	OGE	Convert Koch 69 kV substation to 138 kV.	11/01/14	03/01/13							138				
200163	943	11248	PW	high priority	$25,250,000	PW	Build a new 30.4 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle substation to the Kansas/Oklahoma state border towards the Woodward District EHV substation.	12/31/14			539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	1	345		30.4		1792/1792
200163	943	11249	PW	high priority	$25,250,000	PW	Build a new 30.4 mile double circuit 345 kV line with at least 3000 A capacity from the Thistle substation to the Kansas/Oklahoma state border towards the Woodward District EHV substation.	12/31/14			539801	Flat Ridge 345 kV	515375	Woodward EHV 345kv	2	345		30.4		1792/1792
200163	946	11258	PW	high priority	$65,000,000	PW	Build a new 78 mile double circuit 345 kV line with at least 3000 A capacity from the Wichita substation to ITC Great Plains' Thistle 345 kV substation.	12/31/14			539801	Flat Ridge 345 kV	532796	WICHITA 345 KV	1	345		77.5		1792/1792
200163	946	11259	PW	high priority	$65,000,000	PW	Build a new 78 mile double circuit 345 kV line with at least 3000 A capacity from the Wichita substation to ITC Great Plains' Thistle 345 kV substation.	12/31/14			539801	Flat Ridge 345 kV	532796	WICHITA 345 KV	2	345		77.5		1792/1792
200166	151	10195	SPS	ITP	$2,633,003	SPS	Add third Tuco 115/69 kV autotransformer.	06/01/14	06/01/12	24	525826	TUCO Interchange 69 kV	525828	TUCO Interchange 115 kV	1	115/69				75/84
20043	704	10936	SPS	Balanced Portfolio	$170,247,072	SPS	Build new 345 kV line from Tuco to OGE's Border station near TX/OK Stateline. Install line reactor outside Border station and line reactors at Tuco.	05/19/14			525832	TUCO Interchange 345 kV	515458	Border	1	345		202		1792/1972
20130	764	11007	SPS	ITP	$2,400,000	SPS	Upgrade Happy County 115/69 kV Transformer #1 to 84/96 MVA	06/01/14	06/01/12	28	525154	Happy Interchange 115 kV	525153	Happy Interchange 69 kV	1	115/69				84/96
20130	764	11009	SPS	ITP	$2,400,000	SPS	Upgrade Happy County 115/69 kV Transformer #2 to 84/96 MVA	06/01/14	06/01/12	28	525154	Happy Interchange 115 kV	525153	Happy Interchange 69 kV	2	115/69				84/96
20084	795	11052	SPS	ITP	$19,349,122	SPS	Add 230/115 kV transformer 250/250 MVA CKT 1	12/30/14	06/01/11	24	524770	Pleasant Hill 230 kV	524768	Pleasant Hill 115 kV	1	230/115				250/250
20084	795	11053	SPS	ITP	$14,805,472	SPS	Build new 16 mile Pleasant Hill - Oasis 230 kV line.	12/30/14	06/01/11	24	524770	Pleasant Hill 230 kV	524875	Oasis Interchange 230 kV	1	230		16		492/541
20084	795	11054	SPS	ITP	$20,612,670	SPS	Build new 26 mile Pleasant Hill - Roosevelt County 230 kV line.	12/30/14	06/01/11	30	524770	Pleasant Hill 230 kV	524909	Roosevelt County Interchange NORTH 23	1	230		26		492/541
200190	805	50453	SPS	ITP	$22,577,591	SPS	Build new 38-mile 115 kV line from Bowers Interchange - Howard. At Bowers, install 115 kV breaker positions to serve the new transmission line, converting to a three-breaker ring configuration.	05/31/14	06/01/13	36	523748	Bowers Interchange 115 kV	523797	Howard 115 kV	1	115		33		180/199

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20130	833	11100	SPS	ITP	$2,000,000	SPS	Construct 115 kV bus at NE-Hereford Interchange to accept two transformer terminals, two 115 kV line terminals, and one future 115 kV line terminal. Add 2nd 115/69 kV 84/96 MVA transformer.	06/01/14	06/01/11	30	524567	Northeast Hereford Interchange 115 kV	524573	Northeast Hereford Interchange 69 kV	2	115/69				84/96
20084	834	11101	SPS	ITP	$5,000,000	SPS	Convert existing 3 mile Portales Interchange - Zodiac 69 kV line to operate at 115 kV.	06/01/14	06/01/13	18	524924	Portales Interchange 115 kV	524935	Zodiac Sub 115 kV	1	115			3	157/173
20088	835	11102	SPS	ITP	$2,500,000	SPS	Move load at East Clovis from 69 kV bus to 115 kV bus.	06/01/14	06/01/14	36	524772	East Clovis Sub 69 kV	524773	East Clovis Sub 115 kV	1	115				146/161
200166	839	11107	SPS	ITP	$13,856,881	SPS	Build new 22-mile Kress Interchange - Kiser 115 kV.	11/30/14	06/01/13	36	525192	Kress Interchange 115 kV	525271	Kiser Sub 115 kV	1	115		22.2		157/173
200166	839	11109	SPS	ITP	$5,848,405	SPS	Build new 8.7-mile Cox - Kiser 115 kV line.	02/28/14	06/01/13	36	525326	Cox Interchange 115 kv	525271	Kiser Sub 115 kV	1	115		8.7		157/173
200166	839	50450	SPS	ITP	$6,500,705	SPS	Build new Kiser substation. Install a 115/69 kV transformer and 69 kV terminal equipment to connect to the local 69 kV system.	02/28/14	06/01/13	36	525271	Kiser Sub 115 kV	525272	Kiser Sub 69 kV	1	115/69				84/97
	841	11110	SPS	ITP	$2,356,320	SPS	Upgrade Graham 115/69 kV transformer Ckt 1 (84 MVA)	12/31/14	06/01/13		526693	Graham Interchange 69 kV	526694	Graham Interchange 115 kV	1	115/69				84/84
200166	884	11173	SPS	ITP	$4,863,725	SPS	Install second 230/115 kV transformer at Eddy Co.	06/01/14	06/01/14	30	527800	Eddy County Interchange 230 kV	527798	Eddy County Interchange 115 kV	2	230/115				168/168
20099	940	11241	SPS	high priority	$43,116,469	SPS	Build 30 mile double circuit 345 kV line with at least 3000 A capacity from the Hitchland substation to the OGE interception point from the Woodward District EHV substation. Upgrade the Hitchland substation with the necessary breakers and terminal equipment.	06/30/14			523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	1	345		30		1792/1792
20099	940	11242	SPS	high priority		SPS	Build 30 mile double circuit 345 kV line with at least 3000 A capacity from the Hitchland substation to the OGE interception point from the Woodward District EHV substation. Upgrade the Hitchland substation with the necessary breakers and terminal equipment.	06/30/14			523097	Hitchland Interchange 345 kV	515375	Woodward EHV 345kv	2	345		30		1792/1792
20099	940	11243	SPS	high priority	$12,715,142	SPS	Install a second 345/230 kV transformer at Hitchland substation.	06/30/14	06/01/13		523097	Hitchland Interchange 345 kV	523095	Hitchland Interchange 230 kV	2	345/230				560/560
200193	1000	11314	SPS	transmission service	$345,942	SPS	Upgrade line trap at both Jones Bus #2 and Lubbock South Interchange.	12/30/14	06/01/13	24	526338	Jones Station Bus#2 230 kV	526269	Lubbock South Interchange 230 kV	2	230				478/478
20130	1042	11383	SPS	ITP	$225,000	SPS	Tap the Kress - Plainview City 115 kV line with North Plainview substation. Convert North Plainview substation to 115 kV.	12/31/14	06/01/15		525257	North Plainview Sub 115 kV				115				
20130	1043	11384	SPS	ITP	$200,000	SPS	Tap the Kress - Plainview City 115 kV line with Kress Rural. Convert Kress Rural substation to 115 kV.	12/31/14	06/01/15		525225	Kress Rural Sub 115 kV				115				157/173
200166	1141	11505	SPS	ITP	$2,351,378	SPS	Upgrade the Spearman 115/69 kV transformer.	06/30/14	06/01/13	24	523186	Spearman Interchange 115 kV	523185	Spearman Interchange 69 kV	1	115/69				84/105
	1143	11507	SPS	ITP	$5,179,953	SPS	Install a second 230/115/13.2 kV transformer at Lubbock South.	12/31/14	06/01/13	24	526269	Lubbock South Interchange 230 kV	526268	Lubbock South Interchange 115 kV	2	230/115				250/250
200166	30351	50401	SPS	ITP	$985,519	SPS	Install 14.4 Mvar capacitor at Crosby 115 kV.	03/30/14	06/01/12	12	525926	Crosby County Interchange 115 kV				115				14.4 Mvar
	30424	50517	SPS	ITP	$12,840,220	SPS	Rebuild 16.9 miles Ochiltree-TRI-County Rec Cole 115 kV ckt 1	12/31/14	06/01/13	24	523154	Ochiltree Interchange 115 kV	523120	Cole Interchange 115 kV	1	115	16.9			249/273
	30466	50560	SPS	ITP	$2,144,733	SPS	Upgrade Potash Junction 115/69 kV Ckt 1 transformer to 84 MVA.	12/31/14	06/01/13	24	527962	Potash Junction Interchange 115 kV	527961	Potash Junction Interchange 69 kV	1	115/69				84/84
	30467	50561	SPS	ITP	$2,148,879	SPS	Upgrade Potash Junction 115/69 kV transformer Ckt 2 to 84 MVA.	12/31/14	06/01/13	24	527962	Potash Junction Interchange 115 kV	527961	Potash Junction Interchange 69 kV	2	115/69				84/84
	694	10836	SWPA	ITP - non OATT	$4,500,000	SWPA	Reconductor 4.3-mile Asherville - Poplar Bluff 161 kV to 297/335 MVA.	06/01/14	06/01/15	24	300056	Asherville	505438	Poplar Bluff	1	161	4.3			297/335
20003	241	10307	WFEC	ITP	$2,000,000	WFEC	Rebuild 2 mile Anadarko - Georgia 138 kV line from 556 to 1113 ACSR.	12/01/14	06/01/09	12	520814	ANADARKO	520923	GEORGIA	1	138	2			212/264
20003	242	10308	WFEC	ITP	$3,240,000	SPP	Elmore - Paoli Rebuild 3/0 to 336 ACSR - 10.8 miles.	12/02/14	06/01/09	12	520898	ELMORE	521022	PAOLI	1	69	10.8			47/61
20003	311	10401	WFEC	ITP	$2,065,000	SPP	Convert 5 mile Acme - Franklin from 69 kV to 138 kV.	12/31/14	06/01/10	12	520917	FRANKLIN SW	520802.1	ACME	1	138			4.9	132/163
20003	361	10471	WFEC	ITP	$2,000,000	WFEC	Upgrade 7 miles to 795 ACSR from Fletcher SW to Marlow Junction 69 kV.	06/01/14	06/01/11	16	520911	FLETCHER	520990	MARLOW JCT	1	69	7			72/72
20132	846	11115	WFEC	ITP	$14,737,500	SPP	Rebuild 25.2-mile Anadarko - Blanchard 69 kV line as 138 kV.	12/01/14	06/01/12	36	520814	ANADARKO	520828	BLANCHARD	1	138			25.2	212/264
20132	847	11117	WFEC	ITP	$6,705,000	SPP	Upgrade 15-mile Wakita -Nash 69 kV line from 1/0 to 336.4 ACSR	06/01/14	06/01/11	18	521008	NSAH	521085	WAKITA	1	69	14.9			53/65
20030	30039	50045	WFEC	ITP	$243,000	SPP	Install 6 Mvar capacitor at Esquandale 69 kV.	06/01/14	06/01/14	12	520904	ESQUANDALE				69				6 Mvar
20086	534	10679	WR	ITP	$3,205,323	WR	Replace Halstead 138/69 kV transformer with 100/110 MVA unit.	06/01/14	06/01/11	24	533012	HALSTEAD SOUTH BUS 138 KV	533736	HALSTEAD 69 KV	1	138/69				100/110
20086	819	11082	WR	ITP	$4,373,843	WR	Rebuild 5.56 mile Gill Energy Center East - MacArthur 60 kV line. Replace substation bus and jumpers at MacArthur 69 kV.	06/01/14	05/01/13	18	533795	GILL ENERGY CENTER EAST 69 KV	533813	MACARTHUR 69 KV	1	69	5.56			134/147
20103	946	11497	WR	high priority	$12,000,000	WR	Upgrade the Wichita substation with the necessary breakers and terminal equipment to accommodate two new 345 kV circuits form the new Thistle 345 kV substation	12/31/14			532796	WICHITA 345 KV				345				1792/1792
20131	1073	11411	WR	ITP	$4,981,988	WR	Build 6 miles of double circuit 69 kV line from new Franklin substation to Mulberry - Sheffield 69 kV line, tapping line and connecting to Mulberry.	06/01/14	06/01/13		532938	FRANKLIN	533767	MULBERRY 69 KV	1	69		6		72/72
20131	1073	11412	WR	ITP	$5,701,631	WR	Build 6 miles of double circuit 69 kV line from new Franklin substation to Mulberry - Sheffield 69 kV line, tapping line and connecting to Sheffield.	06/01/14	06/01/13		532938	FRANKLIN	533774	SHEFFIELD 69 KV	1	69		6		72/72
20131	1073	11413	WR	ITP	$11,471,091	WR	Tap Litchfield - Marmaton 161 kV line at new Franklin substation	06/01/14	06/01/13		533876	FRANKLIN				161				211/211
20131	1073	11444	WR	ITP	$3,897,955	WR	New 161/69 kV transformer at Franklin	06/01/14	06/01/13		533876	FRANKLIN	532938	FRANKLIN	1	161/69				100/110
20091	30224	50233	WR	transmission service	$2,848,705	WR	Rebuild approximately 7 miles of line with 954 kcmil ACSR to achieve a minimum 1200 amp emergency rating.	06/01/14	07/01/13	24	533626	BURLINGTON JUNCTION 69 KV	533630	COFFEY COUNTY NO. 3 WESTPHALIA 69	1	69	7.2			134/147
20059	30226	50230	WR	transmission service	$1,045,000	WR	Add 6 Mvar Cap bank at Altoona East	06/01/14	06/01/14	18	533673	ALTOONA EAST 69 KV				69				6 Mvar

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	30252	50290	WR	zonal - sponsored	$3,072,000	SPP	Add second 76.8 Mvar bank at Benton.	06/01/14		24	532986	BENTON 138 KV				138				76.8 Mvar
20140	30326	50372	WR	Zonal Reliability	$7,472,511	WR	Build 6.7-mile Clay Center Switching Station to TC Riley 115 kV line with Single 1192.5 kcmil ACSR (Bunting).	06/01/14	10/01/12		533320	Clay Center Switching Station 115 kV	533319	Riley	1	115		6.7		233/245
20140	30328	50374	WR	Zonal Reliability	$963,441	WR	Install a 2000 Amp bus system, GOAB switches, metering and communication systems.	06/01/14	10/01/12		533319	Riley				115				
200179	30349	50398	WR	ITP	$29,507,894	WR	Upgrade Auburn Road 230/115 kV transformer to 440 MVA.	06/01/14	06/01/14	24	533151	AUBURN ROAD 115 KV	532851	AUBURN ROAD 230 KV	1	230/115		0.4		400/440
200175	30350	50399	WR	Zonal Reliability	$1,007,160	WR	Install second 6 Mvar capacitor at Elk River 69 kV.	12/01/14	06/01/12	12	533691	ELK RIVER 69 KV				69				6 Mvar
200181	30369	10425	WR	ITP	$18,063,183	WR	Install second 138/115 kV transformer at Moundridge.	12/01/14	06/01/13	24	533013	MOUNDRIDGE 138 KV	533429	MOUNDRIDGE 115 KV	2	138/115				110/125
			2015																	
	451	10583	AEP	ITP	$12,705,537	AEP	Rebuild and reconductor 11.1 mile Chamber Springs-Farmington REC 161 kV line with 2-959.6 ACSR/TW. Upgrade wave traps, CT ratios, & relay settings at Chamber Springs.	06/01/15	06/01/13	36	506944	CHAMBER SPRINGS 161KV	504020	FARMINGTON AECC	1	161	11.1			294/360
	478	10615	AEP	ITP	$1,221,505	AEP	Rebuild 2.3-mile Forbing - South Shreveport 69 kV line from 666 ACSR to 1233.6 ACSR/TW.	06/01/15	06/01/13	18	507728	FORBING TAP	507754	SOUTH SHREVEPORT 69KV	1	69	2.3			90/121
	504	10649	AEP	ITP	$12,424,849	AEP	Rebuild Brownlee-North Market 0.6 miles of 2-203 ACSR and 4.1 miles of 666 ACSR with 1233.6 ACSR/TW.	06/01/15	06/01/13	24	507718	BROWNLEE	507745	NORTH MARKET	1	69	4.7			136/143
	681	10898	AEP	ITP	$4,923,124	AEP	Rebuild 2 miles of 266 ACSR with 1233.6 ACSR/TW and replace Fern Street Switches	06/01/15	06/01/13	24	507716	BROADMOOR	507724	FERN STREET	1	69	1			68/94
	879	11158	AEP	ITP	$10,241,314	AEP	Rebuild 9.0 mile Prattville-Bluebell 138 kV line from 795 ACSR to 1926.9 ACSR/TW. New summer ratings 287/287 limited by breaker, switches, CTs, wave trap.	06/01/15	06/01/14	24	515242	BLUEBELL 138	509758	PRATTVILLE	1	138	9			272/287
20096	936	11236	AEP	high priority	$127,995,000	AEP	Build a new 76 mile 345 kV line from Valliant to NW Texarkana with at least 3000 A capacity. Upgrade the Valliant and NW Texarkana substations with the necessary breakers and terminal equipment.	05/01/15		51	510911	VALLIANT 345KV	508072	NORTHWEST TEXARKANA 345KV	1	345		76.25		1330/1940
20104	947	11261	AEP	transmission service	$5,060,000	AEP	Rebuild 4.33 of 795 ACSR with 1590 ACSR.	06/01/15	06/01/15	20	509806	ONETA 138KV	509786	BROKEN ARROW NORTH - SOUTH TAP	1	138	4.33			284/316
	30432	50527	AEP	ITP	$24,992,196	AEP	Rebuild 5.4 miles of 556 ACSR with 2-795 ACSR. Upgrade relay settings at Riverside Station.	06/01/15	06/01/14	18	509814	52ND & DELAWARE WEST TAP	509783	RIVERSIDE STATION 138KV	1	138	5.4			280/331
	30471	50567	AEP	ITP	$16,548,317	AEP	Rebuild Dekalb - New Boston 69 kV Ckt 1 13.2 miles of 4/0 ACSR with 1233.6 ACSR/TW. Upgrade CT ratios & relay settings at New Boston.	06/01/15	06/01/13	24	508067	NEW BOSTON	508289	DEKALB	1	69	13.2			52/69
	30472	50568	AEP	ITP	$7,519,658	AEP	Rebuild Hardy Street-Waterworks 69 kV Ckt 1 1.6 miles of 666 ACSR with 1233.6 ACSR/TW.	06/01/15	06/01/13	18	507734	HARDY STREET	507766	WATERWORKS	1	69	1.65			90/121
	30473	50569	AEP	ITP	$1,829,026	AEP	Rebuild Midland REC-North Huntington 69 kV Ckt 1 4.0 miles with 1233.6 ACSR/TW. Upgrade CT ratios, relay settings, and jumpers at North Huntington	06/01/15	06/01/13	24	507196	MIDLAND REC	507188	NORTH HUNTINGTON 69KV	1	69	4			143/143
	30474	50570	AEP	ITP	$5,653,353	AEP	Rebuild Midland-Midland REC 69 kV Ckt 1 1.3 miles of 4/0 ACSR with 1233.6 ACSR/TW. Upgrade CT ratios, relay settings, switches, and station conductors at Midland.	06/01/15	06/01/13	18	507187	MIDLAND	507196	MIDLAND REC	1	69	1.3			150/217
	30475	50571	AEP	ITP	$9,145,130	AEP	Rebuild 7.0 miles of 4/0 ACSR from state line to Midland with 1233.6 ACSR/TW. Upgrade CT ratios, relay settings, switches, and station conductors at Midland.	06/01/15	06/01/13	24	515259	HOWE INT 69	507187	MIDLAND	1	69	7			150/217
	30495	50607	AEP	ITP	$30,369,537	AEP	Build Messick 500-230 kV station. Connect to Mt Olive-Hartburg 500 kV and Carrol, Clarence, & Western Kraft 230 kV lines. Install 500/230 kV 675 MVA transformer.	12/31/15	06/01/13	30	999113	Messick 500 kV	999114	Messick 230 kV	1	500/230				675/675
	30495	50615	AEP	ITP	$21,508,234	AEP	Install terminal equipment on 500 kV side of new Messick substation. Connect to Mt. Olive - Hartburg 500 kV line.	12/31/15	06/01/13	30	999113	Messick 500 kV				500				675/675
	636	10834	DETEC	zonal - sponsored	$8,894,000	SPP	Install new 138 kV line from Chireno to Martinsville	06/01/15							1	138		10.69		215/225
	334	10431	GMO	zonal - sponsored	$7,096,402	GMO	Radial Line From Greenwood to a new distribution sub at Lone Jack	06/01/15		24	541316	Lone Jack	541218	Greenwood Energy Center 161 KV	1	161		3.35		223/245
200189	703	50499	GMO	Balanced Portfolio	$48,438,919	GMO	Build 31 miles of new 345 kV line from Iatan to Nashua.	06/01/15			542982	IATAN 345 KV	542980	PAOLA 345KV	1	345		31		2546/2546
	30476	50572	GRDA	Zonal Reliability	$334,400	GRDA	Increase line clearance Chelsea-Childers 69 kV Ckt 1		06/01/15	12	512725	CHELSEA 69	512723	CHILDERS 69	1	69				50/56
200188	703	10935	KCPL	Balanced Portfolio	$12,130,261	KCPL	Add 345 kV line terminal at Iatan. Add ring bus at Iatan to accommodate line terminals.	06/01/15			542982	IATAN 345 KV	542980	PAOLA 345KV	1	345				2546/2546
20042	703	10945	KCPL	Balanced Portfolio	$4,230,820	KCPL	Install new 345/161 kV transformer at Nashua	06/01/15			542980	PAOLA 345KV	543028	NASHUA 161 KV	1	345/161				400/440
	30345	50391	LES	zonal - sponsored	$7,675,000	LES	Build 5.5 mile 115 kV line from SW 7th & Bennet to 40th & Rokeby	05/31/15			650244	SW7 & BENNET7	650250	40th & Rokeby	1	115		5.5		362/406
	30358	50549	MIDW	ITP	$1,459,629	MIDW	Install terminal equipment at new Bushton 115 kV substation to accommodate the new 115 kV line from Ellsworth.	06/01/15	06/01/12	29	530681	Bushton 115 kV				115				156/199
200173	30358	50409	MKEC	ITP	$13,151,512	MKEC	Build 21-mile new 115 kV line from Ellsworth to the Midwest Energy's Bushton substation.	06/01/15	06/01/12	24	530623	RICE COUNTY 115 KV	539662	Ellsworth 115 KV	1	115		21		165/199
200173	30358	50410	MKEC	ITP	$5,914,221	MKEC	Install 3-breaker ring bus at Ellsworth Tap 115 kV.	06/01/15	06/01/12	12	539642	Ellsworth Tap				115				239/239
200173	30358	50449	MKEC	ITP	$2,669,385	MKEC	Expand Ellsworth Substation to include two new 115 kV breakers for the new 115 kV line to Rice.	06/01/15	06/01/12	24	539662	Ellsworth 115 KV				115				

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	30496	50608	NPPD	ITP	$6,048,000	NPPD	Build new substation with new Stegall substion with a 345/115 kV 400 MVA Stegal transformer		06/01/15	48	659135	STEGALL	640460	Stegall 115 kV	1	345/115				400/440
	30496	50609	NPPD	ITP	$19,624,000	NPPD	Install new 22-mile 115 kV line from Stegal-Scottsbluff and install necessary terminal equipment.		06/01/15	48	640460	Stegall 115 kV	640338	Scottsbluff	1	115		22		400/440
	30496	50616	NPPD	ITP	$6,732,000	NPPD	Install any required terminal equipment at 345 kV bus at Stegall substation.		06/01/15	48	659135	STEGALL				345				400/440
	30441	50536	OGE	ITP	$3,500,452	OGE	Install a 50 MVAR reactor at Gracemont 345 kV bus	04/01/15	04/01/15	12	515800	Gracemont 345kv				345				50 Mvar
200194	30485	50585	OGE	transmission service	$2,260,299	OGE	Install third 345/138 kV bus tie in Northwest Sub (UID 11496).	06/01/15	06/01/12	36	514880	NORTHWEST 345	514879	NORTHWEST 138	3	345/138				493/493
	30478	50574	OPPD	ITP	$260,590	OPPD	Rebuild 915 tap in Ckt 623-Sub 915 T2 Primary 69 kV Ckt	06/01/15	06/01/15	12	647016	915 Tap in Ckt 623	647915	Sub 915 T2 Primary	1	69	0.71			65/65
	30427	50520	SEPC	ITP	$12,116,815	SEPC	Install second 345/115 kV transformer at Mingo.	06/01/15	06/01/13	36	531451	MINGO	531429	MINGO	2	345/115				280/280
200166	461	10597	SPS	ITP	$35,099,588	SPS	Build 40 miles of 115 kV transmission line between Bailey County and Curry County.	06/01/15	06/01/12	30	524822	Curry County Interchange 115 kV	525028	Bailey County Interchange 115 kV	1	115		41.5		273/300
20084	791	11040	SPS	ITP	$11,980,445	SPS	Tap the Potter Interchange - Plant X Station 230 kV line for new Newhart Substation and Install 230/115 kV, 150/173 MVA transformer.	04/30/15	06/01/10	24	525461	Newhart Interchange 230 kV	525460	Newhart Interchange 115 kV	1	230/115				250/250
20084	791	11041	SPS	ITP	$13,464,382	SPS	New 19 mile Swisher County Interchange - Newhart 230 kV line.	04/30/15	06/01/10	36	525461	Newhart Interchange 230 kV	525213	Swisher County Interchange 230 kV	1	230		19		492/541
20084	791	11042	SPS	ITP	$15,086,485	SPS	New 18 mile Kress - Newhart 115 kV line.	04/30/15	06/01/10	36	525192	Kress Interchange 115 kV	525460	Newhart Interchange 115 kV	1	115		18		157/173
20084	791	11043	SPS	ITP	$15,632,544	SPS	New 24 mile Castro County Interchange - Newhart 115 kV line.	04/30/15	06/01/10	36	524746	Castro County Interchange 115 kV	525460	Newhart Interchange 115 kV	1	115		24		157/173
20084	791	11044	SPS	ITP	$2,010,780	SPS	Build new 4 mile Hart Industrial Substation - Newhart Substation 115 kV line.	04/30/15	06/01/10	15	525124	Hart Industrial 115 kV	525460	Newhart Interchange 115 kV	1	115		4		157/173
20084	791	11045	SPS	ITP	$13,266,452	SPS	New 15 mile Lampton Interchange - Hart Industrial Substation 115 kV line.	04/30/15	06/01/10	36	525414	Lamton Interchange 115 kV	525124	Hart Industrial 115 kV	1	115		15		157/173
	802	11064	SPS	ITP	$4,265,720	SPS	UPGRADE EDDY CO transformer 230-115 KV 250 MVA CKT 1	07/01/15	06/01/16	24	527800	Eddy County Interchange 230 kV	527798	Eddy County Interchange 115 kV	1	230/115				250/250
200166	836	11104	SPS	ITP	$2,917,236	SPS	Tap Bailey County Interchange - Plant X 115 kV line and convert Muleshoe East substation to 115 kV operation.	11/28/15	06/01/12	20	524030	Muleshoe E 115 kV				115		0.3	1.5	139/160
20130	1001	11315	SPS	ITP	$2,349,200	SPS	Construct approximately 2 miles of new 115 kV line from Randall Co. with 795 ACSR. Tie new line into V70 around (not to) Osage Substation. Add new 115 kV terminal at Randall Co. Interchange. (Re-build Randall 115 kV bus to breaker and one-half design.) Re-Conductor V70 with 795 ACSR. Remove line termination at Osage Substation. Upgrade terminal equipment and reset relays at South Georgia Interchange. Remove V04 termination from Osage and remove circuit back to Manhattan Tap (remove 3-terminal condition). Remove circuits V67 & V05 terminations from Osage and tie together around Osage Substation. Leave only V43 & T75 terminated at the Osage Substation.	06/01/15	06/01/16	24	524364	Randall County Interchange 115 kV	524322	South Georgia Interchange 115 kV	1	115		2		160/160
200166	1003	11317	SPS	ITP	$3,914,401	SPS	Upgrade Grassland 230/115 kV transformer Ckt 1 to a 250 MVA.	06/01/15	06/01/13	24	526677	Grassland Interchange 230 kV	526676	Grassland Interchange 115 kV	1	230/115				250/250
	1031	11355	SPS	ITP	$2,357,062	SPS	Upgrades Crosby County 116/69 kV transformer No. 1 to 84 MVA	06/01/15	06/01/13	24	525926	Crosby County Interchange 115 kV	525925	Crosby County Interchange 69 kV	1	115/69				84/84
	1031	11356	SPS	ITP	$2,381,597	SPS	Upgrades Crosby County 116/69 kV transformer No. 2 to 84/96 MVA	06/01/15	06/01/13	24	525926	Crosby County Interchange 115 kV	525925	Crosby County Interchange 69 kV	2	115/69				84/84
200166	1033	11358	SPS	ITP	$3,618,651	SPS	Reconductor 4.1 miles of 6.1-mile 115 kV line from Randall County to South Georgia.	07/31/15	06/01/17	18	524364	Randall County Interchange 115 kV	524322	South Georgia Interchange 115 kV	1	115	4.1			246/270
20130	1036	11372	SPS	ITP	$596,071	SPS	Convert 1.04 miles of Z33 to 115 kV service by tapping the 115 kV line from Sunset Substation to Coulter Interchange at I-40 & Soncy Street. At Soncy Sub split the converted Z33 line off the 69 kV bus and terminate to a new 115/13.2 kV transformer to serve the Soncy distribution load. Install new 115/13.2 kV distribution transformer. Leave 69 kV underground cable to Lawrence Park to be fed by Y72 out of Coulter Interchange.	06/01/15	06/01/15	18	524252	Soncy Tap 115 kV	524254	New Soncy 115 kV	1	115			1.04	157/173
	1147	11512	SPS	ITP	$2,115,794	SPS	Convert 26 miles Channing - Potter 115 kV to 230 kV, upgrade terminal equipment at Potter.	12/31/15	06/01/13	48	523869	Channing 230 kV	523959	Potter County Interchange 230 kV	1	230			26	492/541
	1147	11514	SPS	ITP	$12,509,767	SPS	Convert 35 miles Channing - Dallam 115 kV to 230 kV. Tapping Channing Dallam 230/115 kV into new XIT sub.	12/31/15	06/01/13	48	523869	Channing 230 kV	523229	Dallam 230 kV	1	230			35	492/541
	1147	11515	SPS	ITP	$4,293,268	SPS	Install 230/115/13.2 kV Transformer at Dallam County Jr. (XIT) Sub.	12/31/15	06/01/13	48	523229	Dallam 230 kV	523228	Dallam County Interchange 115 kV	1	230/115				168/168
	30331	50378	SPS	ITP	$697,688	SPS	Install 14.4 MVAR capacitor at Eagle Creek 115 kV.		06/01/15	12	527711	Eagle Creek 115 kV				115				14.4 Mvar
200166	30332	50379	SPS	ITP	$2,225,089	SPS	Install 14.4 Mvar capacitor at Drinkard 115 kV.	06/01/15	06/01/15	12	528589	Drinkard Sub 115 kV				115		0.4		14.4 Mvar
200166	30356	50406	SPS	ITP	$5,524,876	SPS	Install new 115/69 kV transformer at new Cedar Lake Interchange.	06/30/15	06/01/12	24	527212	Cedar Lake 115 kV	527211	Adair Tap 69 kV	1	115/69		17.79		84/84
200166	30356	50407	SPS	ITP	$7,699,644	SPS	Build 12 miles of new 115 kV line from Sulphur Interchange to Cedar Lake Interchange.	06/30/15	06/01/12	24	527262	Sulphur Interchange 115 kV	527212	Cedar Lake 115 kV	1	115		12.5		157/173
200190	30413	50506	SPS	ITP	$4,249,540	SPS	Replace 230/115 kV transformer at Grapevine substation with 250 MVA transformer.	12/01/15	06/01/14	36	523771	Grapevine Interchange 230 kV	523770	Grapevine Interchange 115 kV	1	230/115				250/250
200193	30422	50515	SPS	ITP	$4,273,633	SPS	Upgrade Deaf Smith County Interchange 230/115 kV Ckt 1 transformer to 250 MVA.	03/01/15	06/01/12	24	524623	Deaf Smith County Interchange 230 kV	524622	Deaf Smith County Interchange 115 kV	1	230/115				250/250

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	30423	50516	SPS	ITP	$4,273,633	SPS	Upgrade Deaf Smith Interchange 230/115 kV transformer ckt 2 to 250 MVA	03/01/15	06/01/13	24	524623	Deaf Smith County Interchange 230 kV	524622	Deaf Smith County Interchange 115 kV	2	230/115				250/259
	30429	50522	SPS	ITP	$19,997,019	SPS	Rebuild 28-mile Crosby-Floyd 115 kV Ckt 1.	11/01/15	06/01/13	24	525926	Crosby County Interchange 115 kV	525780	Floyd County Interchange 115 kV	1	115	25.8			249/273
	30430	50523	SPS	ITP	$2,356,579	SPS	Install two 14.4 Mvar capacitors.	03/01/15	06/01/13	12	525780	Floyd County Interchange 115 kV				115				28.8 Mvar
	30444	50539	SPS	ITP	$1,401,906	SPS	Install a 2 stage 28.8 115 kV capacitor bank each stage 14.4 Mvar	12/31/15	06/01/18	12	526361	Cochran Interchange 115 kV				115				28.8 MVAR
	30113	50119	SWPA	ITP - non OATT	$0	SWPA	Install 30 Mvar capacitor at Glencoe 161 kV substation.		06/01/15		504080	Glencoe				161				30 Mvar
20003	311	10403	WFEC	ITP	$1,577,000	SPP	Convert 8 mile OU - West Norman from 69 kV to 138 kV.	12/31/15	06/01/10	12	521095	WEST NORMAN	521104	OU SWITCH 4	1	138			8.3	183/228
20003	399	10519	WFEC	ITP	$1,347,000	SPP	Upgrade line from 1/0 to 336.4, 4.85 miles	06/01/15	06/01/12	12	520979	LINDSAY SW	521087	WALLVILLE	1	69	4.85			53/65
20132	846	11116	WFEC	ITP	$1,125,000	SPP	Rebuild 2-mile Blanchard - OU Switchyard 69 kV line as 138 kV.	12/01/15	06/01/12	12	520828	BLANCHARD	521104	OU SWITCH 4	1	138			2	212/264
20114	1027	11351	WFEC	transmission service	$150,000	WFEC	Replace CTs	06/01/15	06/01/15		521129	BLUE CANYON WIND 5	521024	PARADISE	1	138				163/163
20033	319	10413	WR	ITP	$4,151,903	WR	Rebuild Cowskin - Westlink 69 kV.		06/01/15		533788	COWSKIN 69 KV	533854	WESTLINK 69 KV	1	69	2.11			131/143
20033	319	10414	WR	ITP	$5,834,124	WR	Rebuild Westlink-Tyler 69 kV.		06/01/15		533854	WESTLINK 69 KV	533847	TYLER 69 KV	1	69	2.65			131/143
20033	319	10415	WR	ITP	$4,614,819	WR	Rebuild Tyler-Hoover 69 kV. Install terminal equipment at Tyler substation.		06/01/15		533847	TYLER 69 KV	533806	HOOVER SOUTH 69 KV	1	69	1.96			131/143
	30437	50532	WR	ITP	$20,387,444	WR	Install new Geary County 345/115 kV substation south of Junction City where JEC-Summit and McDowell Creek-Junction City #2 ckt separate. Install 345/115 kV 440 MVA transformer and 115 kV terminal equipment.		06/01/15	24	532767	Geary County	533336	Geary County	1	345/115				400/440
	30437	50605	WR	ITP	$15,376,365	WR	Install 345 kV ring bus at the new Geary County substation		06/01/15	24	532767	Geary County				345				1793/1793
	30437	50534	WR	ITP	$27,938,225	WR	Build new Geary County - Chapman 115 kV line.		06/01/15	36	533336	Geary County	533362	CHAPMAN 115 KV	1	115	10.42	4.67		218/262
	30483	50581	WR	ITP	$7,122,480	WR	Install a third 138/69 kV transformer at Gill		06/01/15	18	533046	GILL ENERGY CENTER SOUTH 138 KV	533795	GILL ENERGY CENTER EAST 69 KV	1	138/69				150/165
			2016																	
20122	479	10616	AEP	ITP	$14,500,000	AEP	Rebuild 12.63 miles of the Georgia Pacific - Keatchie 138 kV line from 795 ACSR to 1272 ACSR	06/01/16	06/01/16	24	509064	GEORGIA-PACIFIC	509050	KEATCHIE REC	1	138	12.63			287/287
20000	511	10656	AEP	ITP	$11,000,000	AEP	Install new 345/161 kV transformer at Kings River (Previous name Osage Creek)	06/01/16	06/01/16	60	506987	Kings River 161 kV	506988	Kings River 161 kV	1	345/161				400/440
20000	511	10659	AEP	ITP	$24,500,000	AEP	Install 9 miles of 345 kV line from Shipe Road to East Rogers	06/01/16	06/01/16	60	506979	Shipe Road 345	506982	East Rogers 345	1	345		9		1366/1915
20000	511	10660	AEP	ITP	$65,500,000	AEP	Install 32 miles of 345 kV line from East Rogers to Kings River (previous Osage Creek)	06/01/16	06/01/16	60	506982	East Rogers 345	506987	Kings River 161 kV	1	345		32		1366/1915
	511	50524	AEP	ITP	$6,095,000	SPP	Build 0.5 miles of 161 kV from Kings River to the Grandview-Osage Creek 161 kV tapping this line creating a new circuit from Kings River-Grandview 161 kV ckt 1. Install 161 kV terminal equipment for the new circuit the new Kings River substation		06/01/16	24	338099	Grandview 161 kV	506988	Kings River 161 kV	1	161		0.5		363/363
	511	50525	AEP	ITP	$6,095,000	SPP	Build 0.5 miles of 161 kV from Kings River to the Grandview-Osage Creek 161 kV tapping this line creating a new circuit from Kings River-Osage Creek 161 kV ckt 1. Install 161 kV terminal equipment for the new circuit from the Kings River substation		06/01/16	24	338682	Osage Creek (AECC)	506988	Kings River 161 kV	1	161		0.5		363/363
	511	50602	AEP	ITP			Build 1 mile of 161 kV from Kings River to the Berryville-Osage Creek 161 kV tapping this line creating a new circuit from Kings River-Osage Creek 161 kV ckt 1. Install 161 kV terminal equipment for the new circuit from the Kings River substation		06/01/16	18	506988	Kings River 161 kV	338682	Osage Creek (AECC)	2	161		1		223/223
	511	50603	AEP	ITP			Build 1 mile of 161 kV from Kings River to the Berryville-Osage Creek 161 kV tapping this line creating a new circuit from Kings River-Berryville 161 kV ckt 1. Install 161 kV terminal equipment for the new circuit from the Kings River substation		06/01/16	18	506988	Kings River 161 kV	338100	Berryville	1	161		1		223/223
20122	30296	50334	AEP	ITP	$1,166,400	AEP	Install a new 28.8 MVAR capacitor bank at Winnsboro 138 kV substation.	06/01/16	06/01/16	18	508317	Winnsboro 138 kV				138				28.8 Mvar
20122	30298	50336	AEP	ITP	$1,166,400	AEP	Install 28.8 MVAR capacitor bank at Logansport 138 kV substation.	06/01/16	06/01/16	18	509071	LOGANSPORT 138KV				138				28.8 Mvar
	30436	50531	AEP	ITP	$1,000,000	AEP	Replace 138 kV breaker at Perdue.	06/01/16	06/01/16	12	508560	NEW GLADEWATER	508351	PERDUE 138KV		138				272/272
	30449	50545	AEP	ITP	$25,060,655	AEP	Rebuild and upgrade conductor 27.6-mile Rock Hill-Springridge Pan-Harr REC 138 kV with 1926.9 ACSR/TW.	06/01/16	06/01/14	24	509083	ROCK HILL 138	507757	SPRINGRIDGE PAN-HARR REC	1	138	27.6			272/376
	414	10540	KCPL	zonal - sponsored	$3,756,500	KCPL	New Cedar Niles-Clare 161 kV Line & Clare substation	12/31/16		24	543054	CEDAR NILES 161 KV	543131	CLARE 161 KV	1	161		4.84		293/335
	418	10544	KCPL	zonal - sponsored	$1,632,300	KCPL	New Waldron sub cut-in	06/01/16		18	543030	WALDRONS 161 KV			1	161				293/293
	30442	50537	OGE	ITP	$3,500,452	OGE	Install a 30 Mvar reactor at Hunter 345 kV for the Hunter - Wichita 345 kV line	04/01/16	04/01/16	24	515477				1	345				30 Mvar
200190	805	11067	SPS	ITP	$2,980,329	SPS	Install second 115/69 kV transformer at Bowers.	06/01/16	06/01/13	24	523748	Bowers Interchange 115 kV	523747	Bowers Interchange 69 kV	2	115/69				84/96
	30451	50546	SPS	ITP	$19,639,618	SPS	Build a new 115 kV line from Atoka-Eagle Creek and install terminal equipment	12/31/16	06/01/15	36	527786	Atoka Interchange 115 kV	527711	Eagle Creek 115 kV	1	115		13.5		249/249
20108	30290	50328	WR	transmission service	$700,000	WR	Replace disconnect switches, wavetrap and CT	06/01/16	06/01/19		533012	HALSTEAD SOUTH BUS 138 KV	533065	SEDGWICK COUNTY NO. 12 COLWICH 13	1	138				160/160
			2017																	
	30130	50136	CUS	zonal - sponsored	$875,000	CUS	Install 30 MVAR capacitor at Twin Oaks Substation	06/01/17	06/01/18	24	549933	Twin Oaks 69				69				30 Mvar

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20097	938	11238	GMO	high priority	$231,600,000	GMO	Build a new 105 mile 345 kV line with at least 3000 A capacity from Sibley to a new Maryville substation. Upgrade the Sibley substation with the necessary breakers and terminal equipment.	06/01/17		72	541201	Sibley 345 KV	541197	Maryville 345 kV	1	345		105		2496/2496
20097	938	11239	GMO	high priority	$152,640,000	GMO	Build a new 345 kV substation at Maryville with a ring bus and necessary terminal equipment. Build a new 65 mile 345 kV line with at least 3000 A capacity from the new Maryville substation to the Missouri/Nebraska state border towards OPPD's Nebraska City substation.	06/01/17		72	645458	Sub 3458 (Neb Cty)	541197	Maryville 345 kV	1	345		65		2496/2496
20137	1134	11496	OGE	transmission service	$15,000,000	OGE	Install third 345/138 kV transformer in Northwest Sub	06/01/17	06/01/17	40	514880	NORTHWEST 345	514879	NORTHWEST 138	3	345/138				493/493
20017	30160	50168	OGE	transmission service	$14,000,000	OGE	Convert Ft. Smith 161KV to 1-1/2 breaker design and install 3rd 500-161KV transformer bank.	06/01/17	06/01/17	36	515305	FT SMITH 500	515300	FT SMITH 161	5	500/161				493/493
20017	30164	50172	OGE	transmission service	$100,000	OGE	Upgrade CT	06/01/17	06/01/17	9	515336	VBI 69	504032	VBI NORTH	1	161				72/72
200194	30481	50577	OGE	transmission service	$10,000	OGE	Replace 400 amp CT in El Reno sub with 800 amp.	06/01/17	06/01/17	14	514818	EL RENO 69	514817	SERVICE PL EL RENO 69		69				72/72
20098	939	11240	OPPD	high priority	$19,796,666	OPPD	Build a new 11.2 mile 345 kV line with at least 3000 A capacity from the Nebraska City substation to the Missouri/Nebraska state border towards KCPL's Maryville substation. Upgrade the Nebraska City substation with the necessary breakers and terminal equipment.	06/01/17			645458	Sub 3458 (Neb Cty)	541197	Maryville 345 kV	1	345		11.2		2496/2496
	772	11017	SPS	ITP	$32,790,576	SPS	Build new 230 kV line from Carlisle to Wolfforth So. and install terminal equipment	06/01/17	06/01/17	36	526525	Wolfforth Interchange 230 kV	526161	Carlisle Interchange 230 kV	1	230		15		478/478
20130	1004	11318	SPS	ITP	$4,762,800	SPS	Upgrade existing Swisher 230/115 kV transformer to 252 MVA	06/30/17	06/01/16	24	525213	Swisher County Interchange 230 kV	525212	Swisher County Interchange 115 kV	1	230/115				252/252
	1139	11501	SPS	ITP	$10,946,449	SPS	Rebuild 6 miles of 115 kV line from Lubbock South Interchange to Allen	06/01/17	06/01/14	24	526268	Lubbock South Interchange 115 kV	526213	Allen Sub 115 kV	1	115	6.1			273/300
	30330	50377	SPS	ITP	$466,889	SPS	Install second stage 14.4 Mvar capacitor at Etter Rural 115 kV substation.		06/01/17	12	523256	Etter Rural Sub 115 kV				115				14.4 Mvar
	500	10645	SWPA	ITP - non OATT	$2,250,000	SPP	Replace Springfield transformer #3 with 125 MVA transfomer.	06/01/17	06/01/17	24	505492	Springfield	505494	Springfield	3	161/69				70/70
200197	30406	50498	WR	transmission service	$456,403	WR	Upgrading the existing Knob Hill strain bus of the north lattice bay and upgrading all the equipment of the line terminal. Also the existing electro-mechanical relay breaker panel of this terminal will not handle the ranges needed for the new line ampacity. So a new microprocessor based relay breaker control panel will need to be installed for this project.	06/01/17	06/01/17		539665	Greenleaf 115 KV	533332	KNOB HILL 115 KV		115				239/239
			2018																	
	30434	50528	AECC	ITP - non OATT	$350,000	AECC	Rebuild Fitzhugh-Ozark 161 Ckt 1 river crossing 0.76 miles.		04/01/18	24	503902	FITZHUGH 161	505516	Ozark	1	161	0.63			184/184
	501	10646	AEP	ITP	$11,980,465	AEP	Rebuild Evenside-Northwest Henderson 69kV Ckt. 6.4 miles of 397 ACSR with 1233.6 ACSR/TW. Replace breaker at Evenside.	06/01/18	06/01/18	24	509061	EVENSIDE	509075	NORTHWEST HENDERSON 69KV	1	69	6.4			71/96
	512	10657	AEP	ITP	$8,174,689	AEP	Rebuild 2.0 miles Ellerbe Road 69 kV Ckt 1 to Forbing Road with 1233.6 ACSR/TW.	06/01/18	06/01/18	24	507723	ELLERBE ROAD	507728	FORBING TAP	1	69	2			90/121
200183	30361	50413	AEP	ITP	$81,514,845	AEP	Build new 345 kV line from Elk City to Gracemont. The total mileage of this Elk City to Gracemont 345 kV line is 93 miles. American Electric Power and Oklahoma Gas and Electric Co. shall decide who shall build how much of these Network Upgrades and shall provide such information, along with specific cost estimates for each Designated Transmission Owner's portion of the Network Upgrades, to SPP in its response to this NTC-C.		03/01/18	60	511553	Elk City 345 kV	515800	Gracemont 345kv	1	345		46.5		1792/1792
200183	30361	50414	AEP	ITP	$18,060,547	AEP	Expand Elk City substation (or build new station). Install a 345/230 kV 675 MVA transformer at Elk City.		03/01/18	60	511553	Elk City 345 kV	511490	ELK CITY 230KV	1	345/230				675/675
	814	11076	CUS	zonal - sponsored	$1,750,000	CUS	Rebuild James River to South Highway 65 69 kV	06/01/18		24	549904	James River 69	549908	South Highway 65 69	1	69	3.8			153/159
	815	11077	CUS	zonal - sponsored	$956,000	CUS	Rebuild South Highway 65 to Sunset 69 kV	06/01/18		24	549907	Sunset 69	549908	South Highway 65 69	1	69	1.9			153/159
20036	30067	50073	EDE	ITP	$1,500,000	EDE	Install 12 Mvar capacitor bank at Quapaw substation 377 69 kV.	06/01/18	06/01/18	18	547590	SUB 377 - QUAPAW (EAGLE PICHER)				69				12 Mvar
	716	10953	GMO	ITP	$20,537	GMO	upgrade Prairie Lee wave trap to at least 1200 amps		06/01/18	12	541211	Blue Spring South 161 KV	541206	Prairie Lee 161 KV	1	161				229/259
	30365	50422	GMO	ITP	$2,983,952	KCPL	Reconductor 3.21 miles from Blue Springs to Prairie Lee 161 kV to 795 ACSS. Upgrade substation equipment to 2000 Amps.		06/01/18	24	541211	Blue Spring South 161 KV	541206	Prairie Lee 161 KV	1	161	3.21			558/558
	30365	50423	GMO	ITP	$2,399,248	KCPL	Reconductor 2.5 mile from Blue Springs South - Blue Springs East 161 kV to 795 ACSS. Upgrade substation equipment to 2000 Amps.		06/01/18	24	541205	Blue Springs East 161 KV	541211	Blue Spring South 161 KV	1	161	2.5			558/558
	30438	50533	GRDA	ITP	$161,100	GRDA	Replace 161kV,1200A switch with a 2000A Switch at Kerr Substation bus.		06/01/18	12	512637	412SUB 161	512635	KERR 161	1	161				356/432
	30440	50535	GRDA	ITP	$161,100	GRDA	Replace 161kV, 1200A switch with a 2000A switch at Kansas Tap Substation.		06/01/18	12	512637	412SUB 161	512714	KANSAS TAP 161	1	161				356/432
	30477	50573	GRDA	Zonal Reliability	$150,700	GRDA	Increase line clearance Okay-Unarco 69 kV Ckt 1		06/01/18	12	512646	OKAY 69	512828	UNARCO69	1	69				87/108
200187	30367	50425	ITCGP	ITP	$28,580,803	ITCGP	Build ITCGP's portion of new 345 kV line from Elm Creek to Summit.	03/01/18	03/01/18	60	750011	Elm Creek 345 kV	532773	SUMMIT 345 KV	1	345		28		1792/1792
200187	30367	50426	ITCGP	ITP	$5,403,707	ITCGP	Install new 345/230 kV transformer at Elm Creek.	03/01/18	03/01/18	60	750011	Elm Creek 345 kV	539639	Elm Creek Substation	1	345/230				448/448

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200187	30367	50427	ITCGP	ITP	$8,015,964	ITCGP	Bus work on 345 kV side at Elm Creek substation.	03/01/18	03/01/18	60	750011	Elm Creek 345 kV			1	345				
200187	30367	50428	ITCGP	ITP	$697,163	ITCGP	Bus work on 230 kV side at Elm Creek substation.	03/01/18	03/01/18	60	539639	Elm Creek Substation				230				
20107	30299	50337	MKEC	transmission service	$150,000	MKEC	Replace CTs and relays at Jewell substation and Smith Center substation	06/01/18	06/01/18		539669	Jewell 3 115	539693	Smith Center 115 KV	1	115				80/88
	717	10954	NPPD	zonal - sponsored	$5,625,000	NPPD	Tap CENCITY7 - Silver Creek 115 kV at Clarks. Build new 115 kV line from Clarks - Central City North. Radial 115 kV line for TransCanada Keystone XL project.	06/01/18		48	640436	Clarks	640434	Central City North	1	115		8.8		80/80
	738	10975	NPPD	zonal - sponsored	$19,687,500	NPPD	Build new line from Petersburg to new ERICSON7. Radial 115 kV line for TransCanada Keystone XL project.	06/01/18		48	640318	Petersburg	640437	Ericson	1	115		35		174/174
200186	30375	50442	NPPD	ITP	$92,660,000	NPPD	Build new 76-mile 345 kV line from Gerald Gentleman Station substation to new Cherry County substation. This upgrade is contingent upon approval from Western Area Power Administration to tap the Grand Island - Fort Thompson 345 kV line.	01/01/18	01/01/18	72	640500	Cherry County 345 kV	640183	Gerald Gentleman Station	1	345		76		1792/1792
200186	30375	50443	NPPD	ITP	$1,380,000	NPPD	Construct 345 kV terminal at Gerald Gentleman Station 345 kV substation to accommodate new 345 kV line from Gerald Gentleman Station to new Cherry County 345 kV substation. This upgrade is contingent upon approval from Western Area Power Administration to tap the Grand Island - Fort Thompson 345 kV line.	01/01/18	01/01/18	72	640183	Gerald Gentleman Station				345				
200186	30375	50444	NPPD	ITP	$6,000,000	NPPD	Build new Cherry County 345 kV substation and install necessary terminal equipment. This upgrade is contingent upon approval from Western Area Power Administration to tap the Grand Island - Fort Thompson 345 kV line.	01/01/18	01/01/18	72	640500	Cherry County 345 kV				345				
200186	30375	50445	NPPD	ITP	$172,360,000	NPPD	Build new 146-mile 345 kV line from new Cherry County substation to new Holt County substation. This upgrade is contingent upon approval from Western Area Power Administration to tap the Grand Island - Fort Thompson 345 kV line.	01/01/18	01/01/18	72	640500	Cherry County 345 kV	640503	Holt County 345 kV	1	345		146		1792/1792
200186	30375	50446	NPPD	ITP	$16,880,000	NPPD	Construct new Holt County 345 kV substation tap on the Grand Island - Fort Thompson 345 kV line owned by Western Area Power Administration. Install necessary terminal equipment at new substation. This upgrade is contingent upon approval from Western Area Power Administration to tap the Grand Island - Fort Thompson 345 kV line.	01/01/18	01/01/18	72	640503	Holt County 345 kV				345				
200185	30361	50419	OGE	ITP	$75,486,000	OGE	Build OGE's portion of new 345 kV line from Elk City to Gracemont.	03/01/18	03/01/18	60	511553	Elk City 345 kV	515800	Gracemont 345kv	1	345		46.5		1792/1792
	865	11142	OPPD	ITP	$475,340	OPPD	Increase line clearances to allow the use of a higher conductor rating and replacing some terminal equipment	06/01/18	06/01/18	18	647917	Sub 917	647918	Sub 918	1	69				89/89
200184	1140	11502	SPS	ITP	$37,490,796	SPS	Install 345/115 kV transformer between Tuco and new 115 kV substation (New Deal).		06/01/18	36	525836	New-Sub-EH1 345kV	525837	New-Sub-EH1 115kV	1	345/115				458/474
200184	1140	11503	SPS	ITP		SPS	Build new 15-mile 345 kV line between Tuco and high side of new transformer between Tuco and Stanton.		06/01/18	36	525832	TUCO Interchange 345 kV	525836	New-Sub-EH1 345kV	1	345		15		1792/1792
200184	1140	11504	SPS	ITP		SPS	Build new 17-mile 115 kV line between Stanton and low side of new transformer between Tuco and Stanton.		06/01/18	36	525837	New-Sub-EH1 115kV	526076	Stanton Sub 115 kV	1	115		17		174/192
	1144	11508	SPS	ITP	$4,220,694	SPS	Build a second 230/115/13.2 kV transformer at Hitchland.		06/01/18	24	523095	Hitchland Interchange 230 kV	523093	Hitchland Interchange 115 kV	2	230/115				250/250
	1146	11509	SPS	ITP	$3,644,914	SPS	Upgrade the Carlisle 230/115/13.2 transformer - 250 MVA.		06/01/18	24	526161	Carlisle Interchange 230 kV	526160	Carlisle Interchange 115 kV	1	230/115				250/250
200184	30355	50404	SPS	ITP	$50,068,309	SPS	Build new 230 kV line from Wolfforth to Grassland, and install terminal equipment at Grassland and Wolfforth substations.	03/01/18	03/01/18	54	526525	Wolfforth Interchange 230 kV	526677	Grassland Interchange 230 kV	1	230		44		478/478
	30377	50454	SPS	ITP	$1,581,080	SPS	Reconductor 1.5 miles line from Indiana to Stanton.		06/01/18	24	526146	Indiana Sub 115 kV	526076	Stanton Sub 115 kV	1	115	1.5			240/240
	30377	50455	SPS	ITP	$1,604,810	SPS	Reconductor 4 miles from Indiana to SP-Erskine.		06/01/18	24	526146	Indiana Sub 115 kV	526109	South Plains REC-Erskine 115 kV	1	115	4			240/240
	30469	50563	SPS	ITP	$5,784,673	SPS	Build 2.2 miles of 115 kV from Zodiac 115 kV to South Portales 115 kV and install necessary terminal equipment	12/01/18	06/01/18		524935	Zodiac Sub 115 kV	524949	S Portales 115 kV	1	115		2.2		159/175
	30469	50564	SPS	ITP	$4,589,546	SPS	Build 1.9 miles of 115 kV from S Portales to Market St 115 kV and install necessary terminal equipment	12/01/18	06/01/18	24	524949	S Portales 115 kV	524950	Market ST 115 kV	1	115		1.9		159/175
	30469	50565	SPS	ITP	$14,576,999	SPS	Build 7 miles of 115 kV from Market St to Portales substation and install necessary terminal equipment.	12/01/18	06/01/18	24	524950	Market ST 115 kV	524924	Portales Interchange 115 kV	1	115		7		159/175
	679	10896	SWPA	ITP - non OATT	$2,250,000	SWPA	Replace Poplar Bluff 2nd transformer with larger transformer, 70/70 MVA unit.		06/01/18	24	505436	Poplar Bluff	505438	Poplar Bluff	2	161/69				70/70
200182	30367	50429	WR	ITP	$62,110,152	WR	Build Westar's portion of new 345 kV line from Elm Creek to Summit.		03/01/18	60	750011	Elm Creek 345 kV	532773	SUMMIT 345 KV	1	345		30		1792/1792
	30435	50530	WR	ITP	$1,966,717	WR	Install two 25 Mvar reactors on the tertiaries of each of the 345-115 kV Transformers at Reno County Substation. 4 x 25Mvar total.		04/01/18	18						14.4				100 Mvar
	30484	50582	WR	ITP	$15,402,744	WR	Install new 345/138 kV transformer at Viola substation		06/01/18	36	532798	Viola 7	533075	Viola 138kV	1	345/138				448/492
	30484	50612	WR	ITP			Install 345 kV breakers at Viola substation		06/01/18	36	532798	Viola 7			1	345				448/492
	30484	50583	WR	ITP	$40,525,225	WR	Build new 138 kV line between new Viola substation 345/138 kV transformer and existing Clearwater 138 kV substation.		06/01/18	36	533075	Viola 138kV	533036	CLEARWATER 138KV	1	138		21.8		534/586

Appendix A - Complete List of Network Upgrades

NTC ID	PID	UID	Facility Owner	2013 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
	30484	50584	WR	ITP	$22,234,744	WR	Build new 138 kV line between new Viola substation 345/138 kV transformer and existing Gill 138 kV substation.		06/01/18	36	533075	Viola 138kV	533045	GILL ENERGY CENTER WEST 138 KV	1	138		27.9		534/586
			2019																	
200186	30374	50440	NPPD	ITP	$61,205,000	NPPD	Build a new 50-mile 345 kV line from Hoskins to Neligh.	03/01/19	03/01/19	60	640226	Hoskins	750013	Neligh 345 kV	1	345		40		1792/1792
200186	30374	50441	NPPD	ITP	$35,497,400	NPPD	Construct new substation at Neligh. Install a new 345/115 kV transformer at Neligh.	03/01/19	03/01/19	60	750013	Neligh 345 kV	640293	Neligh	1	345/115				458/474
20110	910	11207	OGE	transmission service	$225,000	OGE	Replace wavetrap	06/01/19	06/01/19	12	514839	BRYANT 138	514835	MEMORIAL 138	1	138				478/478
20110	1021	11343	OGE	transmission service	$18,000,000	OGE	Add 3rd 345kV line from Arcadia to Redbud	06/01/19	06/01/19	36	514908	ARCADIA 345	514909	REDBUD 345	3	345		5		1248/1426
			2020																	
	30210	50439	MKEC	ITP	$385,244	MKEC	Reconductor 22.1 mile Harper to Milan Tap 138 kV line.		03/01/20	12	539668	Harper 138 KV	539675	Milan Tap 138 KV	1	138	22.11			261/314
200184	30376	50447	SPS	ITP		SPS	Build new 67-mile 345 kV line from Tuco to Amoco.		01/01/20	72	525832	TUCO Interchange 345 kV	750014	Amoco 345 kV	1	345		67		1792/1792
200184	30376	50451	SPS	ITP		SPS	Install new 345/230 kV transformer at Amoco.		01/01/20	72	750014	Amoco 345 kV	526460	Amoco Switching Station 230 kV (Amoco	1	345/230				448/448
200184	30376	50452	SPS	ITP	$181,415,883	SPS	Install new 345/230 kV transformer at Hobbs.		01/01/20	72	750015	Hobbs 345 kV	527894	Hobbs Interchange 230 kV	1	345/230				448/448
200184	30376	50457	SPS	ITP		SPS	Build new 100 mile Amoco - Hobbs 345 kV line. Expand the Hobbs substation.		01/01/20	72	750014	Amoco 345 kV	750015	Hobbs 345 kV	1	345		100		1792/1792
			2021																	
200185	30364	50420	OGE	ITP	$71,876,622	OGE	Build new 49-mile Woodward EHV - Tatonga 345 kV Ckt 2 line.	03/01/21	03/01/21	72	515375	Woodward EHV 345kv	515407	Tatonga 345kv	2	345		49		1792/1792
200185	30364	50421	OGE	ITP	$82,139,900	OGE	Build new 61-mile Tatonga - Matthewson 345 kV line.	03/01/21	03/01/21	72	515407	Tatonga 345kv	4	Mathewson 345 kV	1	345		61		1792/1792
200185	30364	50456	OGE	ITP	$32,780,617	OGE	Build new 16-mile 345 kV line from Matthewson to Cimarron.	03/01/21	03/01/21	72	4	Mathewson 345 kV	514901	CIMARRON 345	1	345		16		1792/1792
200185	30364	50458	OGE	ITP	$20,169,602	OGE	Build new Matthewson 345 kV substation at the intersection of the Woodring - Cimarron and the existing Northwest - Tatonga 345 kV lines.	03/01/21	03/01/21	72	4	Mathewson 345 kV				345				1792/1792
	1145	11524	SPS	ITP	$4,714,312	SPS	Reconductor 3.98 miles of Carlisle - Murphy 115 kV.		06/01/21	24	526160	Carlisle Interchange 115 kV	526192	Murphy Strb 115 kV	1	115	3.98			273/300
	756	10998	WR	ITP	$18,343,600	WR	Tap Lawrence Hill-Swissvale 230 kV line near Baldwin Creek substation and install Baldwin Creek 230/115 kV transformer		06/01/21	24	532858	BALDWIN CREEK	533232	BALDWIN CREEK 115 KV	1	230/115				280/308
			2022																	
	30362	50416	AEP	ITP	$100,504,688	AEP	Build 55 mile new 345 kV line from Welsh to Lake Hawkins (or Perdue).		03/01/22	60	700346	Lake Hawkins 345 kV	508359	WELSH	1	345		55		1792/1792
	30362	50417	AEP	ITP	$16,666,456	AEP	Expand Lake Hawkins (or Perdue) substation (or build new station). Install a 345/138 kV transformer at Lake Hawkins (or Perdue).		03/01/22	60	700346	Lake Hawkins 345 kV	508358	LAKE HAWKINS	1	345/138				675/675
	711	10948	LES	zonal - sponsored	$11,250,000	SPP	Add NW68th Holdrege 345/115kV Transformer #2. Driven by NERC Category C (TPL-003) - prior outage of one 345/115kV transformer, followed by an outage of a second 345/115kV transformer.	05/31/22			650214	NW68th & Holdrege	650114	NW68th & Holdrege	1	345/115				336/403
	30208	10991	MKEC	ITP	$2,501,569	MKEC	Rebuild MKEC portion of the 5.6 mile Clearwater-Milan Tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)		03/01/22	24	533036	CLEARWATER 138KV	539675	Milan Tap 138 KV	1	138	5.6			261/314
	757	11000	OGE	ITP	$6,509,948	OGE	Reconductor 12.08 mile FPL Switch - Woodward District 138 kV line to 1590 ASCR.		03/01/22	24	514785	WOODWARD 138	515785	FPL SWITCH 138	1	138	12.08			404/485
	30363	50418	OGE	ITP	$15,990,000	SPP	Reconductor 26 mile Glass Mountain - Mooreland line to 795 AS33		03/01/22	36	520999	MOORELAND	514788	GLASS MOUNTAIN 138	1	138	26			268/287
	30329	50376	SPS	ITP	$944,754	SPS	Install 28.8 Mvar capacitor at Lamb County 69 kV.		06/01/22	12	526036	Lamb County REC-Opdyke Sub 115 kV				69				28.8 Mvar
	30372	50437	WFEC	ITP	$16,666,500	SPP	Reconductor Okeene - Dover Switching Station 138 kV to 795 ACSS.		03/01/22	36	520882	DOVER SW	521016	OKEENE	1	138	27.1			286/286
	30209	10992	WR	ITP	$7,951,703	WR	Rebuild Westar portion of the Clearwater-Milan tap 115 kV with bundled 1192.5 kcmil ACSR conductor (Bunting)		03/01/22	24	533036	CLEARWATER 138KV	539675	Milan Tap 138 KV	1	138	6.1			261/314
	30368	50430	WR	ITP	$11,501,055	WR	Tear down/rebuild 12.3 mile Abilene East - Chapman 115 kV line as single circuit with bundled 1192 ACSR conductor.		06/01/22	36	533365	EAST ABILENE 115 KV	533362	CHAPMAN 115 KV	1	115	12.3			240/240
	30368	50431	WR	ITP	$3,806,178	WR	Tear down/rebuild Abilene East - Abilene Energy Center 115 kV as single circuit with bundled 1192 ACSR conductor.		06/01/22	24	533365	EAST ABILENE 115 KV	533361	ABILENE ENERGY CENTER 115 KV	1	115	3.33			240/240
	30368	50432	WR	ITP	$19,949,242	WR	Tear down/rebuild Abilene Energy Center - Northview 115 kV as single circuit with bundled 1192 ACSR conductor.		06/01/22	36	533361	ABILENE ENERGY CENTER 115 KV	533371	NORTHVIEW 115 KV	1	115	21.75			240/240
	30368	50433	WR	ITP	$5,131,249	WR	Tear down/rebuild North Street - Northview 115 kV as single circuit with bundled 1192 ACSR conductor.		06/01/22	24	533370	NORTH STREET 115 KV	533371	NORTHVIEW 115 KV	1	115	3.2			240/240
	30370	50435	WR	Zonal Reliability	$957,660	WR	Install additional 1 stage of 15 MVAR capacitor bank at Northwest Manhattan for a total of 30 Mvar.		06/01/22	12	533347	NORTHWEST MANHATTAN				115				15 Mvar
	30371	50436	WR	Zonal Reliability	$957,660	WR	Install second bank of 10.9 Mvar at South Seneca 115kV substation.		06/01/22	12	533337	SOUTH SENECA 115 KV				115				10.9 Mvar
			2030																	
	30391	50473	ITCGP	ITP	$6,000,000	SPP	Install second 345/230 kV 448 MVA Post Rock Transformer		01/01/30			Post Rock 345 KV		Post Rock 230 KV	2	345/230				448/448
	30391	50474	ITCGP/SEPC	ITP	$121,500,000	SPP	Build new new 108 mies Mingo - Post Rock and associated terminal equipment		01/01/30			Mingo 345 kV		POST ROCK 345 KV	1	345		108		1792/1792
	30392	50475	KCPL/WR	ITP	$79,875,000	SPP	Build new 71 miles of 345 kV line Iatan - Jeffrey Energy Center and associated terminal equipment		01/01/30			Iatan 345 KV		Jeffrey Energy Center 345 kV	1	345		71		1792/1792
	30393	50476	MIDW/SEPC	ITP	$85,840,000	SPP	Build 79 miles of 345 kV Spearville - Mullergren and associated terminal equipment		01/01/30		531469	Spearville 345 kV		Mullergren 345 kV	1	345		79		1792/1792

Appendix A - Complete List of Network Upgrades

NTC ID	PID	UID	Facility Owner	2013 Project Type	Cost Estimate	Estimated Cost Source	Project Description/Comments	TO Projected In-Service	SPP Determined Need Date	Project Lead Time (Mo)	From Bus Number	From Bus Name	To Bus Number	To Bus Name	Circuit	Voltages (kV)	Miles of Reconductor	Miles of New Line	Miles of Voltage Conversion	Ratings
	30393	50477	MIDW/WR	ITP	$85,840,000	SPP	Build 79 miles of 345 kV Mullergren - Circle and associated termila equipment		01/01/30			Mullergren 345 kV		Circle 345 kV	1	345		79		1792/1792
	30393	50478	WR	ITP	$6,519,500	SPP	Build six miles of 345 kV Circle - Reno and associated terminal equipment		01/01/30			Circle 345 kV		Reno 345 kV	1	345		6		1792/1792
	30393	50481	MIDW	ITP	$6,000,000	SPP	Install new 345/230 kV 448 MVA Mullergren Transformer		01/01/30			Mullergren 345 kV		Mullergren 230 kV	1	345/230				448/448
	30394	50479	NPPD	ITP	$5,625,000	SPP	Build 5 miles of 345 kV Keystone – Ogallala and associated equipment.		01/01/30			Keystone 345 IV		Ogallala 345 kV	1	345		5		1792/1792
	30394	50480	NPPD	ITP	$6,000,000	SPP	Install new 345/230 kV 448 MVA Ogallala Transformer		01/01/30			Ogallala 345 kV		Ogallala 230 kV	1	345/230				448/448
	30395	50483	NPPD/WAPA	ITP	$64,125,000	SPP	Grand Island - Holt Co. rebuild 76 miles of 345 kV		01/01/30			Grand Island 345 kV		Holt Co. 345 kV	1	345	76			1792/1792
	30397	50486	NPPD	ITP	$30,656,000	NPPD	Build new 16 miles 345 kV Holt - Neligh and associated terminal equipment		01/01/30			Holt 345 kV		Neligh 345 kV	1	345		16		1792/1792
	30396	50484	NPPD	ITP	$69,750,000	SPP	Build new 69 miles 345 kV Holt Co. - Shell Creek and associated terminal equipment		01/01/30			Holt Co. 345 kV		Shell Creek 345 kV	1	345		69		1792/1792
	30396	50485	NPPD	ITP	$6,000,000	SPP	Install 2nd 345/230 kV MVA Shell Creek Transformer		01/01/30			Shell Creek 345 kV		Shell Creek 230 kV	2	345/230				336/420
	30398	50487	NPPD	ITP	$6,000,000	SPP	Install new 345/115 kV 420 MVA Columbus East Transformer		01/01/30			Columbus East 345 kV		Columbus East 115 kV	2	345/115				336/420
	30399	50488	NPPD	ITP	$6,000,000	SPP	Install 2nd 345/230 kV 420 MVA Hoskins Transformer		01/01/30			Hoskins 345 kV		Hoskins 230 kV	2	345/230				336/420
	30399	50489	NPPD	ITP	$6,000,000	SPP	Install 2nd 345/115 420 MVA kV Hoskins Transformer		01/01/30			Hoskins 345 kV		Hoskins 115 kV	2	345/115				336/420
	30399	50490	NPPD/OPPD	ITP	$193,380,000	NPPD/OPPD	Build 120 miles 345 kV new Hoskins - Ft. Calhoun and associated terminal equipment		01/01/30			Hoskins 345 kV		Ft. Calhoun 345 kV	1	345		120		1792/1792
	30400	50491	OPPD	ITP	$46,875,000	SPP	Build new 23 miles 345 kV Ft Calhoun - S3454 and associated terminal equipment		01/01/30			Ft Calhoun 345 kV		S3454 345 kV	1	345		23		1792/1792
	30401	50492	OPPD	ITP	$36,750,000	SPP	Build new 23 miles 345 kV Cass Co. - S.W. Omaha (aka S3454) and associated terminal equipment		01/01/30			Cass Co 345 kV		S.W. Omaha (Sub 3454) 345 kV	1	345		23		1792/1792
	30402	50493	OPPD	ITP	$6,000,000	SPP	Install 2nd 345/161 kV 560 MVA S3459-S1209 transformer		01/01/30			S3459 345 kV		S1209 161 kV	2	345/161				560/560
	30403	50494	SPS	ITP	$133,875,000	SPP	Build 119 new miles 345 kV Hitchland - Potter Co. and associated terminal equipment		01/01/30		523097	Hitchland 345 kV	523961	Potter Co 345 kV	1	345		119		1792/1792
	30404	50495	SPS	ITP	$121,500,000	SPP	Build new 90 miles 345 kV Tolk - Potter Co. and associated terminal equipment		01/01/30			Tolk 345 kV		Potter Co. 345 kV	1	345		90		1792/1792
	30393	50482	WR	ITP	$6,000,000	SPP	Install new 345/230 kV 448 MVA Circle Transformer		01/01/30			Circle 345 kV		Circle 230 kV	1	345/230				448/448
	30405	50496	WR	ITP	$54,000,000	SPP	Build 40 miles of 345 kV Wichita-Viola and associated terminal equipment		01/01/30			Wichita 345 kV		Viola 345 kV	1	345		40		1792/1792
	30405	50497	WR	ITP	$54,000,000	SPP	Build 40 miles of 345 kV Viola-Rose Hill and associated terminal equipment		01/01/30			Viola 345 kV		Rose Hill 345 kV	1	345		40		1792/1792

SPP Southwest Power Pool

HELPING OUR MEMBERS WORK TOGETHER
TO KEEP THE LIGHTS ON... TODAY AND IN THE FUTURE

SPP-NTC-200215

SPP
Notification to Construct with Conditions

February 19, 2013

Mr. John Fulton
Southwestern Public Service Company
P.O. Box 1261
Amarillo, TX 79105

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Fulton,

Pursuant to Section 3.3 of the Southwest Power Pool, Inc. ("SPP") Membership Agreement and Attachment O, Section VI, of the SPP Open Access Transmission Tariff ("OATT"), SPP provides this Notification to Construct ("NTC") directing Southwestern Public Service Company ("SPS"), as the Designated Transmission Owner ("DTO"), to construct the Network Upgrade(s). This NTC is conditioned upon SPS not ordering materials or beginning construction until:

(1) the DTO submits a refined NTC-C Project Estimate ("CPE") to SPP that has a variance bandwidth of -20% to +20% that does not exceed the Study Estimate variance bandwidth of -30% to +30% as provided for in SPP's Business Practices; **or**

(2) the SPP Board of Directors considers SPP's re-evaluation of a project that has a refined CPE from the DTO that exceeds the Study Estimate variance bandwidth of -30% to +30% as provided for in SPP's Business Practices.

On January 29, 2013, the SPP Board of Directors approved the Network Upgrade(s) listed below to be constructed.

New Network Upgrades

Project ID: 772
Project Name: Line - Carlisle - Wolfforth 230 kV
Need Date for Project: 6/1/2017
Estimated Cost for Project: $32,790,576

Network Upgrade ID: 11017
Network Upgrade Name: Carlisle Interchange - Wolfforth Interchange 230 kV Ckt 1

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Network Upgrade Description: Build 15 miles of new 230 kV line from Carlisle to Wolfforth South and install necessary terminal equipment.
Network Upgrade Owner: SPS
MOPC Representative(s): William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 478 MVA.
Network Upgrade Justification: To address the overload of Indiana - Stanton 115 kV Ckt 1 for the outage of Carlisle Interchange - Tuco Interchange 230 kV Ckt 1.
Estimated Cost for Network Upgrade (current day dollars): $32,790,576
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPS
Date of Estimated Cost: 11/28/2012

Project ID: 30469
Project Name: Multi - Zodiac - South Portales - Market - Portales 115 kV
Need Date for Project: 6/1/2018
Estimated Cost for Project: $24,951,218

Network Upgrade ID: 50563
Network Upgrade Name: South Portales - Zodiac 115 kV Ckt 1
Network Upgrade Description: Build 2.2 miles of 115 kV from Zodiac to South Portales 115 kV and install necessary terminal equipment.
Network Upgrade Owner: SPS
MOPC Representative(s): William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 175 MVA.
Network Upgrade Justification: To address the overload of Portales 115/69 kV transformers for the outage of the parallel Portales 115/69 kV transformer.
Estimated Cost for Network Upgrade (current day dollars): $5,784,673
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPS
Date of Estimated Cost: 1/3/2013

Network Upgrade ID: 50564
Network Upgrade Name: Market St. - South Portales 115 kV Ckt 1
Network Upgrade Description: Build 1.9-mile 115 kV line from South Portales to Market St. and install necessary terminal equipment.

SPP-NTC-200215

Network Upgrade Owner: SPS
MOPC Representative(s): William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 175 MVA.
Network Upgrade Justification: To address the overload of Portales 115/69 kV transformers for the outage of the parallel Portales 115/69 kV transformer.
Estimated Cost for Network Upgrade (current day dollars): $4,589,546
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPS
Date of Estimated Cost: 1/3/2013

Network Upgrade ID: 50565
Network Upgrade Name: Market St. - Portales 115 kV Ckt 1
Network Upgrade Description: Build 7-mile 115 kV line from Market St. to Portales and install necessary terminal equipment.
Network Upgrade Owner: SPS
MOPC Representative(s): William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 175 MVA.
Network Upgrade Justification: To address the overload of Portales 115/69 kV transformers for the outage of the parallel Portales 115/69 kV transformer.
Estimated Cost for Network Upgrade (current day dollars): $14,576,999
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPS
Date of Estimated Cost: 1/3/2013

Commitment to Construct

Within 90 days of this NTC, please provide to SPP a written commitment to construct the Network Upgrade(s) pursuant to Attachment O, Section VI.6 of the SPP OATT, and a construction schedule for the Network Upgrade(s). Failure to provide a sufficient written commitment to construct as required by Attachment O could result in the Network Upgrade(s) being assigned to another entity.

CPE

Please provide SPP a CPE by August 31, 2013, as described in SPP's Business Practice No. 7060 regarding Notification to Construct with Conditionss. SPS shall advise SPP of any inability to provide the CPE by August 31, 2013, as soon as the inability becomes apparent.

SPP-NTC-200215

Removal of Conditions
Upon notice by SPP of removal of the conditions contained in this NTC, SPP will issue the DTO a new NTC and the following will be applicable:

Mitigation Plan
The Need Date represents the timing required for the Network Upgrade(s) to address the identified need. Your prompt attention is required for formulation and approval of any necessary mitigation plans for the Network Upgrade(s) included in the Network Upgrade(s) if the Need Date is not feasible. Additionally, if it is anticipated that the completion of any Network Upgrade will be delayed past the Need Date, SPP requires a mitigation plan be filed within 60 days of the determination of expected delays.

Notification of Commercial Operation
Please submit a notification of commercial operation for each listed Network Upgrade to SPP as soon as the Network Upgrade is complete and in-service. Please provide SPP with the actual costs of these Network Upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Notification of Progress
Please continue to keep SPP advised of any inability on SPS's part to complete the approved Network Upgrade(s). For project tracking, SPP requires SPS to submit quarterly status updates of the Network Upgrade(s) in conjunction with the SPP Board of Directors meetings. However, SPS shall also advise SPP of any inability to comply with the Project Schedule as soon as the inability becomes apparent.

All terms and conditions of the SPP OATT and the SPP Membership Agreement shall apply to this Project, and nothing in this NTC shall vary such terms and conditions.

Don't hesitate to contact me if you have questions or comments regarding these instructions. Thank you for the important role that you play in maintaining the reliability of our electric grid.

Sincerely,

Lanny Nickell

Lanny Nickell
Vice President, Engineering
Phone: (501) 614-3232 • Fax: (501) 482-2022 • lnickell@spp.org

SPP Southwest Power Pool

HELPING OUR MEMBERS WORK TOGETHER
TO KEEP THE LIGHTS ON... TODAY AND IN THE FUTURE

SPP-NTC-200215

cc: Carl Monroe - SPP
Katherine Prewitt - SPP
William Grant - SPS

201 WORTHEN DRIVE | LITTLE ROCK, ARKANSAS 72223-4936 | 501-614-3200 | SPP.ORG

Riley Hill
President and Chief Executive Officer-
Southwestern Public Service Company

600 S. Tyler Str, Suite 29B01
Amarillo, TX 79101
clyde.r.hill@xcelelnergy.com
Phone: 806.378.2922

Mr. Lanny Nickell, Vice President
Southwest Power Pool
201 Worthen Drive
Little Rock, AR 72223-4936

May 14, 2013

RE: SPP-NTC-200215 with Conditions, dated February 19, 2013

Dear Mr. Nickell:

Southwestern Public Service Company ("SPS") hereby responds to the Southwest Power Pool ("SPP") Notification to Construct ("NTC") dated February 19, 2013, referred to as SPP-NTC-200215. The NTC seeks a commitment from SPS to construct 2 projects and 4 upgrades that have been assigned to SPS. As detailed below, this response will constitute SPS's commitment, under Attachment O, Section VI of the SPP Open Access Transmission Tariff, to construct the project identified in SPP-NTC-200215.

The SCERT estimate forms will be provided separately by the date required in the NTC.

As SPS completes its detailed design and engineering and internal capital budgeting processes for the upgrade, updated project scheduling information will be provided to the SPP through the Quarterly Tracking reports.

As with any Transmission Owner receiving an SPP NTC for new transmission projects, SPS's commitment to construct the SPP-NTC-200215 project listed below also includes its intent to work with SPP to review the scope and configuration of any project should the subsequent development of a future contingency or change in circumstance affect the design, scope, or need for a project as currently planned. Such contingencies could include, but would not be limited to, SPS's obtaining all necessary local, state, and federal governmental approvals, the necessary corporate governance approvals within Xcel Energy for the related capital expenditures, adequate regulatory treatment that ensure cost recovery, or the option to assign the construction of a project(s) to an SPS affiliate, with SPP's approval. Also, wholesale customers on the SPS system are changing their system resource and operation plans, which may drive additional SPS work with SPP to address any relevant changes in circumstance which may affect certain associated projects.

The projects identified in SPP-NTC-200215 are:

New Network Upgrades

Upgrade ID: 11017
Upgrade Description: Build 15 miles of new 230 kV line from Carlisle to Wolfforth South and install necessary terminal equipment.

Upgrade ID: 50563
Upgrade Description: Build 2.2 miles of 115 kV from Zodiac to South Portales 115 kV and install necessary terminal equipment.

Upgrade ID: 50564
Upgrade Description: Build 1.9-mile 115 kV line from South Portales to Market St. and install necessary terminal equipment.

Upgrade ID: 50565
Upgrade Description: Build 7-mile 115 kV line from Market St. to Portales and install necessary terminal equipment.

Finally, SPS would note that, to the extent that any significant changes in future loads or load forecasts occur that may affect the planned configurations or need for new upgrade project numbers 11017, 50563, 50564, and 50565, SPS will work with SPP to re-evaluate these projects. Additionally, for any project where SPS shows an in-service date beyond the desired Need Date reflected in the NTC, SPS will provide mitigations within 60 days of the date of this letter.

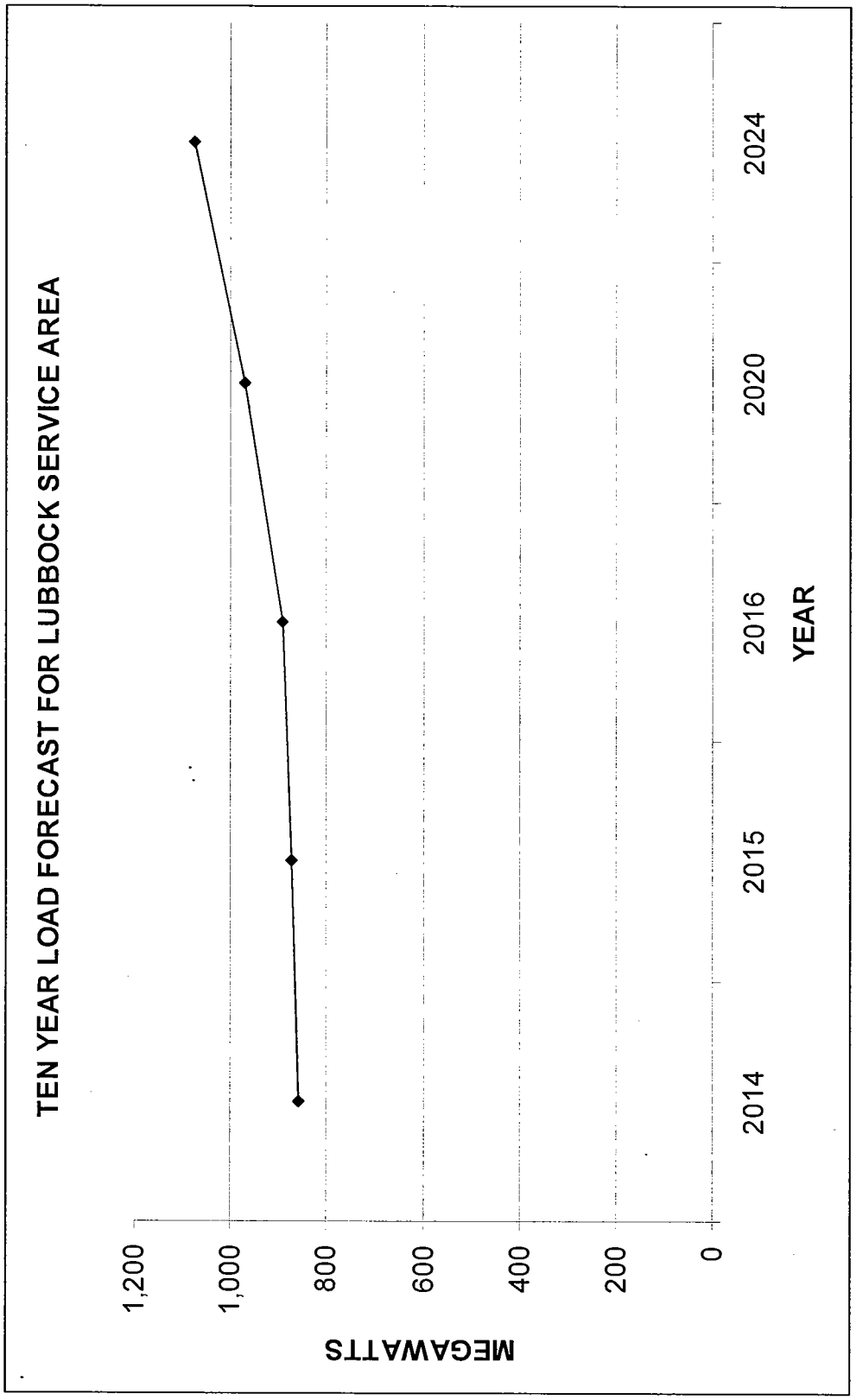
Should there be any questions, please feel free to contact Mr. John Fulton of SPS.

Sincerely,

Riley Hill

Riley Hill
President and Chief Executive Officer

Cc: Bob Lux, Jody Holland – SPP
Teresa Mogensen, Ian Benson, Bruce Cude, Bill Grant, Gerald Deaver – Xcel Energy



YEAR	2014	2015	2016	2020	2024
MW	856.1	872.6	890.0	969.3	1076.6

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

VIA FIRST CLASS MAIL

«First_Name»
«Address_1»
«City», «State» «Zip»

Dear Landowner:

Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 42729

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Your land may be directly affected by the outcome of this docket. If one of SPS's alternative routes is approved by the Public Utility Commission of Texas (Commission or PUC), SPS will have the right to

build a facility, which may directly affect your land. This docket will not determine the value of your land or the value of an easement if one is needed by SPS to build the facility. If you have questions about the transmission line you may contact Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868. A map of SPS's proposed routes is included with this letter, along with a written description of the segments that comprise the proposed routes. Larger, more detailed routing maps may be viewed at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

All routes and route segments included in this notice are available for selection and approval by the Commission.

The PUC has a brochure entitled "Landowners and Transmission Line Cases at the PUC" that provides basic information about how you may participate in this docket, and how you may contact the PUC. Please read this brochure carefully. The brochure includes sample forms for making comments and for making a request to intervene as a party in this docket. Copies of the brochure are enclosed and are also available from Nisha Patel at 806-378-2713 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

In addition to the contacts listed in the brochure, you may call the PUC's Customer Assistance Hotline at 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. If you wish to participate in this proceeding by becoming an intervenor, the deadline for intervention in the proceeding is October 6, 2014, and the PUC should receive a letter from you requesting intervention by that date. Mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Ave.
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is mailed to the PUC. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket. The enclosed brochure explains how you can access these filings.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights
Enclosures

Southwestern Public Service Company
Wolfforth to Carlisle
230-kV Transmission Line Project

Segment Descriptions

ROUTE	ROUTE COMPOSITION (SEGMENTS)	LENGTH (miles)
A	2-7-19-26-41-46-53-54-56-58-61-64	22.84
B	2-7-19-26-40-42-43-46-53-54-57-59-60-61-64	22.85
C	2-7-19-26-41-43-45-51-52-53-54-56-58-61-64	22.94
D	2-6-8-19-26-40-44-48-50-52-53-54-57-59-62-63-64	18.83
E	3-5-8-19-26-40-44-47-59-62-63-64	18.44
F	1-9-10-13-22-33-38	11.10
G	1-9-10-12-14-17-20-21-22-33-38	11.66
H	3-5-8-16-15-17-20-23a-23c-25-31-32-33-38	12.96
I	2-6-8-16-18-20-23a-23b-28-29-35-36-37-38	12.88
J	2-6-8-19-24a-28-29-35-36-37-38	12.82
K	2-6-8-19-24a-24b-25-31-34-36-37-38	12.73
L	2-6-8-19-24a-28-29-30-31-34-36-37-38	12.93
M	2-6-8-19-27-29-30-31-34-36-39-63-64	13.05
N	3-4-11-14-17-20-21-22-33-38	11.01

Segment 1
Segment 1 begins at the southeast corner of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 1 exits the substation to the south and immediately crosses an existing 230-kV transmission line and FM 1585, and enters the northwest portion of Section 26. From here the segment travels east, paralleling the south side of FM 1585 along the northern boundary of Section 26 for approximately 0.6 mile and reaches a railroad track west of U.S. Highway (US) 62/82. It angles northeast and parallels the northwest side of the railroad track, crosses FM 1585 and the existing 230-kV transmission line and enters the southwest corner of Section 32. From this point it continues northeast, paralleling the northwestern side of the railroad track for approximately 0.6 mile and terminates at its junction with Segment 9, in the south-central portion of Section 32 on the northwestern side of the railroad track west of US 62/82.

Segment 2
Segment 2 begins on the west side of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 2 exits the substation and runs west approximately 300 feet, then angles southwest and extends an additional 275 feet where it reaches an existing 230-kV transmission line. Then the segment angles west and extends approximately 0.1 mile paralleling the northern side of the 230-kV transmission line, north of FM 1585, along the southern boundary of Section 29. There it crosses an existing 115-kV transmission line and continues approximately 200 ft where it terminates at the junction of segments 6 and 7 northeast of the FM 1585 and County Road (CR) 1100 intersection in the southwest corner of Section 29.

Segment 3
Segment 3 begins on the northeast side of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 3 extends north approximately 580 feet, paralleling the east side of two existing 115-kV transmission lines and terminates at the junction of segments 4 and 5, south of an existing 115-kV transmission line in the southwestern portion of Section 29.

Segment 4
Segment 4 begins at the junction of segments 3 and 5, south of an existing 115-kV transmission line in the southwestern portion of Section 29 in Lubbock County. Segment 4 extends northeast, paralleling the south side of the existing 115-kV transmission line for approximately 0.8 mile and enters Section 32. From there, it continues paralleling the south side of the existing 115-kV transmission line for approximately 0.6 mile, crosses into Section 23, and terminates at the junction of segments 9, 10, and 11, on the south side of the existing 115-kV transmission line approximately 0.5 mile west of the CR 1300 and 5th Street intersection.

Segment 5
Segment 5 begins at its junction with segments 3 and 4, south of an existing 115-kV transmission line in the southwestern portion of Section 29 in Lubbock County. It extends north approximately 90 feet, where it crosses an existing 115-kV transmission line, turns west, and extends across cropland approximately 0.3 mile where it terminates at the junction of segments 6 and 8, on the east side of CR 1100 adjacent to the western boundary of Section 29, approximately 0.2 mile north of the FM 1585 and CR 1100 intersection.

Segment 6
Segment 6 begins at the junction of segments 2 and 7, northeast of the FM 1585 and CR 1100 intersection in the southwest corner of Section 29 in Lubbock County. It extends north, paralleling the east side of CR 1100 along the western boundary of Section 29, for approximately 0.2 mile, and terminates at the junction of segments 5 and 8.

Segment 7
Segment 7 begins at the junction of segments 2 and 6, northeast of the FM 1585 and CR 1100 intersection in the southwest corner of Section 29 in Lubbock County. It extends west immediately crossing CR 1100 and enters the southeast corner of Section 30. It parallels the north side of an existing 230-kV transmission line along the southern boundary of Section 30 for approximately 0.5 mile, then turns north and extends approximately 1.0 mile paralleling the west side of a property line to the northern boundary of Section 30. At this point, the segment turns west and extends approximately 0.5 mile along the northern boundary of Section 30 to the east side of FM 2378. Here, the segment turns north and extends approximately 1.0 mile paralleling the east side of FM 2378 along the western boundary of Section 27 to the southeast corner of the FM 2378 and CR 7100 intersection. The segment then turns east and parallels the south side of CR 7100 along the northern boundary of Section 27 for approximately 1.0 mile where it crosses CR 1100 and terminates at the junction of segments 8, 16, and 19, southeast of the CR 7100 and CR 1100 intersection, in the northwest corner of Section 28.

Segment 8
Segment 8 begins at the junction of segments 5 and 6, on the east side of CR 1100, adjacent to the western boundary of Section 29, approximately 0.2 mile north of the FM 1585 and CR 1100

intersection in Lubbock County. It extends north, paralleling the east side of CR 1100 for approximately 1.7 miles along the western boundaries of Section 29 and 28, respectively. It terminates at the junction of segments 7, 16, and 19, southeast of the CR 7100 and CR 1100 intersection, in the northwest corner of Section 28.

Segment 9
Segment 9 begins at its junction with Segment 1, in the south-central portion of Section 32 on the northwestern side of a railroad track west of US 62/82 in Lubbock County. The segment extends north across agricultural fields for approximately 0.7 mile, crosses into Section 23, and terminates at the junction of segments 4, 10, and 11, on the south side of an existing 115-kV transmission line approximately 0.5 mile west of the CR 1300 and 5th Street intersection.

Segment 10
Segment 10 begins at the junction of segments 4, 9, and 11 north of the southern boundary of Section 23 approximately 0.5 mile west of the CR 1300 and 5th Street intersection in Lubbock County. From this junction, segment 10 extends east, paralleling the north side of the southern boundary of Section 23 for approximately 0.4 mile. There, it angles northeast and extends approximately 0.2 mile and terminates at the junction of segments 12 and 13, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300, approximately 0.2 mile north of the CR 1300 (Quitsna Ave.) and 5th Street intersection.

Segment 11
Segment 11 begins at the junction of segments 4, 9, and 10, north of the southern boundary of Section 23 and the south side of an existing 115-kV transmission line, approximately 0.5 mile west of the CR 1300 (Quitsna Ave.) and 5th Street intersection in Lubbock County. Segment 11 extends northeast, paralleling the south side of an existing 115-kV transmission line for approximately 0.60 mile, where it terminates at the junction of segments 12 and 14, along the eastern boundary of Section 23, south of an existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.).

Segment 12
Segment 12 begins at the junction of segments 10 and 13, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300 (Quitsna Ave.), approximately 0.2 mile north of the CR 1300 and 5th Street intersection in Lubbock County. From this point it extends north, parallel to the west side of the pipeline along the eastern boundary of Section 23 for approximately 0.2 mile, where it terminates at the junction of segments 11 and 14, along the eastern boundary of Section 23, south of the existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.).

Segment 13
Segment 13 begins at the junction of segments 10 and 12, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300 (Quitsna Ave.), approximately 0.2 mile north of the CR 1300 (Quitsna Ave.) and 5th Street intersection in Lubbock County. From there it extends east, immediately crossing the pipeline and CR 1300 (Quitsna Ave.) and enters Section 24, where it continues east for approximately 0.3 mile. There it angles slightly northeast and extends approximately 0.4 mile until it reaches the western side of a railroad track. It then angles further northeast, and parallels the northwest side of railroad tracks for approximately 0.3 mile where it crosses FM 179 (Dowden Rd.) into Section 25. The segment continues to parallel the northwest side of the railroad tracks for approximately 0.6 mile, then angles east, extends approximately 0.1 mile to cross to the southeastern side of the railroad tracks, then angles slightly northeast. At this point, Segment 13 parallels the southeast side of the railroad tracks for

approximately 0.2 mile, and angles north for approximately .1 mile to cross back to the northwest side of the railroad tracks at CR 7100 (Donald Preston Drive), and into the southeast corner of Section 32. The segment then parallels the northwest side of the railroad tracks approximately 0.2 mile and reaches the eastern boundary of Section 32 at CR 1500 (Alcove Avenue). Segment 13 then turns north to parallel the west side of CR 1500 (Alcove Ave.) along the eastern boundary of Section 32 for approximately 0.6 mile where it crosses an existing 115-kV transmission line, then continues north to parallel the west side of CR 1500 (Alcove Ave.) an additional 0.2 mile where it crosses CR 7000 and an existing 69-kV transmission line and enters the southeast corner of Section 33. The segment then continues north, paralleling the west side of CR 1500 and the eastern boundary of Section 33 for approximately 0.4 mile where it angles slightly northeast, and crosses to the east side of CR 1500 and enters the western boundary of Section 34. From there, the segment parallels the east side of CR 1500 along the western boundary of Section 34 to the north for approximately 0.5 mile where it crosses CR 6900 and terminates at the junction of segments 21 and 22, northeast of the CR 1500 and CR 6900 intersection, in the southwest corner of Section 39.

Segment 14
Segment 14 begins at the junction of segments 11 and 12 along the eastern boundary of Section 23, south of the existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.) in Lubbock County. It extends north, immediately crossing the 115kV transmission line and paralleling the west side of the pipeline and CR 1300 along the eastern boundary of Section 23 for approximately 0.6 mile, where it terminates at the junction of segments 15 and 17, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23, just west of the existing pipeline.

Segment 15
Segment 15 begins at the junction of segments 16 and 18, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28 in Lubbock County. It extends east, crosses into Section 23, and parallels the south side of CR 7100 along the northern boundary of Section 23 for approximately 1.0 mile. It then terminates at the junction of segments 14 and 17, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23, just west of an existing pipeline.

Segment 16
Segment 16 begins at the junction of segments 7, 8, and 19, southeast of the CR 7100 and CR 1100 intersection in the northwest corner of Section 28 in Lubbock County. It extends east, parallel to the south side of CR 7100 and the northern boundary of Section 28 for approximately 1.0 mile where it terminates at the junction of segments 15 and 18, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28.

Segment 17
Segment 17 begins at the junction of segments 14 and 15, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23 in Lubbock County, just west of an existing pipeline. It extends northeast and immediately crosses a pipeline, CR 7100, and CR 1300 (Quitsna Ave.) and enters the southwest corner of Section 21. It then extends north, paralleling the east side of CR 1300 along the western boundary of Section 21, for approximately 0.8 mile where it crosses a pipeline. It then parallels the east side of CR 1300 (Quitsna Ave.) and the western boundary of Section 21 for approximately 0.1 mile and terminates at the junction of segments 18 and 20, southwest of the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21.

Segment 18
Segment 18 begins at the junction of segments 15 and 16, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28 in Lubbock County. It extends north, immediately crossing CR 7100 and enters the southeast corner of Section 19. It parallels the west side of CR 1200 along the eastern boundary of Section 19 for approximately 0.6 mile, where it crosses a pipeline. From there, it angles slightly northeast and crosses CR 1200 into the northwestern portion of Section 22. The segment then parallels the east side of CR 1200 along the western boundary of Section 22 to the north for approximately 0.2 mile to the northwest corner of Section 22 (southeast of the CR 1200 and CR 7000 intersection). The segment then turns east and parallels the south side of CR 7000 along the northern boundary of Section 22 for approximately 1.0 mile and crosses CR 1300 (Quitsna Ave.). The segment terminates at the junction of segments 17 and 20, southeast of the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21.

Segment 19
Segment 19 begins at the junction of segments 7, 8, and 16, southeast of the CR 7100 and CR 1100 intersection in the northwest corner of Section 28 in Lubbock County. It extends north and immediately crosses CR 7100 into the southwest corner of Section 19, and parallels the east side of CR 1100 along the western boundary of Section 19 for approximately 0.4 mile where it crosses a pipeline. It then continues to parallel the western boundary of Section 19 approximately 0.6 mile and crosses CR 7000, enters the southwest corner of Section 18, and crosses an existing 69-kV transmission line. The segment continues north paralleling the east side of CR 1100 along the western boundary of Section 18 for approximately 1.0 mile, where it crosses CR 6900 and enters the southwest corner of Section 15. The segment continues north paralleling the east side of CR 1100 along the western boundary of Section 15 for approximately 1.0 mile, and terminates at its junction with the segments 24a, 26, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15.

Segment 20
Segment 20 begins at the junction of segments 17 and 18, southeast the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21 in Lubbock County. It extends north immediately crossing CR 7000, enters the southwest corner of Section 10, and crosses an existing 69-kV transmission line. It continues north paralleling the east side of CR 1300 (Quitsna Ave.) along the western boundary of Section 10 for approximately 0.8 mile to a point where the segment angles northeast. From that point, it extends northeast approximately 0.2 mile and terminates in Section 10 at the junction of segments 21 and 23a on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) .

Segment 21
Segment 21 begins at the junction of segments 20 and 23a, in the northwestern portion of Section 10 on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) in Lubbock County. It parallels the south side of CR 6900 along the northern boundary of Section 10 to the east for approximately 0.4 mile and crosses a pipeline. The segment continues paralleling the south side of CR 6900 to the east approximately 0.4 mile and angles slightly northwest. From there, it extends 0.1 mile and crosses to the northern side of CR 6900 in the southeastern corner of Section 7, then crosses FM 179 and enters the southwestern corner of Section 40. The segment parallels the north side of CR 6900 along the southern boundary of Section 40 for approximately 1.0 mile, crosses CR 1500 and terminates at the junction of segments 13 and 22 northeast of the CR 1500 and CR 6900 intersection in the southwest corner of Section 39.

Segment 22
Segment 22 begins at the junction of segments 13 and 21, northeast of the CR 1500 and CR 6900 intersection in the southwest corner of Section 39 in Lubbock County. It proceeds east, paralleling the north side of CR 6900 along the southern boundary of Section 39 for approximately 0.5 mile. The segment then turns north, and parallels property lines in the center of Section 39 for approximately 0.9 mile. It angles slightly northeast, crosses a railroad track, then continues north approximately 0.1 mile where it crosses CR 6800 (34th Street) and an existing 115-kV transmission line adjacent to the southern boundary of Section 42. The segment terminates at the junction of segments 32 and 33, on the north side of CR 6800 (34th Street) along the southern boundary of Section 42 approximately 0.5 mile west of CR 1600 (Upland Avenue).

Segment 23a
Segment 23a begins at the junction of segments 20 and 21, in the northwestern portion of Section 10 on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) in Lubbock County. It extends north, immediately crossing CR 6900 into Section 7 and parallels a property line for approximately 0.5 mile. It then angles northwest and extends northwest for approximately 0.1 mile to the western boundary of Section 7. The segment then angles north and parallels the east side of CR 1300 (Quitsna Ave.) along the western boundary of Section 7 for approximately 0.3 mile, where it terminates at the junction of segments 23b and 23c, southeast of the CR 1300 and CR 6800 (34th Street) intersection in the northwest corner of Section 7.

Segment 23b
Segment 23b begins at the junction of segments 23a and 23c, southeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the northwest corner of Section 7 in Lubbock County. It extends north 170 feet, immediately crossing CR 6800 (34th Street) and enters the southwest corner of Section 6. It terminates at the junction of segments 24a, 24b, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6.

Segment 23c
Segment 23c begins at the junction of segments 23a and 23b, southeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the northwest corner of Section 7 in Lubbock County. It parallels the south side of CR 6800 (34th Street) along the northern boundary of Section 7 for approximately 565 ft and terminates at the junction of segments 24b and 25 on the south side of CR 6800 (34th Street) along the northern boundary of Section 7 approximately 0.1 mile east of CR 1300 (Research Blvd.).

Segment 24a
Segment 24a begins at the junction of segments 19, 26, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It angles northeast and extends approximately 0.2 mile crossing CR 6800 into the southwest portion of Section 12. It angles east and parallels the north side of CR 6800 along the southern boundary of Section 12 for approximately 0.8 mile where it crosses CR 1200 into Section 5. The segment then continues east paralleling the north side of CR 6800 along the southern boundary of Section 5 for approximately 1.0 mile, where it crosses CR 1300 (Research Blvd.) into Section 6, and terminates at the junction of segments 23b, 24b, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6.

Segment 24b
Segment 24b begins at the junction of segments 23b, 24a, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6 in

Lubbock County. It extends southeast a total of approximately 0.1 mile, crossing CR 6800 (34th Street) into Section 7, and terminating at the junction of segments 23c and 25 on the south side of CR 6800 (34th Street) along the northern boundary of Section 7, approximately 0.1 mile east of CR 1300 (Research Blvd.).

Segment 25
Segment 25 begins at the junction of segments 23c and 24b on the south side of CR 6800 (34th Street) along the northern boundary of Section 7, approximately 0.1 mile east of CR 1300 (Research Blvd.) in Lubbock County. It parallels the south side of CR 6800 (34th Street), along the northern border of Section 7 to the east for approximately 0.4 mile, and crosses a pipeline. It then continues east approximately 0.4 mile, angles northeast and extends 0.1 mile as it crosses CR 6800 (34th Street) and enters the southeast corner of Section 6, northwest of the CR 6800 (34th Street) and FM 179 (Inler Ave.) intersection. At this point, it turns north and parallels the western side of FM 179 (Inler Ave.) along the eastern boundary of Section 6 for approximately 0.3 mile. It then angles northeast, and extends approximately 0.1 mile as it crosses FM 179 (Inler Ave.), enters Section 41 and crosses a railroad track. It terminates at the junction of segments 30 and 31, on the north side of the railroad tracks, east of FM 179 (Inler Ave.), along the western boundary of Section 41.

Segment 26
Segment 26 begins at the junction of segments 19, 24a, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It extends west and immediately crosses CR 1100 into Section 16. It parallels the south side of CR 6800 along the northern boundary of Section 16 for approximately 0.5 mile, where it angles northwest and crosses CR 6800 into the southern portion of Section 11. From there, the segment turns west and parallels the north side of CR 6800 along the southern boundary of Section 11 for approximately 0.4 mile, where it angles northwest and extends 0.1 mile to the eastern side of FM 2378 along the western boundary of Section 11. Here, the segment turns north and parallels the east side of FM 2378 along the western boundary of Section 11 for approximately 0.9 mile to the northwest corner of Section 11, southeast of the FM 2378 and CR 6700 intersection. The segment then angles northeast and extends approximately 415 ft, crosses CR 6700 into Section 13, then angles back to the northwest and extends approximately 0.2 mile and crosses to the west side of FM 2378 into Section 14. It parallels the west side of FM 2378 for an approximate total of 0.2 mile as it crosses a railroad track and State Highway (SH) 114 into Section 14. The segment angles northeast and crosses to the east side of FM 2378 along the western boundary of Section 13. It turns north, and parallels the east side of FM 2378 along the western boundary of Section 13 for approximately 0.5 mile to the northwest corner of Section 13. There, it turns east and parallels the south side the northern boundary of Section 13 for approximately 1.0 mile to the northeast corner of Section 13, just west of CR 1100. Segment 26 then turns north, crosses into Section 47, and parallels the west side of CR 1100 along the eastern boundary of Section 47 for approximately 1.0 mile where it crosses CR 6500 into Section 46. The segment then continues north paralleling, the west side of CR 1100 along the eastern boundary of Section 46 for approximately 0.9 mile and crosses a pipeline. It parallels the west side of CR 1100 for approximately 0.1 mile to the northeast corner of Section 46 (southwest of the CR 1100 and CR 6400 intersection). It angles northeast and stretches into the southwest corner of Section 56, northwest of the CR 1100 and CR 6400 intersection and terminates at the junction of segments 40 and 41.

Segment 27
Segment 27 begins at the junction of segments 19, 24a, and 26, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It extends north, immediately crossing CR 6800 into the southwest corner of Section 12, and parallels the east side

of CR 1100 along the western boundary of Section 12 for approximately 0.5 mile. There it turns east and parallels a property line for approximately 1.0 mile where it crosses CR 1200 just south of the CR 1200 and CR 6740 intersection into Section 5. It continues east paralleling the south side of a property line for approximately 0.5 mile, where it angles northeast, extends 0.1 mile, and turns back to the east just south of another property line. It parallels the property line for approximately 0.5 mile, and crosses CR 1300 (Research Blvd.) into Section 6. Segment 27 terminates at the junction of segments 28 and 29, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track.

Segment 28
Segment 28 begins at the junction of segments 23b, 24a and 24b northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6 in Lubbock County. It proceeds north, paralleling the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 for approximately 0.5 mile, and terminating at the junction of segments 27 and 29, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track.

Segment 29
Segment 29 begins at the junction of segments 27 and 28, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track in Lubbock County. It extends east approximately 0.5 mile, paralleling a property line the final 0.2 mile. It terminates at the junction of segments 30 and 35 on the south side of a railroad track and the west side of a pipeline in the central portion of Section 6.

Segment 30
Segment 30 begins at the junction of segments 29 and 35 on the south side of a railroad track and the west side of a pipeline in the central portion of Section 6 in Lubbock County. It extends southeast, immediately crossing the pipeline, and parallels the south side of the railroad track for approximately 0.5 mile. It angles to the east, and crosses FM 179 (Inler Ave.) and the railroad track into Section 41. It terminates at the junction of segments 25 and 31, east of FM 179 (Inler Ave.) and north of railroad tracks just east of the western boundary of Section 41.

Segment 31
Segment 31 begins at the junction of segments 25 and 30, east of FM 179 (Inler Ave.) and north of railroad tracks just east of the western boundary of Section 41 in Lubbock County. It extends southeast, paralleling the north side of a railroad track for approximately 0.5 mile where the segment terminates at the junction of segments 32 and 34, east of a property line on the north side of the railroad tracks in the south-central portion of Section 41.

Segment 32
Segment 32 begins at the junction of segments 31 and 34, east of a property line on the north side of a railroad track in the south-central portion of Section 41 in Lubbock County. It extends southeast, paralleling the north side of the railroad track for approximately 0.5 mile and crosses CR 1500 (Alcove Ave.), and enters Section 42. It parallels the north side of the railroad track approximately 0.2 mile and turns east. It then parallels the north side of CR 6800 (34th Street) for approximately 0.1 mile and crosses an existing 115-kV transmission line. It then extends an additional 0.2 mile parallel to the north side of the existing 115-kV transmission line, north of CR 6800 (34th Street), and terminates at the junction of segments 22 and 33 on the north side of 34th Street along the southern boundary of Section 42 approximately 0.5 mile west of the CR 6800 (34th Street) and CR 1600 (Upland Avenue) intersection.

Segment 33
Segment 33 begins at the junction of segments 22 and 32 north of an existing 115-kV transmission line on the north side of CR 6800 (34th Street) along the southern boundary of Section 42, approximately 0.5 mile west of the CR 6800 (34th Street) and CR 1600 (Upland Ave.) intersection in Lubbock County. It extends north approximately 0.5 mile paralleling a property line across an open field to the south side of 26th Street. At that point, it turns east and parallels the south side of 26th street for approximately 0.5 mile. The segment then angles to the northeast and crosses the 26th Street and CR 1600 (Upland Ave.) intersection, enters the western portion of Section 43, and an existing 69-kV transmission line. It angles and extends east, paralleling the north side of 26th Street for approximately 0.4 mile to the west side of two existing transmission lines. The segment then turns north and parallels the west side of the existing transmission lines for approximately 0.5 mile, crosses SH 114 (19th Street), enters the southern portion of Section 10, and parallels the existing transmission lines to the north an additional 0.5 mile. Segment 33 terminates at the junction of segments 37 and 38 on the west side of two existing transmission lines, approximately 0.5 mile east of the 12th Street and CR 1600 (Upland Ave.) intersection in the center of Section 10.

Segment 34
Segment 34 begins at the junction of segments 31 and 32 east of a property line on the north side of a railroad track in the south-central portion of Section 41 in Lubbock County. It extends north, paralleling a property line for approximately 0.7 mile where it angles slightly to the northeast. It extends approximately 0.1 mile and crosses SH 114 (19th Street) and enters the southern portion of Section 2 at a point approximately 0.5 mile west of the SH 114 (19th Street) and CR 1500 (Alcove Ave.) intersection. The segment then turns back to the north and parallels a property line to the north for approximately 0.5 mile and terminates at the junction of segments 35 and 36 in the center of Section 2.

Segment 35
Segment 35 begins at the junction of segments 29 and 30 on the south side of a railroad track and the west side of a pipeline in the center of Section 6 in Lubbock County. It extends north parallel to the west side of the pipeline and immediately crosses the railroad track, then parallels the pipeline approximately 0.2 mile and crosses a rail spur that curves west. From there, it parallels the west side of the pipeline, which is now west of a railroad track, to the north for approximately 0.3 mile and crosses SH 114 (19th Street) and enters Section 3. It continues to parallel the pipeline to the north approximately 0.2 mile, angles to the northeast and crosses the pipeline, and then parallels the northwest side of the railroad track to the northeast for approximately 0.6 mile. The segment then turns east and crosses the railroad track and extends 0.1 mile, where it crosses FM 179 (Inler Ave.) and enters the northwestern portion of Section 2, approximately 0.3 mile south of FM 2255 (4th Street). It continues east paralleling a property line for approximately 0.5 mile, and turns south and parallels a property line for approximately 0.2 mile. At this point, the segment angles to the southeast, extends approximately 170 feet, crosses a property line and terminates at the junction of segments 34 and 36, in the center of Section 2.

Segment 36
Segment 36 begins at the junction of segments 34 and 35 in the center of Section 2 in Lubbock County. It parallels a property line to the east for approximately 0.5 mile, crosses CR 1500 (Alcove Ave.), and terminates at the junction of segments 37 and 39, northeast of the CR 1500 (Alcove Ave.) and 12th Street intersection adjacent to the western boundary of Section 1.

Segment 37
Segment 37 begins at the junction of segments 36 and 39, northeast of the CR 1500 (Alcove Ave.) and 12th Street intersection adjacent to the western boundary of Section 1 in Lubbock County. It

extends east paralleling the north side of 12th Street for approximately 0.2 mile to a point where 12th Street ends, and then parallels the north side of a property line 0.3 mile. It then angles slightly southeast and extends approximately 0.5 mile following a property line to CR 1600 (Upland Ave.). Segment 37 crosses CR 1600 (Upland Ave.), enters the western boundary of Section 10 just south of 12th Street, and crosses an existing 69-kV transmission line. The segment then extends to the east an additional 0.5 mile where it terminates at the junction of segments 33 and 38 on the west side of two existing transmission lines in the center of Section 10.

Segment 38
Segment 38 begins at the junction of segments 33 and 37 on the west side of two existing transmission lines, approximately 0.5 mile east of the 12th Street and CR 1600 (Upland Avenue) intersection in the center of Section 10 in Lubbock County. It extends north, paralleling the western side of two existing 115-kV transmission lines for approximately 0.4 mile and terminates at the Carlisle Substation in the north-central portion of Section 10.

Segment 39
Segment 39 begins at the junction of segments 36 and 37, northeast of the CR 1500 (Alcove Avenue) and 12th Street intersection along the western boundary of Section 1 in Lubbock County. It proceeds north, parallel to the east side of CR 1500 (Alcove Avenue), along the western boundary of Section 1 for approximately 0.5 mile to the northwest corner of Section 1, southeast of the FM 2255 (4th Street) and CR 1500 (Alcove Ave.) intersection. It turns east and parallels south of FM 2255 (4th Street) along the northern boundary of Section 1 for approximately 0.1 mile. The segment then angles northeast and crosses FM 2255 (4th Street) and enters the southwest corner of Section 4. It then parallels the north side of FM 2255 (4th Street) along the southern boundary of Section 4 for approximately 0.9 mile where it crosses CR 1600 (Upland Avenue) and terminates at the junction of segments 62 and 63, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Ave.) intersection in the southwest corner of Section 3.

Segment 40
Segment 40 begins at the junction of segments 26 and 41 in the southwest corner of Section 56, northeast of the CR 1100 and CR 6400 intersection in Lubbock County. It extends east paralleling north of the Section 56 southern boundary for approximately 0.2 mile and crosses a pipeline. It then continues paralleling the southern boundary of Section 56 to the east another 0.8 mile where it terminates at the junction of segments 42 and 44 in the southwest corner of Section 37.

Segment 41
Segment 41 begins at the junction of segments 26 and 40, in the southwest corner of Section 56, northeast of the CR 6400 and CR 1100 intersection in Lubbock County. It proceeds north paralleling the east side of CR 1100 along the western boundary of Section 56 for approximately 1.0 mile, crosses CR 6300, and turns east in the southwestern corner of Section 51. From there, the segment parallels the north side of CR 6300 along the southern boundary of Section 51 for approximately 1.0 mile, and terminates at the junction of segments 43 and 46 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection.

Segment 42
Segment 42 begins at the junction of segments 40 and 44 in the southwest corner of Section 37 in Lubbock County. It extends north paralleling the east side of property line along the western boundary of Section 37 for approximately 0.5 mile and terminates at the junction of segments 43 and 45 south of a property line along the western boundary of Section 37.

Segment 43
Segment 43 begins at the junction of segments 42 and 45, south of a property line along the western boundary of Section 37 in Lubbock County. It extends north, paralleling the east side of the western boundary of Section 37 for approximately 250 ft, crosses two pipelines, then continues north along the western boundary of Section 37 for approximately 0.5 mile. There it crosses CR 6300 into Section 32 and terminates at the junction of segments 41 and 46 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection.

Segment 44
Segment 44 begins at the junction of segments 40 and 42 in the southwest corner of Section 37 in Lubbock County. It proceeds east, parallel to the north side of the southern boundary of Section 37 for approximately 1.0 mile, and terminates at the junction of segments 47 and 48 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection.

Segment 45
Segment 45 begins at the junction of segments 42 and 43, south of a property line along the western boundary of Section 37 in Lubbock County. It extends east, paralleling the south side of the property line for approximately 1.0 mile, where it crosses CR 1300, crosses the western boundary of Section 28, and immediately crosses a pipeline. The segment continues east paralleling the south side of a property line for approximately 0.5 mile where it crosses a railroad track and terminates at the junction of Segment 51 in the center of Section 28.

Segment 46
Segment 46 begins at the junction of segments 41 and 43 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection in Lubbock County. It extends east, immediately crosses CR 1200, and parallels the north side of CR 6300 along the southern boundary of Section 32 for approximately 0.7 mile where it crosses two pipelines. It then parallels the north side of CR 6300 to the east approximately 0.2 mile, angles southeast for approximately 0.1 mile, crossing the CR 6300 and CR 1300 intersection and a pipeline and entering the northwest corner of Section 28. The segment then angles back to the east and parallels the south side of the northern boundary of Section 28 for approximately 0.5 mile and crosses a railroad track. It then continues to parallel the northern boundary of Section 28 for another 0.5 mile and crosses FM 179, enters the northwest corner of Section 27, crosses a pipeline, and parallels the south side of the northern boundary of Section 27 for approximately 1.0 mile to the northeast corner of Section 27, just west of CR 1500. Segment 46 then turns to the south, and parallels the west side of CR 1500 along the eastern boundary of Section 27 for approximately 0.9 mile and terminates at the junction of segments 52 and 53 in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection.

Segment 47
Segment 47 begins at the junction of segments 44 and 48 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection in Lubbock County. It extends south, immediately crossing into the northeast corner of Section 20, and parallels the west side of CR 1300 along the eastern boundary of Section 20 to the south for approximately 0.5 mile. Here, a pipeline crosses from the east side to the west side of CR 1300. Segment 47 now parallels the west side of the pipeline to the south approximately 0.5 mile to the southeast corner of Section 20. At this point, it turns east and immediately crosses the pipeline and CR 1300 into the southwest corner of Section 19, and parallels the southern boundary of Section 19 to the east for approximately 0.5 mile to the west side of a railroad track. Segment 47 then crosses the railroad track, angles to the southeast, enters the northern boundary of Section 18, and parallels the east side of the railroad track for approximately 0.6 mile. The segment then turns east, extends

approximately 350 feet where it crosses FM 179 and the western boundary of Section 17 at a point approximately 0.2 mile south of CR 6520. It then parallels the north side of a property line to the east for approximately 0.2 mile and crosses a pipeline. From there, it continues east paralleling a property line for approximately 0.8 mile to the west side of CR 1500 along the eastern boundary of Section 17. It then angles slightly southeast, crosses CR 1500, and enters the western portion of Section 4, where it parallels the south side of a property line to the east for approximately 0.5 mile, and angles slightly northeast to the north side of the property line. It then parallels the property line to the east approximately 0.5 mile and terminates at the junction of segments 57 and 59 adjacent to the eastern boundary of Section 4 on the west side of CR 1600, approximately 270 feet north of Auburn Street.

Segment 48
Segment 48 begins at the junction of segments 44 and 47 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection in Lubbock County. It extends east, immediately crosses CR 1300, enters the southwest corner of Section 28, crosses a pipeline, and parallels the north side of CR 6400 to the east along the southern boundary of Section 28 for approximately 0.4 mile and crosses a railroad track. Segment 48 terminates at the junction with Segment 50, on the east side of the railroad track, northeast of the CR 6400 and CR 1330 intersection, along the southern boundary of Section 28.

Segment 50
Segment 50 begins at its junction with segment 48, on the east side of a railroad track, northeast of the CR 6400 and CR 1330 intersection, along the southern boundary of Section 28 in Lubbock County. It parallels the north side of CR 6400 to the east along the southern boundary of Section 28 for approximately 0.6 mile where it crosses FM 179, enters the southwestern corner of Section 27, crosses a pipeline and terminates at the junction of segments 51 and 52, northeast of the FM 179 and CR 6400 intersection.

Segment 51
Segment 51 begins at its junction with segment 45 on the east side of a railroad track in the center of Section 28 in Lubbock County. It parallels the south side of a property line to the east for approximately 0.4 mile where it angles to the southeast and extends 0.1 mile as it crosses FM 179, the western boundary of Section 27, and a pipeline. The segment then turns south and parallels the east side of FM 179 and the pipeline to the south for approximately 0.4 mile along the western boundary of Section 27, where it terminates at the junction of segments 50 and 52, northeast of the FM 179 and CR 6400 intersection, in the southwest corner of Section 27.

Segment 52
Segment 52 begins at the junction of segments 50 and 51, northeast of the FM 179 and CR 6400 intersection, in the southwest corner of Section 27 in Lubbock County. It parallels the north side of CR 6400 along the southern boundary of Section 27 to the east for approximately 0.8 mile, where it angles northeast and extends approximately 0.1 mile, then angles back east and extends 0.1 mile where it terminates at the junction of segments 46 and 53, in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection.

Segment 53
Segment 53 begins at the junction of segments 46 and 52, in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection in Lubbock County. It extends east, immediately crosses CR 1500, enters the southwest corner of Section 26 and parallels the north side of CR 6400 for approximately 0.2 mile. At this point, it angles southeast for approximately 0.1 mile, crossing CR 6400. It then angles east to parallel the south side of CR 6400 for

approximately 0.4 mile where it terminates at the junction of Segment 54 on the south side of CR 6400 in the southern portion of Section 26.

Segment 54
Segment 54 begins at its junction with segment 53 on the south side of CR 6400 in the southern portion of Section 26 in Lubbock County. It extends south parallel to the east side of a property line for approximately 0.1 mile where it enters Section 15. It then parallels the property line another 0.4 mile, and angles southwest to the west side of the property line. It then parallels the property line south an additional 0.4 mile, crosses a pipeline, and parallels the property line south another 0.1 mile where it crosses CR 6500, enters Section 4, and crosses another pipeline. The segment then turns east and parallels the south side of the pipeline to the east along the south side of the northern boundary of Section 4 for approximately 0.4 mile, and terminates at the junction of segments 56 and 57, south of a pipeline, and southwest of CR 1600 and CR 6500 intersection in the northeast corner of Section 4.

Segment 56
Segment 56 begins at the junction of segments 54 and 57, south of a pipeline, southwest of the CR 1600 and CR 6500 intersection in the northeast corner of Section 4 in Lubbock County. It extends east, and immediately crosses CR 1600 into the northwest corner of Section 3. It parallels a pipeline south of CR 6500 to the east along the south side of the northern boundary of Section 3 to the west side of an existing transmission line. Segment 56 terminates at the junction of Segment 58 on the south side of the pipeline located south of CR 6500, and west of an existing transmission line along the northern boundary of Section 3.

Segment 57
Segment 57 begins at the junction of segments 54 and 56, south of a pipeline and southwest of the CR 1600 and CR 6500 intersection in the northeast corner of Section 4 in Lubbock County. It parallels the west side of CR 1600 to the south along the eastern boundary of Section 4 for approximately 0.5 mile where it terminates at the junction of segments 47 and 59 along the eastern boundary of Section 4 on the west side of CR 1600 (approximately 270 feet north of Auburn St).

Segment 58
Segment 58 begins at its junction with segment 56 on the south side of a pipeline located south of CR 6500, and west of an existing transmission line along the northern boundary of Section 3 in Lubbock County. It parallels the west side of the existing transmission line to the south for approximately 0.5 mile and terminates at the junction of segments 60 and 61, on the west side of the existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3.

Segment 59
Segment 59 begins at the junction of segments 47 and 57 along the eastern boundary of Section 4 on the west side of CR 1600 (Upland Ave.), approximately 270 feet north of Auburn St in Lubbock County. It extends southeast approximately 200 feet crossing CR 1600 (Upland Avenue), and enters Section 3 where it terminates at the junction of segments 60 and 62, east of the CR 1600 (Upland Ave.) and Auburn Street intersection.

Segment 60
Segment 60 begins at the junction of segments 59 and 62 on the east side of CR 1600 (Upland Avenue) at Auburn Street along the western boundary of Section 3 in Lubbock County. It extends east paralleling the south side of a property line approximately 0.5 mile where it terminates at the

junction of segments 58 and 61, on the west side of the existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3.

Segment 61
Segment 61 begins at the junction of segments 58 and 60, on the west side of an existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3 in Lubbock County. It parallels the west side of the existing transmission line to the south for approximately 0.4 mile. It then angles to the southwest, and extends approximately 425 ft, crosses FM 2255 (4th Street) and an existing 69 kV transmission line, and terminates at the junction of segments 63 and 64 in Section 10 on the south side of FM 2255 (4th Street) and on the west side of the Carlisle Substation.

Segment 62
Segment 62 begins at the junction of segments 59 and 60 on the east side of CR 1600 (Upland Avenue) at Auburn Street along the western boundary of Section 3 in Lubbock County. It parallels the east side of CR 1600 (Upland Avenue) along the western boundary of Section 3 to the south for approximately 0.5 mile, and terminates at the junction of segments 39 and 63, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Avenue) intersection in the southwest corner of Section 3.

Segment 63
Segment 63 begins at the junction of segments 39 and 62, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Ave.) intersection in the southwest corner of Section 3 in Lubbock County. It parallels the north side of FM 2255 (4th Street) to the east along the north side of the southern boundary of Section 3 for approximately 0.3 mile, where it angles to the southeast and extends 0.1 mile, as it crosses FM 2255 (4th Street) and an existing 69-kV transmission line, and terminates at the junction of segments 61 and 64, in Section 10 on the south side of FM 2255 (4th Street) and on the west side of the Carlisle Substation.

Segment 64
Segment 64 begins at the junction of segments 61 and 63 on the south side of FM 2255 (4th Street) and the west side of the Carlisle Substation in Section 10 in Lubbock County. It extends south approximately 315 feet, west of the Carlisle Substation, then turns east and extends 365 feet where it terminates at the south side of the Carlisle Substation.

Landowners and Transmission Line Cases at the PUC

Public Utility Commission of Texas

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Purpose of This Brochure

This brochure is intended to provide landowners with information about proposed new transmission lines and the Public Utility Commission's ("PUC" or "Commission") process for evaluating these proposals. At the end of the brochure is a list of sources for additional information.

The following topics are covered in this brochure:
- How the PUC evaluates whether a new transmission line should be built,
- How you can participate in the PUC's evaluation of a line, and
- How utilities acquire the right to build a transmission line on private property.

You are receiving the enclosed formal notice because one or more of the routes for a proposed transmission line may require an easement or other property interest across your property, or the centerline of the proposed project may come within 300 feet of a house or other habitable structure on your property. This distance is expanded to 500 feet if the proposed line is greater than 230 kilovolts (kV). For this reason, your property is considered **directly affected land.** This brochure is being included as part of the formal notice process.

If you have questions about the proposed routes for a transmission line, you may contact the applicant. The applicant also has a more detailed map of the proposed routes for the transmission line and nearby habitable structures. The applicant may help you understand the routing of the project and the application approval process in a transmission line case but cannot provide legal advice or represent you. ***The applicant cannot predict which route may or may not be approved by the PUC. The PUC decides which route to use for the transmission line, and the applicant is not obligated to keep you informed of the PUC's proceedings. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene, which is discussed below.***

The PUC is sensitive to the impact that transmission lines have on private property. At the same time, transmission lines deliver electricity to millions of homes and businesses in Texas, and new lines are sometimes needed so that customers can obtain reliable, economical power.

The PUC's job is to decide whether a transmission line application should be approved and on which route the line should be constructed. The PUC values input from landowners and encourages you to participate in this process by intervening in the docket.

PUC Transmission Line Case

Texas law provides that most utilities must file an application with the PUC to obtain or amend a Certificate of Convenience and Necessity (CCN) in order to build a new transmission line in Texas. The law requires the PUC to consider a number of factors in deciding whether to approve a proposed new transmission line.

The PUC may approve an application to obtain or amend a CCN for a transmission line after considering the following factors:
- Adequacy of existing service;
- Need for additional service;
- The effect of approving the application on the applicant and any utility serving the proximate area;
- Whether the route utilizes existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the route parallels existing compatible rights-of-way;
- Whether the route parallels property lines or other natural or cultural features;
- Whether the route conforms with the policy of prudent avoidance (which is defined as the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort); and
- Other factors such as community values, recreational and park areas, historical and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers in the area.

If the PUC decides an application should be approved, it will grant to the applicant a CCN or CCN amendment to allow for the construction and operation of the new transmission line.

Application to Obtain or Amend a CCN:

An application to obtain or amend a CCN describes the proposed line and includes a statement from the applicant describing the need for the line and the impact of building it. In addition to the routes proposed by the applicant in its application, the possibility exists that additional routes may be developed, during the course of a CCN case, that could affect property in a different manner than the original routes proposed by the applicant.

The PUC conducts a case to evaluate the impact of the proposed line and to decide which route should be approved. Landowners who would be affected by a new line can:

- informally file a protest, or
- formally participate in the case as an intervenor.

Filing a Protest (informal comments):

If you do not wish to intervene and participate in a hearing in a CCN case, you may file **comments.** An individual or business or a group who files only comments for or against any aspect of the transmission line application is considered a "protestor."

Protestors make a written or verbal statement in support of or in opposition to the utility's application and give information to the PUC staff that they believe supports their position.

Protestors are ***not*** parties to the case, however, and ***do not have the right to***:

- Obtain facts about the case from other parties;
- Receive notice of a hearing, or copies of testimony and other documents that are filed in the case;
- Receive notice of the time and place for negotiations;
- File testimony and/or cross-examine witnesses;
- Submit evidence at the hearing; or
- Appeal P.U.C. decisions to the courts.

If you want to make comments, you may either send written comments stating your position, or you may make a statement on the first day of the hearing. If you have not intervened, however, you will not be able to participate as a party in the hearing. Only parties may submit evidence and ***the PUC must base its decision on the evidence.***

Intervening in a Case:

To become an intervenor, you must file a statement with the PUC, no later than the date specified in the notice letter sent to you with this brochure, requesting intervenor status (also referred to as a party). This statement should describe how the proposed transmission line would affect your property. Typically, intervention is granted only to directly affected landowners. However, any landowner may request to intervene and obtain a ruling on his or her specific fact situation and concerns. A sample form for intervention and the filing address are attached to this brochure, and may be used to make your filing. A letter requesting intervention may also be used in lieu of the sample form for intervention.

If you decide to intervene and become a party in a case, you will be required to follow certain procedural rules:

- You are required to timely respond to requests for information from other parties who seek information.
- If you file testimony, you must appear at a hearing to be cross-examined.
- If you file testimony or any letters or other documents in the case, you must send copies of the documents to every party in the case and you must file multiple copies with the PUC.
- If you intend to participate at the hearing and you do not file testimony, you must at least file a statement of position, which is a document that describes your position in the case.
- Failure to comply with these procedural rules may serve as grounds for you to be dismissed as an intervenor in the case.
- If you wish to participate in the proceedings it is very important to attend any prehearing conferences.

Intervenors may represent themselves or have an attorney to represent them in a CCN case. If you intervene in a case, you may want an attorney to help you understand the PUC's procedures and the laws and rules that the PUC applies in deciding whether to approve a transmission line. The PUC encourages landowners to intervene and become parties.

Stages of a CCN Case:

If there are persons who intervene in the case and oppose the approval of the line, the PUC may refer the case to an administrative law judge (ALJ) at the State Office of Administrative Hearings (SOAH) to conduct a hearing, or the Commission may elect to conduct a hearing itself. The hearing is a formal proceeding, much like a trial, in which testimony is presented. In the event the case is referred to SOAH, the ALJ makes a recommendation to the PUC on whether the application should be approved and where and how the line should be routed.

There are several stages of a CCN case:

- The ALJ holds a prehearing conference (usually in Austin) to set a schedule for the case.
- Parties to the case have the opportunity to conduct discovery; that is, obtain facts about the case from other parties.
- A hearing is held (usually in Austin), and parties have an opportunity to cross-examine the witnesses.
- Parties file written testimony before the date of the hearing. Parties that do not file written testimony or statements of position by the deadline established by the ALJ may not be allowed to participate in the hearing on the merits.
- Parties may file written briefs concerning the evidence presented at the hearing, but are not required to do so.
- In deciding where to locate the transmission line and other issues presented by the application, the ALJ and Commission rely on factual information submitted as evidence at the hearing by the parties in the case. In order to submit factual information as evidence (other than through cross-examination of other parties' witnesses), a party must have intervened in the docket and filed written testimony on or before the deadline set by the ALJ.
- The ALJ makes a recommendation, called a **proposal for decision**, to the Commission regarding the case. Parties who disagree with the ALJ's recommendation may file exceptions.
- The Commissioners discuss the case and decide whether to approve the application. The Commission may approve the ALJ's recommendation, approve it with specified changes, send the case back to the ALJ for further consideration, or deny the application. The written decision rendered by the Commission is called a **final order**. Parties who believe that the Commission's decision is in error may file motions for rehearing, asking the Commission to reconsider the decision.
- After the Commission rule on the motion for rehearing, parties have the right to appeal the decision to district court in Travis County.
-

Right to Use Private Property

The Commission is responsible for deciding whether to approve a CCN application for a proposed transmission line. If a transmission line route is approved that impacts your property, the electric utility must obtain the right from you to enter your property and to build, operate, and maintain the transmission line. This right is typically called an easement.

Utilities may buy easements through a negotiated agreement, but they also have the power of eminent domain (condemnation) under Texas law. Local courts, not the PUC, decide issues concerning easements for rights-of-way. The PUC does not determine the value of property.

The PUC final order in a transmission case normally requires a utility to take certain steps to minimize the impact of the new transmission line on landowners' property and on the environment. For example, the order normally requires steps to minimize the possibility of erosion during construction and maintenance activities.

HOW TO OBTAIN MORE INFORMATION

The PUC's online filings interchange on the PUC website provides free access to documents that are filed with the Commission in Central Records. The docket number, also called a control number on the PUC website, of a case is a key piece of information used in locating documents in the case. You may access the Interchange by visiting the PUC's website home page at www.puc.state.tx.us and navigate the website as follows:

- Select "Filings."
- Select "Filings Search."
- Select "Filings Search."
- Enter 5-digit Control (Docket) Number. *No other information is necessary.*
- Select "Search." *All of the filings in the docket will appear in order of date filed.*
- Scroll down to select desired filing.
- Click on a blue "Item" number at left.
- Click on a "Download" icon at left.

Documents may also be purchased from and filed in Central Records. For more information on how to purchase or file documents, call Central Records at the PUC at 512-936-7180.

PUC Substantive Rule 25.101, Certification Criteria, addresses transmission line CCNs and is available on the PUC's website, or you may obtain copies of PUC rules from Central Records.

Always include the docket number on all filings with the PUC. You can find the docket number on the enclosed formal notice. Send documents to the PUC at the following address.

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, TX 78711-3326

The information contained within this brochure is not intended to provide a comprehensive guide to landowner rights and responsibilities in transmission line cases at the PUC. This brochure should neither be regarded as legal advice nor should it be a substitute for the PUC's rules. However, if you have questions about the process in transmission line cases, you may call the PUC's Legal Division at 512-936-7261. The PUC's Legal Division may help you understand the process in a transmission line case but cannot provide legal advice or represent you in a case. You may choose to hire an attorney to decide whether to intervene in a transmission line case, and an attorney may represent you if you choose to intervene.

Communicating with Decision-Makers

Do not contact the ALJ or the Commissioners by telephone or email. They are not allowed to discuss pending cases with you. They may make their recommendations and decisions only by relying on the evidence, written pleadings, and arguments that are presented in the case.

Request to Intervene in PUC Docket No. _____

The following information must be submitted by the person requesting to intervene in this proceeding. This completed form will be provided to all parties in this docket. **If you DO NOT want to be an intervenor, but still want to file comments, please complete the "Comments" page.**

Mail this completed form and 10 copies to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Ave.
P.O. Box 13326
Austin, TX 78711-3326

First Name: _____ Last Name: _____

Phone Number: _____ Fax Number: _____

Address, City, State: _____

I am requesting to intervene in this proceeding. As an INTERVENOR, I understand the following:

- I am a party to the case;
- I am required to respond to all discovery requests from other parties in the case;
- If I file testimony, I may be cross-examined in the hearing;
- If I file any documents in the case, I will have to provide a copy of that document to every other party in the case; and
- I acknowledge that I am bound by the Procedural Rules of the Public Utility Commission of Texas (PUC) and the State Office of Administrative Hearings (SOAH).

Please check one of the following:

☐ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.

☐ One or more of the utility's proposed routes would cross my property.

☐ Other. Please describe and provide comments. You may attach a separate page, if necessary. _____

_____

_____

_____

_____

Signature of person requesting intervention:

_____ Date: _____

Comments in Docket No. _____

If you want to be a PROTESTOR only, please complete this form. Although public comments are not treated as evidence, they help inform the PUC and its staff of the public concerns and identify issues to be explored. The PUC welcomes such participation in its proceedings.

Mail this completed form and 10 copies to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Ave.
P.O. Box 13326
Austin, TX 78711-3326

First Name: _____ Last Name: _____

Phone Number: _____ Fax Number: _____

Address, City, State: _____

I am NOT requesting to intervene in this proceeding. As a PROTESTOR, I understand the following:

- I am NOT a party to this case;
- My comments are not considered evidence in this case; and
- I have no further obligation to participate in the proceeding.

Please check one of the following:

☐ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.

☐ One or more of the utility's proposed routes would cross my property.

☐ Other. Please describe and provide comments. You may attach a separate page, if necessary. _____

_____

_____

_____

_____

Signature of person submitting comments:

_____ Date: _____

THE STATE OF TEXAS

LANDOWNER'S BILL OF RIGHTS

PREPARED BY THE

OFFICE OF THE
ATTORNEY GENERAL OF TEXAS

STATE OF TEXAS LANDOWNER'S BILL OF RIGHTS

This Landowner's Bill of Rights applies to any attempt by the government or a private entity to take your property. The contents of this Bill of Rights are prescribed by the Texas Legislature in Texas Government Code Sec. 402.031 and Chapter 21 of the Texas Property Code.

1. You are entitled to receive adequate compensation if your property is taken for a public use.
2. Your property can only be taken for a public use.
3. Your property can only be taken by a governmental entity or private entity authorized by law to do so.
4. The entity that wants to take your property must notify you that it wants to take your property.
5. The entity proposing to take your property must provide you with a written appraisal from a certified appraiser detailing the adequate compensation you are owed for your property.
6. The entity proposing to take your property must make a bona fide offer to buy the property before it files a lawsuit to condemn the property – which means the condemning entity must make a good faith offer that conforms with Chapter 21 of the Texas Property Code.
7. You may hire an appraiser or other professional to determine the value of your property or to assist you in any condemnation proceeding.
8. You may hire an attorney to negotiate with the condemning entity and to represent you in any legal proceedings involving the condemnation.
9. Before your property is condemned, you are entitled to a hearing before a court appointed panel that includes three special commissioners. The special commissioners must determine the amount of compensation the condemning entity owes for the taking of your property. The commissioners must also determine what compensation, if any, you are entitled to receive for any reduction in value of your remaining property.
10. If you are unsatisfied with the compensation awarded by the special commissioners, or if you question whether the taking of your property was proper, you have the right to a trial by a judge or jury. If you are dissatisfied with the trial court's judgment, you may appeal that decision.

CONDEMNATION PROCEDURE

Eminent domain is the legal authority that certain entities are granted that allows those entities to take private property for a public use. Private property can include land and certain improvements that are on that property.

Private property may only be taken by a governmental entity or private entity that is authorized by law to do so. Your property may be taken only for a public purpose. That means it can only be taken for a purpose or use that serves the general public. Texas law prohibits condemnation authorities from taking your property to enhance tax revenues or foster economic development.

Your property cannot be taken without adequate compensation. Adequate compensation includes the market value of the property being taken. It may also include certain damages if your remaining property's market value is diminished by the acquisition itself or by the way the condemning entity will use the property.

HOW THE TAKING PROCESS BEGINS

The taking of private property by eminent domain must follow certain procedures. First, the entity that wants to condemn your property must provide you a copy of this Landowner's Bill of Rights before - or at the same time - the entity first represents to you that it possesses eminent domain authority.

Second, if it has not been previously provided, the condemning entity must send this Landowner's Bill of Rights to the last known address of the person who is listed as the property owner on the most recent tax roll. This requirement stipulates that the Landowner's Bill of Rights must be provided to the property owner at least seven days before the entity makes a final offer to acquire the property.

Third, the condemning entity must make a bona fide offer to purchase the property. The requirements for a bona fide offer are contained in Chapter 21 of the Texas Property Code. At the time a purchase offer is made, the condemning entity must disclose any appraisal reports it produced or acquired that relate specifically to the property and were prepared in the ten years preceding the date of the purchase offer. You have the right to discuss the offer with others and to either accept or reject the offer made by the condemning entity.

CONDEMNATION PROCEEDINGS

If you and the condemning entity do not agree on the value of your property, the entity may begin condemnation proceedings. Condemnation is the legal process that eligible entities utilize to take private property. It begins with a condemning entity filing a claim for your property in court. If you live in a county where part of the property being condemned is located, the claim must be filed in that county. Otherwise, the condemnation claim can be filed in any county where at least part of the property being condemned is located. The claim must describe the property being condemned, state with specificity the public use, state the name of the landowner, state that the landowner and the condemning entity were unable to agree on the value of the property, state that the condemning entity provided the landowner with the Landowner's Bill of Rights, and state that the condemning entity made a bona fide offer to acquire the property from the property owner voluntarily.

SPECIAL COMMISSIONERS' HEARING

After the condemning entity files a condemnation claim in court, the judge will appoint three local landowners to serve as special commissioners. The judge will give you a reasonable period to strike one of the special commissioners. If a commissioner is struck, the judge will appoint a replacement. These special commissioners must live in the county where the condemnation proceeding is filed, and they must take an oath to assess the amount of adequate compensation fairly, impartially, and according to the law. The special commissioners are not legally authorized to decide whether the condemnation is necessary or if the public use is proper. Their role is limited to assessing adequate compensation for you. After being appointed, the special commissioners must schedule a hearing at the earliest practical time and place. The special commissioners are also required to give you written notice of the condemnation hearing.

You are required to provide the condemning entity any appraisal reports that were used to determine your claim about adequate compensation for the condemned property. Under a new law enacted in 2011, landowners' appraisal reports must be provided to the condemning entity either ten days after the landowner receives the report or three business days before the special commissioners' hearing - whichever is earlier. You may hire an appraiser or real estate professional to help you determine the value of your private property. Additionally, you can hire an attorney to represent you during condemnation proceedings.

At the condemnation hearing, the special commissioners will consider your evidence on the value of your condemned property, the damages to remaining property, any value added to the remaining property as a result of the condemnation, and the condemning entity's proposed use of your condemned property.

SPECIAL COMMISSIONERS' AWARD

After hearing evidence from all interested parties, the special commissioners will determine the amount of money that you should be awarded to adequately compensate you for your property. The special commissioners' decision is significant to you not only because it determines the amount that qualifies as adequate compensation, but also because it impacts who pays for the cost of the condemnation proceedings. Under the Texas Property Code, if the special commissioners' award is less than or equal to the amount the condemning entity offered to pay before the proceedings began, then you may be financially responsible for the cost of the condemnation proceedings. However, if the special commissioners' award is more than the condemning entity offered to pay before the proceedings began, then the condemning entity will be responsible for the costs associated with the proceedings.

The special commissioners are required to provide the court that appointed them a written decision. That decision is called the "Award." The Award must be filed with the court and the court must send written notice of the Award to all parties. After the Award is filed, the condemning entity may take possession of the property being condemned, even if either party appeals the Award of the special commissioners. To take possession of the property, the condemning entity must either pay the amount of the Award or deposit the amount of the Award into the court's registry. You have the right to withdraw funds that are deposited into the registry of the court.

OBJECTION TO THE SPECIAL COMMISSIONERS' AWARD

If either the landowner or the condemning entity is dissatisfied with the amount of the Award, either party can formally object to the Award. In order to successfully make this valuation objection, it must be filed in writing with the court. If neither party timely objects to the special commissioners' Award, the court will adopt the Award as the final judgment of the court.

If a party timely objects to the special commissioners' Award, the court will hear the case in the same manner that other civil cases are heard. Landowners who object to the Award and ask the court to hear the matter have the right to a trial and can elect whether to have the case decided by a judge or jury. The allocation of any trial costs is decided in the same manner that costs are allocated with the special commissioners' Award. After trial, either party may appeal any judgment entered by the court.

DISMISSAL OF THE CONDEMNATION ACTION

A condemning entity may file a motion to dismiss the condemnation proceeding if it decides it no longer needs your condemned property. If the court grants the motion to dismiss, the case is over and you are entitled to recover reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing on the motion to dismiss.

If you wish to challenge the condemning entity's authority to take your property, you can lodge that challenge by filing a motion to dismiss the condemnation proceeding. Such a motion to dismiss would allege that the condemning entity did not have the right to condemn your property. For example, a landowner could challenge the condemning entity's claim that it seeks to take the property for a public use. If the court grants the landowner's motion, the court may award the landowner reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing or judgment.

RELOCATION COSTS

If you are displaced from your residence or place of business, you may be entitled to reimbursement for reasonable expenses incurred while moving personal property from the residence or relocating the business to a new site. However, during condemnation proceedings, reimbursement for relocation costs may not be available if those costs are separately recoverable under another law. Texas law limits the total amount of available relocation costs to the market value of the property being moved. Further, the law provides that moving costs are limited to the amount that a move would cost if it were within 50 miles.

RECLAMATION OPTIONS

If private property was condemned by a governmental entity, and the public use for which the property was acquired is canceled before that property is used for that public purpose, no actual progress is made toward the public use within ten years or the property becomes unnecessary for public use within ten years, landowners may have the right to repurchase the property for the price paid to the owner by the entity at the time the entity acquired the property through eminent domain.

DISCLAIMER

The information in this statement is intended to be a summary of the applicable portions of Texas state law as required by HB 1495, enacted by the 80th Texas Legislature, Regular Session. This statement is not legal advice and is not a substitute for legal counsel.

ADDITIONAL RESOURCES

Further information regarding the procedures, timelines and requirements outlined in this document can be found in Chapter 21 of the Texas Property Code.

Southwestern Public Service Company

Wolfforth to Carlisle CCN
Directly Affected Landowner List

Segment	Habitable Structure #	Tract #	Portion	Section	Block	Survey	County	Landowner	Address	City	State	Zip	Interest
1		1	184.4 acs of W/2 N of HWY	26	CB	C&M RR	Lubbock	Keith & Alta Snowden Living Trust	11015 FM 1585	Wolfforth	TX	79382	100%
1		2	67 acs. of NE/4 N of HWY	26	CB	C&M RR	Lubbock	Keith & Alta Snowden Living Trust	11015 FM 1585	Wolfforth	TX	79382	100%
7		3	W/2	30	D6	DS&E	Lubbock	Leonard & Betty Keeton	10510 CR 1100	Wolfforth	TX	79382	100%
7		4	SE/4	30	D6	DS&E	Lubbock	Leonard L. Keeton	10510 CR 1100	Wolfforth	TX	79382	100%
8	1	5	Tract 1B of NE/4	30	D6	DS&E	Lubbock	Leonard L. Keeton	10510 CR 1100	Wolfforth	TX	79382	100%
8	2	6	Tracts 1A & 1D of NE/4	30	D6	DS&E	Lubbock	Leonard & Betty Keeton	10510 CR 1100	Wolfforth	TX	79382	100%
1, 2, 3, 4, 5, 6, 7, 8		7	632.9 acs.	29	D6	DS&E	Lubbock	Noret Trust Attn: Nancy Noret Moore	15 Tanglewood Trail	San Marcos	TX	78666	33%
1, 2, 3, 4, 5, 6, 7, 8		7	632.9 acs.	29	D6	DS&E	Lubbock	Noret Trust Attn: Cindy Ware	4550 Hayvenhurst Ave.	Encino	CA	91436	33%
1, 2, 3, 4, 5, 6, 7, 8		7	632.9 acs.	29	D6	DS&E	Lubbock	Noret Trust Attn: Linda Noret Smith	7622 Queensferry Dr.	Dallas	TX	75248	33%
4, 9		8	NW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Nancy Noret Moore	15 Tanglewood Trail	San Marcos	TX	78666	33%
4, 9		8	NW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Cindy Ware	4550 Hayvenhurst Ave.	Encino	CA	91436	33%
4, 9		8	NW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Linda Noret Smith	7622 Queensferry Dr.	Dallas	TX	75248	33%
1, 9		10	139.5 acs. in SW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Nancy Noret Moore	15 Tanglewood Trail	San Marcos	TX	78666	33%
1, 9		10	139.5 acs. in SW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Cindy Ware	4550 Hayvenhurst Ave.	Encino	CA	91436	33%
1, 9		10	139.5 acs. in SW/4	32	D6	WT RR	Lubbock	Noret Trust Attn: Linda Noret Smith	7622 Queensferry Dr.	Dallas	TX	75248	33%
7	3	11	.361 acs. out of S/Pt.	9	D	B F Montgomery	Lubbock	Larry & Linda Williams	RR 1, Box 192	Wolfforth	TX	79382-9602	100%
7	5	12	.395 ac. in N/Pt.	9	D	PSL	Hockley	James Walter Hagood	9808 FM 2378	Wolfforth	TX	79382	100%
7	4	13	NE/Cor of NE/Pt. of S/Pt. .355 acs.	9	D	B F Montgomery	Lubbock	James Walter Hagood	9808 FM 2378	Wolfforth	TX	79382	100%
7	6	14	Tract 2A	9	D	B F Montgomery	Lubbock	Jerry & Shirley Stephenson	9108 FM 2378	Wolfforth	TX	79382-5918	100%
7		15	All	27	D6	DS&E	Lubbock	Westover Land LLC	314 S. Lafayette	Marshall	TX	75670	100%
7, 8, 16, 19		16	W/2	28	D6	DS&E	Lubbock	R. A. & Sarah Noret	2726 82nd St.	Lubbock	TX	79423-1428	100%
15, 16, 18		17	E/2	28	D6	DS&E	Lubbock	R. A. & Sarah Noret	2726 82nd St.	Lubbock	TX	79423-1428	100%
4, 9, 10, 11, 12, 13, 14, 15, 17		18	All, Less 1.63 acs. in SE/4	23	D6	L&SV	Lubbock	R. A. & Sarah Noret	2726 82nd St.	Lubbock	TX	79423-1428	100%
10	7	19	1.65 acs. in SE/Cor SE/4	23	D6	L&SV	Lubbock	Camille Williams	1102 W. 5th St.	Wolfforth	TX	79382	100%
13		20	Tracts E & M (353 acs.) in S/2	24	D6	L&SV	Lubbock	Terry & Cindy Henrie	9301 CR 7100	Wolfforth	TX	79382-9704	100%
13	8	21	RR Corridor (3.54 acs.) in SE/4	24	D6	L&SV	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
13	9	22	OT Wolfforth Block 7 Tracts 2-9 & Pt. of tracts 1 & 10, All of Block 11 & Closed Street	24	D6	L&SV	Lubbock	Frenship ISD	P. O Box 100	Wolfforth	TX	79382-0100	100%
13		23	Tracts J & N (31.456 acs.) in S/2	24	D6	L&SV	Lubbock	First Baptist Church of Wolfforth Texas	501 Main St.	Wolfforth	TX	79382	100%
13	10	24	Frenship Mesa Lot 281	24	D6	L&SV	Lubbock	Darrell G. & Karan K. Newsom	201 Longhorn Blvd.	Wolfforth	TX	79382	100%
13		25	Tract J1 (.629 ac.) in NE/Cor SE/4	24	D6	L&SV	Lubbock	Vancal Wilson	P. O. Box 64247	Lubbock	TX	79464	100%

Southwestern Public Service Company

Wolfforth to Carlisle CCN
Directly Affected Landowner List

Segment	Habitable Structure #	Tract #	Portion	Section	Block	Survey	County	Landowner	Address	City	State	Zip	Interest
13	11	26	Tract 11D in SW/4	25	AK	G RR CO	Lubbock	City of Wolfforth	P. O. Box 36	Wolfforth	TX	79382-0036	100%
13	12	27	Tract 13 (.336 ac.) in SW/4	25	AK	G RR CO	Lubbock	R. M. Gillit	P. O. Box 63	Wolfforth	TX	79382-0063	100%
13	13 & 14	28	Tract 33 (4.3 acs.) in NW/4	25	AK	G RR CO	Lubbock	James M. & Marcella A. Dooley	14 Bennett Circle	Wolfforth	TX	79382-2202	100%
13	15	29	Crestridge Addition Lot 7	25	AK	G RR CO	Lubbock	James M. & Marcella A. Dooley	14 Bennett Circle	Wolfforth	TX	79382-2202	100%
13	16	30	Crestridge Addition Lot 5	25	AK	G RR CO	Lubbock	Billie M. & Janice Carol Jordan	10 Bennett Circle	Wolfforth	TX	79382	100%
13	17	31	Crestridge Addition Lot 4	25	AK	G RR CO	Lubbock	Eric W. & Terry L. Knight	1403 Nottingham Ave.	Wolfforth	TX	79382-3208	100%
13	18	32	Crestridge Addition Lot 3 & Tract A Less 20 x 60'	25	AK	G RR CO	Lubbock	Annice Meeker	6 Bennett Circle	Wolfforth	TX	79382	100%
13	19	33	Crestridge Addition Lot 2	25	AK	G RR CO	Lubbock	J. Christopher & Alisa R. Sisemore	4 Bennett Circle	Wolfforth	TX	79382-2210	100%
13	20	34	Crestridge Addition Lot 1	25	AK	G RR CO	Lubbock	Jose I. & Saturina Rosales	2 Bennett Circle	Wolfforth	TX	79382	100%
13	21	35	Crestridge Addition Tract E-3	25	AK	G RR CO	Lubbock	Billy Lloyd Sisson	7726 19th St.	Lubbock	TX	79407-4204	100%
13	22	36	Crestridge Addition Tract C	25	AK	G RR CO	Lubbock	American Bank of Commerce	P. O. Box 946	Wolfforth	TX	79382-0009	100%
13		37	RR Corridor in SW/4	25	AK	G RR CO	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
13		38	RR Corridor in N/2	25	AK	G RR CO	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
13	23-25	39	NW 138.578 acs.	25	AK	G RR CO	Lubbock	Frenship ISD	P. O. Box 100	Wolfforth	TX	79382-0100	100%
19	65 & 66	40	NE/4	20	D6	ACH&B	Lubbock	Elizabeth Ann Richey	RR 1, Box 108	Wolfforth	TX	79382-9708	100%
19		41	W/2	19	D6	ACH&B	Lubbock	Billy B. Boyd	2127 S. 57th St.	Lubbock	TX	79412	100%
18		42	SE/4	19	D6	ACH&B	Lubbock	Billy B. Boyd	2127 S. 57th St.	Lubbock	TX	79412	100%
18	68	43	NE/4	19	D6	ACH&B	Lubbock	Billy B. Boyd	2127 S. 57th St.	Lubbock	TX	79412	100%
17 & 18		44	All, Less 3.904 acs. tract	22	D6	BS&F	Lubbock	R. A. & Sarah Noret	2726 82nd St.	Lubbock	TX	79423-1426	100%
17		45	159 acs. in SW/4	21	D6	BS&F	Lubbock	Anna M. Brooke	P. O. Box 276	Wolfforth	TX	79382	100%
17		46	Tract D 118.5 acs. in S/2 NW/4	21	D6	BS&F	Lubbock	Kay Spikes Moore/Patsy Ann Sherrod/Leslie Spikes Green	7003 Oxford Ave.	Lubbock	TX	79413	100%
17, 18, 20		47	N/2 NW/4	21	D6	BS&F	Lubbock	Johnnie Spikes Moore/Cynthia Spikes High/Patsy Spikes Sherrod	7003 Oxford Ave.	Lubbock	TX	79413	100%
13		48	Tract D1 of SE/4 (46.605 acs.)	32	AK	Tubbs 1	Lubbock	United Supermarkets, LLC	7830 Orlando Ave.	Lubbock	TX	79423-1942	100%
13		49	RR Corridor in SE/4	32	AK	Tubbs 1	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
13		50	Tract D of SE/4 (90.044 acs.)	32	AK	Tubbs 1	Lubbock	Iron Horse Land Development	20801 CR 1940	Lubbock	TX	79423-6617	100%
13		51	SE/Pt. NE/4 (39.348 acs.)	32	AK	Tubbs 1	Lubbock	Stettheimer Family Investents LP	15404 Slide Rd.	Lubbock	TX	79424-6639	100%
13		52	Tract B of NE/4 (26.176 acs.)	32	AK	Tubbs 1	Lubbock	UDF PM LLC	1301 Municipal Way, Suite #200	Grapevine	TX	76051	100%
13	37	53	Preston Estates Lot 45	32	AK	Tubbs 1	Lubbock	Dustyn T. & Kara L. Reeder	1313 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	38	54	Preston Estates Lot 46	32	AK	Tubbs 1	Lubbock	Saaz Limited Liability Company	2110 97th St.	Lubbock	TX	79423	100%
13	39	55	Preston Estates Lot 47	32	AK	Tubbs 1	Lubbock	Gordon Nelson, Jr.	1317 Yorkshire Ave.	Wolfforth	TX	79382	100%

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13	40	56	Preston Estates Lot 49	32	AK	Tubbs 1	Lubbock	Saaz Limited Liability Company	2110 97th St.	Lubbock	TX	79423	100%
13	41	57	Preston Estates Lot 50	32	AK	Tubbs 1	Lubbock	Jason B. & Anna Andrews	1323 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	42	58	Preston Estates Lot 51	32	AK	Tubbs 1	Lubbock	Jennifer L. Floyd	1325 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	43	59	Preston Estates Lot 52	32	AK	Tubbs 1	Lubbock	Domingo Garcia	1327 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	44	60	Preston Estates Lot 53	32	AK	Tubbs 1	Lubbock	Marcus & Doris Whitcis	1501 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	45	61	Preston Estates Lot 54	32	AK	Tubbs 1	Lubbock	Ernest & Clarissa M. Cantu	1503 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	46	62	Preston Estates Lot 55	32	AK	Tubbs 1	Lubbock	Christopher C. & Laci D. Sutton	1505 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	47	63	Preston Estates Lot 56	32	AK	Tubbs 1	Lubbock	Stanley J., Jr. & Jirapa L. Shestokes	1507 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	48	64	Preston Estates Lot 57	32	AK	Tubbs 1	Lubbock	Carrie G. Connelley	1509 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	49	65	Preston Estates Lot 58	32	AK	Tubbs 1	Lubbock	Lisa R. & Michael S. Boyd	1511 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	50	66	Preston Estates Lot 59	32	AK	Tubbs 1	Lubbock	Ventura Homes by Jeff Seal	4806 Knoxville Ave.	Lubbock	TX	79413	100%
13	51	67	Preston Estates Lot 60	32	AK	Tubbs 1	Lubbock	Wesley John Dipprey	1515 Yorkshire Ave.	Wolfforth	TX	79382	100%
13	26	68	Tract C3 (.47 ac.) in SW/4	31	AK	G RR CO	Lubbock	Raymond Castillo	P. O. Box 53804	Lubbock	TX	79453	100%
13	29, 33, 34, 35	69	Tract C4 (2.14 acs.) in SW/4	31	AK	G RR CO	Lubbock	John & Kathleen Rogers	7603 CR 1500	Lubbock	TX	79407	100%
13	27 & 28	70	Tract D1 (.263 ac.) in SW/4	31	AK	G RR CO	Lubbock	Jose & Norma Perez	7701 CR 1500	Lubbock	TX	79407-6105	100%
13	30	71	Tract D4 (.123 ac.) in SW/4	31	AK	G RR CO	Lubbock	Amanda Lynda Ancisco	7605 S. CR 1500	Lubbock	TX	79407	100%
13	31	72	Tract D3 (.076 ac.) in SW/4	31	AK	G RR CO	Lubbock	Amanda Lynda Ancisco	7605 S. CR 1500	Lubbock	TX	79407	100%
13	32	73	Tract C4A (.28 ac.) in SW/4	31	AK	G RR CO	Lubbock	John & Kathleen Rogers	7603 CR 1500	Lubbock	TX	79407	100%
13	36	74	Tract B1 Less W 40' in NW/4	31	AK	G RR CO	Lubbock	Earl & Gloria Jackson	7303 CR 1500	Lubbock	TX	79423	100%
19	67	75	S 80 acs. of SE/4	17	D6	HE&WT	Lubbock	Linda Janell Klattenhoff	6208 CR 1100	Wolfforth	TX	79382	100%
19		76	SW/4	18	D6	HE&WT	Lubbock	J. Larry Elliott	5215 79th St.	Lubbock	TX	79424	100%
18	69	77	SE 20 acs. of SE/4	18	D6	HE&WT	Lubbock	Leslie B. Gillit	6726 76th St.	Lubbock	TX	79424-0907	100%
19		78	126.57 acs. of NW/4	18	D6	HE&WT	Lubbock	Margaret Green, et al	1700 Redbud	Odessa	TX	79761	100%
18	70	79	Tract 8 in SW/4	9	D6	B&B	Lubbock	Omega Family Limited Partnership	P. O. Box 16051	Lubbock	TX	79490-6051	100%
18	71	80	Tracts 6 & 7 in SW/4	9	D6	B&B	Lubbock	Yolanda Scheffel	10108 CR 7000	Lubbock	TX	79407-6438	100%
18	72	81	Tract 5 in SW/4	9	D6	B&B	Lubbock	James A. Russ	10026 CR 7000	Lubbock	TX	79407-6444	100%
18	73	82	Tract 4 in SW/4	9	D6	B&B	Lubbock	Diane L. Richter	P. O. Box 1236	Stillwater	OK	74076-1236	100%
18	74	83	Tracts A10 & A13 of SE/4	9	D6	B&B	Lubbock	Patricia L. Reddell	6305 Big Springs Dr.	Lubbock	TX	79407	100%
20	75	84	Tract A11 of SE/4	9	D6	B&B	Lubbock	Paul & Kelly Sellers	700 Ave. G	Cisco	TX	76437	100%
20	76	85	Tract A3A of SE/4	9	D6	B&B	Lubbock	Steven M. Lewis	6106 CR 1300	Lubbock	TX	79407-6006	100%
20	77	86	Tract A9 of SE/4	9	D6	B&B	Lubbock	Olen R. Merry	5810 CR 1300	Lubbock	TX	79407	100%
20	78, 79, 80	87	West 50th Ranchettes Block 30	9	D6	B&B	Lubbock	Olen Merry Holding Trust	5810 CR 1300	Lubbock	TX	79407	100%
20	81	88	West 50th Ranchettes Block 21 Lot D	9	D6	B&B	Lubbock	Gordon E. & Michelle Smith	5514 CR 1300	Lubbock	TX	79407-6012	100%
20	82	89	West 50th Ranchettes Block 21 Lot B	9	D6	B&B	Lubbock	Olen Merry Holding Trust	5810 CR 1300	Lubbock	TX	79407	100%
20	83	90	West 50th Ranchettes Block 21 Tract A	9	D6	B&B	Lubbock	Deborah Ipock	5502 S. CR 1300	Lubbock	TX	79407-6012	100%
20	84 & 85	91	West 50th Ranchettes Block 20 Lots C & D	9	D6	B&B	Lubbock	Sherry Duke	5414 CR 1300	Lubbock	TX	79407	100%
20	86	92	West 50th Ranchettes Block 20 Lot B	9	D6	B&B	Lubbock	Kenneth Ivey	5406 CR 1300	Lubbock	TX	79407	100%

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20	87	93	West 50th Ranchettes Block 20 Lot A	9	D6	B&B	Lubbock	Timothy Dean Vaughn	5402 CR 1300	Lubbock	TX	79407-6011	100%
20	88	94	West 50th Ranchettes Block 11 Lot D	9	D6	B&B	Lubbock	Duane Lee & Deborah Teague	5314 CR 1300	Lubbock	TX	79407-6011	100%
20	89	95	West 50th Ranchettes Block 11 Lot A & B	9	D6	B&B	Lubbock	Peggye Mills	5302 CR 1300	Lubbock	TX	79407-6010	100%
20		96	SW/4	10	D6	B&B	Luhhock	Carol Daniel	11 Southwind Ct.	Niceville	FL	32578	100%
20, 21, 23a		97	NW/4	10	D6	B&B	Lubbock	Nelson Sherman Family LP	5402 FM 179	Lubbock	TX	79407-6004	100%
21		98	NE/4, Less tracts in E Pt.	10	D6	B&B	Lubbock	Nelson Sherman Family LP	5402 FM 179	Lubbock	TX	79407-6004	100%
13		99	Lot 1 Cedar Creek Addition in SE/4	33	AK	G RR CO	Lubbock	Lubbock Landmark Development LTD	13 E. Brook Hollow Dr.	Ransom Canyon	TX	79366	100%
13	61	100	85.691 acs. in E/2	33	AK	G RR CO	Lubbock	Curtis Griffith C/o City Bank	5211 Brownfield Hwy.	Lubbock	TX	79407-3544	100%
13	60	101	Tract A of E/2 (44.955 acs.)	33	AK	G RR CO	Lubbock	Texas Tech University	P. O. Box 41081	Lubbock	TX	79409	100%
13	62	102	Tejas Estates Lot 6	33	AK	G RR CO	Lubbock	Curtis Griffith C/o City Bank	5211 Brownfield Hwy.	Lubbock	TX	79407-3544	100%
13	63	103	Tejas Estates Lot 5	33	AK	G RR CO	Lubbock	Brady D. & Terri D. Robinette	5203 CR 1470	Lubbock	TX	79407	100%
13	64	104	Tejas Estates Lot 4	33	AK	G RR CO	Lubbock	Larry K. & Margaret A. Lowe	2313 Broadway Ave.	Lubbock	TX	79401	100%
21		105	Tract B (NW/Cor NW/4)	33	AK	G RR CO	Lubbock	MA Development LP	9814 Salisbury Ave.	Lubbock	TX	79424	100%
21	97	106	Llano Estates Lot 1	33	AK	G RR CO	Lubbock	Darrell L. & Karen S. Mann	5002 CR 1425	Lubbock	TX	79407-5740	100%
21	99	107	Llano Estates Lot 8	33	AK	G RR CO	Lubbock	Craig A. & Andrea L. Halsell	5004 CR 1430	Lubbock	TX	79407	100%
21	98	108	Llano Estates Lot 9	33	AK	G RR CO	Lubbock	Darby W. & Elizabeth Williams	5002 CR 1430	Lubbock	TX	79407-5736	100%
21	101	109	Llano Estates Lot 133	33	AK	G RR CO	Lubbock	Miles R. & Audra R. Day	5005 CR 1430	Lubbock	TX	79407-5737	100%
21	100	110	Llano Estates Lot 132	33	AK	G RR CO	Lubbock	Brett W. & Jennifer A. Myers	5003 CR 1430	Lubbock	TX	79407	100%
21	103	111	Llano Estates Lot 136	33	AK	G RR CO	Lubbock	Roxane Holt & Oren Grossman	5006 CR 1435	Lubbock	TX	79416	100%
21	102	112	Llano Estates Lot 137	33	AK	G RR CO	Lubbock	Michael & Jordan Cole	5004 CR 1435	Lubbock	TX	79407	100%
21	105	113	Llano Estates Lot 140	33	AK	G RR CO	Lubbock	John W. & Sharla R. Jackson	5003 CR 1435	Lubbock	TX	79407-5745	100%
21	104	114	Llano Estates Lot 139	33	AK	G RR CO	Lubbock	Robert L. III & Alice D. Young	5001 CR 1435	Lubbock	TX	79407	100%
21	107	115	Tejas Estates Lot 25	33	AK	G RR CO	Lubbock	Cynthia M. & Patricia Caruso	8104 CR 6910	Lubbock	TX	79424	100%
21	108	116	Tejas Estates Lot 24	33	AK	G RR CO	Lubbock	Bobby & Becky Yates	1901 Loop 289, Suite 11	Lubbock	TX	79407	100%
21	109	117	Tejas Estates Lot 1	33	AK	G RR CO	Lubbock	Noel Family Trust Agreement	8006 CR 6910	Lubbock	TX	79407	100%
21	110	118	Tejas Estates Lot 2	33	AK	G RR CO	Lubbock	Robert E. & Janet B.	8004 CR 6910	Lubbock	TX	79407	100%
21	111	119	Tejas Estates Lot 3	33	AK	G RR CO	Lubbock	Kent & Laura James	8002 CR 6910	Lubbock	TX	79407	100%
13	52	120	Tract 12 of SW/4 (5.62 acs.)	34	AK	G RR CO	Lubbock	Antonio Guerrero	7820 CR 7000	Lubbock	TX	79407	100%
13	53	121	Tract 13 of SW/4 (5.1 acs.)	34	AK	G RR CO	Lubbock	Sprague J. Fleming, Jr.	5738 62nd St.	Lubbock	TX	79424-1260	100%
13	54	122	Tract 14 of SW/4 (5.1 acs.)	34	AK	G RR CO	Lubbock	VLB #142420 C/o Bernard Skalsky	6021 CR 1500	Lubbock	TX	79407-5409	100%
13	55	123	Tract 15 of SW/4 (5.1 acs.)	34	AK	G RR CO	Lubbock	James & Jeri Putman	P. O. Box 856	Wolfforth	TX	79382	100%
13	56	124	Tract 17 of SW/4 (5.1 acs.)	34	AK	G RR CO	Lubbock	Ricky G. & Sabrina J. Murphy	5817 CR 1500	Lubbock	TX	79407	100%
13	57	125	Tract 18A of SW/4 (2.55 acs.)	34	AK	G RR CO	Lubbock	L. Kirt & Nancy R. Martin	5815 Alcove Ave.	Lubbock	TX	79407-9521	100%
13	58	126	Tract 18 of SW/4 (2.5 acs.)	34	AK	G RR CO	Lubbock	Conrad P. & Victoria G. Lyford	5811 CR 1500	Lubbock	TX	79407	100%
13	59	127	Tract 19 of SW/4 (5.1 acs.)	34	AK	G RR CO	Lubbock	Edward Durward Jones, Jr. & Norma Ruth Pringle	5803 CR 1500	Lubbock	TX	79407	100%
13		128	Tract A of SW/4 61.89 acs.	34	AK	G RR CO	Lubbock	Allen, Jeffrey & Danny Everson	2301 57t St.	Lubbock	TX	79412-2531	100%

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13		129	NW/4	34	AK	G RR CO	Lubbock	Jay Hamilton Scott	P. O. Box 946	Malibu	CA	90265	100%
22	114	130	Tract A in NW/Cor NE/4	34	AK	G RR CO	Lubbock	Norbert Nebe	7521 CR 6900	Lubbock	TX	79407-5308	100%
26		131	158 acs. in NE/4	16	D6	EL&RR	Lubbock	Leota Wentz Preston	3509 Sawmill Dr.	Austin	TX	78749-6960	100%
19	160	132	2 acs. in NE/4	16	D6	EL&RR	Lubbock	Kyle D. Reese & Jessica L. Morgan	3804 CR 1100	Lubbock	TX	79407	100%
26	169	133	23.88 acs. in NW/4	16	D6	EL&RR	Lubbock	Galdino & Carmen Martinez	11619 CR 6800	Lubbock	TX	79407-7114	100%
26	167 & 168	134	Tracts 2 & 2A (3.37 acs.) in NW/4	16	D6	EL&RR	Lubbock	Charles Quisenberry	4601 66th St.	Lubbock	TX	79414-4828	100%
26	166	135	Tract 3 (3.03 acs.) in NW/4	16	D6	EL&RR	Lubbock	Mary A. & Donald D. Dorsey	P. O. Box 65104	Lubbock	TX	79464-5104	100%
26	165	136	Tract 1 (3.03 acs.) in NW/4	16	D6	EL&RR	Lubbock	David & Angie Villareal	11505 CR 6800	Lubbock	TX	79407-7104	100%
19		137	SW/4	15	D6	AB&M	Lubbock	Mary Elizabeth Hurley C/o Brad & Janet Williams	6807 59th St.	Lubbock	TX	79407	100%
19, 24a, 26, 27		138	NW/4	15	D6	AB&M	Lubbock	Ina Jo S. Tr. Lincecum	5011 94th St.	Lubbock	TX	79424	100%
24a	159	139	Tract B of NE/4 (W 51.5 acs.)	15	D6	AB&M	Lubbock	Bob & Kevin Lokey	P. O. Box 84454	Lubbock	TX	79464-4454	100%
24a	158	140	Tract B1 of NE/4 (5.183 acs. in NE Cor)	15	D6	AB&M	Lubbock	Steve Gonzales Rositas	3406 CR 1200	Lubbock	TX	79407	100%
23a, 23b, 23c, 24a, 24b, 28	156 & 157	141	NE/Cor 10acs.	8	D6	B&B	Lubbock	Rhonda & David Slack	3402 Research Blvd.	Lubbock	TX	79407	100%
23a	90-94	142	W/36 acs. of SW/4	7	D6	B&B	Lubbock	Todd Conversano	9157 Sunset Blvd., #211	West Hollywood	CA	90069	100%
23a		143	119.78 acs. in SW/4	7	D6	B&B	Lubbock	Verrado Estates LLC	901 Via Piemonte, Suite #150	Ontario	CA	91764-6597	100%
21	95	144	Verrado Estates Lot 11	7	D6	B&B	Lubbock	Lubbock Champion Homes LP	3410 98th St., Suite #4-332	Lubbock	TX	79407	100%
21	96	145	Verrado Estates Lot 3	7	D6	B&B	Lubbock	Nicki L. Colbert	8817 CR 6875	Lubbock	TX	79407	100%
21		146	N/Pt. & E/Pt. of SE/4 (74.466 acs.)	7	D6	B&B	Lubbock	Verrado Estates LLC	901 Via Piemonte, Suite #150	Ontario	CA	91764-6597	100%
23a		147	N/2 Less N 660'	7	D6	B&B	Lubbock	Kirksey Farm LLC	17103 Preston Rd., Suite #225	Dallas	TX	75248-1389	100%
23a, 23b, 23c, 24b, 25	144	148	N 660' of N/2	7	D6	B&B	Lubbock	Kirksey Farm LLC	17103 Preston Rd., Suite #225	Dallas	TX	75248-1389	100%
21		149	SW/4 158.332 acs.	40	AK	GC&SF	Lubbock	Absolute Milling LLC	2517 74th	Lubbock	TX	79423	100%
21		150	Tract 6 of SE/4	40	AK	GC&SF	Lubbock	Tom Baker	8226 CR 6900	Lubbock	TX	79407	100%
21	106	151	Tract 6A of SE/4	40	AK	GC&SF	Lubbock	Tom Baker	8226 CR 6900	Lubbock	TX	79407	100%
21		152	Tracts 3, 4 & 5 of SE/4	40	AK	GC&SF	Lubbock	Corey & Jennifer Haggard	4817 100th St.	Lubbock	TX	79424-5703	100%
21		153	Tract 2 of SE/4	40	AK	GC&SF	Lubbock	Corey & Jennifer Haggard	4817 100th St.	Lubbock	TX	79424-5703	100%
21		154	Tract 8 of SE/4	40	AK	GC&SF	Lubbock	Steven Lee Vernon	15007 Joliet Ave.	Lubbock	TX	79423	100%
21	112	155	Tract 9 of SE/4	40	AK	GC&SF	Lubbock	Randy Craig & Sandra M. Coleman Living Trust	8012 CR 6900	Lubbock	TX	79407	100%
21		156	Tract 13 of SE/4	40	AK	GC&SF	Lubbock	Randy Craig & Sandra M. Coleman Living Trust	8012 CR 6900	Lubbock	TX	79407	100%
21	113	157	Tract 12 of SE/4	40	AK	GC&SF	Lubbock	Michael A. Timmons	5513 103rd St.	Lubbock	TX	79424-6418	100%
21		158	10.69 acs. SE/Cor SE/4	40	AK	GC&SF	Lubbock	Michael A. & Lauren D. Timmons	P. O. Box 644	Brownfield	TX	79316	100%
13, 21, 22		159	Tract B1 & B2 in SW/4	39	AK	GC&SF	Lubbock	Peggy Marie Crawley	204 N. 14th St.	Lamesa	TX	79331-3830	100%
22		160	Tract B7 (E/2 SW/4)	39	AK	GC&SF	Lubbock	Duhan Family Limited Ptsp.	P. O. Box 12347	Lubbock	TX	79452	100%
22		161	S 118.74 acs. of NW/4	39	AK	GC&SF	Lubbock	Duhan Family Limited Ptsp.	P. O. Box 12347	Lubbock	TX	79452	100%
22		162	25.26 acs. N 660' of Tract 1 in NW/4	39	AK	GC&SF	Lubbock	Duhan Family Limited Ptsp.	P. O. Box 12347	Lubbock	TX	79452	100%
22	115 & 116	163	Tract A10A (1 ac. in NE/4)	39	AK	GC&SF	Lubbock	Johnny Putman & Sherri L. Hollis	7441 34th St.	Lubbock	TX	79407-5011	100%

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22	117 & 118	164	Tract A10 Less N 60' (8.89 acs. in NE/4)	39	AK	GC&SF	Lubbock	Johnny Putman & Sherri L. Hollis	7441 34th St.	Lubbock	TX	79407-5011	100%
22		165	RR Corridor in NW/4	39	AK	GC&SF	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
22	120	166	Tracts 3 & 4 in NW/4	39	AK	GC&SF	Lubbock	E. C. Hatton	7501 34th St.	Lubbock	TX	79407-4903	100%
22	119	167	Tract A4 (NW/Cor NE/4)	39	AK	GC&SF	Lubbock	Bolton Oil Company LTD	1316 54th St.	Lubbock	TX	79412	100%
26	170	168	Tract 3A (40acs.) (SW/4 SW/4)	11	D6	EL&RR	Lubbock	Joel Scarsy	11802 CR 6800	Lubbock	TX	79407	100%
26		169	Tract 3-B (40 acs.) (SE/4 SW/4)	11	D6	EL&RR	Lubbock	Michael Layne Walker	11623 CR 6700	Lubbock	TX	79407-7102	100%
26	164	170	Tract 4F (10 acs.) of SE/4	11	D6	EL&RR	Lubbock	Eric I. & Misty M. Rudd	11420 CR 8800, Unit #B	Lubbock	TX	79407-7105	100%
26	163	171	Tract 4D (10 acs.) of SE/4	11	D6	EL&RR	Lubbock	VLB #152419 C/o Just & Danielle Westfall	7009 Utica Pl.	Lubbock	TX	79424-1615	100%
26	162	172	Tract 4C (10 acs.) of SE/4	11	D6	EL&RR	Lubbock	VLB C/o Owen K. & Carolyn Ray Hatter	1808 FM 400	Slaton	TX	79364	100%
19, 24a, 26, 27	161	173	Tract 4B (10 acs.) of SE/4	11	D6	EL&RR	Lubbock	Stephanie Miller	11108 CR 6800	Lubbock	TX	79407	100%
26		174	Tract 3 (80 acs.) in SW/4	11	D6	EL&RR	Lubbock	Billy J. Walker	11621 CR 6700	Lubbock	TX	79407	50%
26		174	Tract 3 (80 acs.) in SW/4	11	D6	EL&RR	Lubbock	Billy Walker Trust for Michael L. Walker C/o Jo Beth Walker Trustee	11621 CR 6700	Lubbock	TX	79407	50%
27	171	175	Tract 4M (10 acs.) of SE/4	11	D6	EL&RR	Lubbock	Steve P. & Tommie E. Watson	P. O. Box 6841	Lubbock	TX	79493-6841	100%
26		176	Tract 2 (80 acs.) in NW/4	11	D6	EL&RR	Lubbock	Billy J. Walker	11621 CR 6700	Lubbock	TX	79407	50%
26		176	Tract 2 (80 acs.) in NW/4	11	D6	EL&RR	Lubbock	Billy Walker Trust for Michael L. Walker C/o Jo Beth Walker Trustee	11621 CR 6700	Lubbock	TX	79407	50%
26		177	Tract 1 (79 acs.) in NW/4	11	D6	EL&RR	Lubbock	Jo Beth Walker	11621 CR 6700	Lubbock	TX	79407-7102	50%
26		177	Tract 1 (79 acs.) in NW/4	11	D6	EL&RR	Lubbock	Billy Walker Trust for Michael L. Walker C/o Jo Beth Walker Trustee	11621 CR 6700	Lubbock	TX	79407	50%
24a, 27		178	S/2	12	D6	EL&RR	Lubbock	Flora Cates McKinzie	5722 72nd St.	Lubbock	TX	79424-1826	100%
27	172	179	20 acs. in E/2 NE/4	12	D6	EL&RR	Lubbock	Carl J. White	2514 CR 1200	Lubbock	TX	79407-6608	100%
24a		180	SW/4 SW/4	5	D6	B&B	Lubbock	Martha Jean Womack Junca	1017 Raymond Dr.	Metairie	LA	70001-5752	100%
24a		181	SE/4 SW/4	5	D6	B&B	Lubbock	Eileen Ruth Garrett	3833 34th St.	Lubbock	TX	79410	100%
24a		182	Tract 12 Less E60'	5	D6	B&B	Lubbock	Milton Kirksey Estate C/o Leroy Richardson	3209 Kelsey Ave.	Lubbock	TX	79407	100%
24a		183	E 660' S/2 SE/4	5	D6	B&B	Lubbock	Milton Kirksey Estate C/o Leroy Richardson	3209 Kelsey Ave.	Lubbock	TX	79407	100%
27		184	NW/4 SW/4	5	D6	B&B	Lubbock	Dorothy Faye Womack Shaw	2610 Research Blvd.	Lubbock	TX	79407	100%
27		185	NE/4 SW/4	5	D6	B&B	Lubbock	Eileen Ruth Garrett	3833 34th St.	Lubbock	TX	79410	100%
27		186	Tract 12A Less E 660' & W/Pt. Tract 12A1 (65.7 acs.) in E/2	5	D6	B&B	Lubbock	Dorothy Faye Womack Shaw	2610 Research Blvd.	Lubbock	TX	79407	100%
27 & 28	178	187	E 660' N/2 SE/4	5	D6	B&B	Lubbock	Dorothy Faye Womack Shaw	2610 Research Blvd.	Lubbock	TX	79407	100%
27	174	188	Tract 10I & 10B (6.911 acs.) in W/2	5	D6	B&B	Lubbock	Timothy L. Smith, Billie J. Smith, John H. Smith, Jr., Phillip M. Smith & Tammy A. Hendricks	10216 CR 6740	Lubbock	TX	79407-6218	100%
27	176	189	Tract 10E (6.1 acs.) in W/2	5	D6	B&B	Lubbock	Ricky Lee Jenkins	10117 CR 6740	Lubbock	TX	79407	100%
27	177	190	Tract 9 (16 acs.) in W/2	5	D6	B&B	Lubbock	Eileen Ruth Garrett	3833 34th St.	Lubbock	TX	79410	100%

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27	173	191	Tract 10F (.5 ac.) in W/2	5	D6	B&B	Lubbock	Timothy L. & Billie J. Smith	10216 CR 6740	Lubbock	TX	79407	100%
27	175	192	Tract 10G (.5 ac.) in NW/4	5	D6	B&B	Lubbock	John Smith	10210 CR 6740	Lubbock	TX	79407-6218	100%
23b, 24a, 24b, 28, 29		193	Tract W (SW/4)	6	D6	B&B	Lubbock	Robert Sterling Short, Jr.	P. O. Box 7551	Victoria	TX	77903	50%
23b, 24a, 24b, 28, 29		193	Tract W (SW/4)	6	D6	B&B	Lubbock	Sandra K. Short	5004 Misty Trail	Temple	TX	76502-3371	50%
25	154	194	Cheyenne Country Estates Lot 44	6	D6	B&B	Lubbock	Stacy Lynn Harvey	3214 Langford Ave.	Lubbock	TX	79407-4604	100%
25	152	195	Cheyenne Country Estates Lot 32	6	D6	B&B	Lubbock	Joel & Jose Jaime	3207 Langford Ave.	Lubbock	TX	79407-4600	100%
25	150	196	Cheyenne Country Estates Lot 31	6	D6	B&B	Lubbock	Jessie Garza, Jr.	3212 Kelsey Ave.	Lubbock	TX	79407-4603	100%
25	148	197	Cheyenne Country Estates Lot 20	6	D6	B&B	Lubbock	D. Dean & Janice Johnson	3211 Kelsey Ave.	Lubbock	TX	79407	100%
25	147	198	Cheyenne Country Estates Lot 19	6	D6	B&B	Lubbock	Ida G. Cervantes	3212 Jason Ave.	Lubbock	TX	79407	100%
25	145	199	Cheyenne Country Estates Lot 8	6	D6	B&B	Lubbock	Frankie D. Ogletree & Barbara J. Zelinski	3211 Jason Ave.	Lubbock	TX	79407	100%
25		200	Cheyenne Country Estates Lots 2 thru 7	6	D6	B&B	Lubbock	Leroy Richardson, et al	3209 Kelsey Ave.	Lubbock	TX	79407	100%
25	155	201	Cheyenne Country Estates Lot 43	6	D6	B&B	Lubbock	Clifton D. & Margaret Ann Caldwell	3212 Langford Ave.	Lubbock	TX	79407	100%
25	153	202	Cheyenne Country Estates Lot 33	6	D6	B&B	Lubbock	Robert George & Patricia Ann Damron	3205 Langford Ave.	Lubbock	TX	79407-4600	100%
25	151	203	Cheyenne Country Estates Lot 30	6	D6	B&B	Lubbock	Cecil A. & Vicki G. Hall	3210 Kelsey Ave.	Lubbock	TX	79407	100%
25	149	204	Cheyenne Country Estates Lot 21	6	D6	B&B	Lubbock	Leroy & Judy Richardson	3209 Kelsey Ave.	Lubbock	TX	79407	100%
25	146	205	Cheyenne Country Estates Lot 9	6	D6	B&B	Lubbock	Barry & Kay E. Paxton	3209 Jason Ave.	Lubbock	TX	79407-4607	100%
25, 30		206	Tract Z (N/Pt. SE/4)	6	D6	B&B	Lubbock	Leroy Richardson, et al	3209 Kelsey Ave.	Lubbock	TX	79407	100%
30		207	Tract A (N/Pt. of SE/4)	6	D6	B&B	Lubbock	Mark R. Tanner & Donna D. Srader	2608 Inler Ave.	Lubbock	TX	79407-4700	100%
29, 30, 35		208	Tract Y (11.5 acs. in SE/4 NW/4)	6	D6	B&B	Lubbock	Leroy Richardson, et al	3209 Kelsey Ave.	Lubbock	TX	79407	100%
35		209	RR Corridor (Odd Shaped Tract 29.15 acs.)	6	D6	B&B	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
35		210	Tract X (E/2 NW/4)	6	D6	B&B	Lubbock	Leroy Richardson, et al	3209 Kelsey Ave.	Lubbock	TX	79407	100%
25 & 30		211	RR Corridor (Odd Shaped Tract 12.74 acs.)	41	AK	EL&RR	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
25		212	Tract F1 in SW/4	41	AK	EL&RR	Lubbock	Roman Catholic Diocese of Lubbock C/o Placido Rodriguez	4620 4th St.	Lubbock	TX	79416-4726	100%
32	123-143	213	Tract 3 in SE/4	41	AK	EL&RR	Lubbock	Lloyd Cowan	8008 34th St., Lot 84	Lubbock	TX	79407-4806	100%
31,32, 34		214	Tract E (in SE/4)	41	AK	EL&RR	Lubbock	Szu-han Ho	1 Whisperwood Circle	Lubbock	TX	79416	100%
25, 30, 31		215	Tract D (86 acs. in W/2) & Jetland Terrace Lots 10-15 & 19-21	41	AK	EL&RR	Lubbock	James A., Jr. & Ann S Foy	P. O. Box 1269	Riggins	ID	83549-1269	100%
31		216	Tract C (105.3 acs. in W/2)	41	AK	EL&RR	Lubbock	Texas Green Attn: Ann or Jimmy Foy	P. O. Box 1269	Riggins	ID	83549-1269	100%

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34		217	Tract B (NE/4 & N/Pt. SE/4)	41	AK	EL&RR	Lubbock	Szu-han Ho	1 Whisperwood Circle	Lubbock	TX	79416	100%
34	246	218	Jetland Terrace Lot 1 & E/2 of Lot 2	41	AK	EL&RR	Lubbock	Lubbock Regional MHMR Center	904 Ave. O	Lubbock	TX	79401	100%
32		219	RR Corridor (Odd Shaped Tract 4 acs.)	41	AK	EL&RR	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
32	122	220	Rolling Plains Tract B in SW/4	42	AK	EL&RR	Lubbock	Duhan Family Limited Ptsp.	P. O. Box 12347	Lubbock	TX	79452	100%
32	121	221	Rolling Plains Tract A in SW/4	42	AK	EL&RR	Lubbock	Ranjim Interests LLC	7722 34th St.	Lubbock	TX	79407-4999	100%
32		222	Tract C5C in SW/4	42	AK	EL&RR	Lubbock	Duhan Family Limited Ptsp.	P. O. Box 12347	Lubbock	TX	79452	100%
32		223	Tract C5B in SW/4	42	AK	EL&RR	Lubbock	Patti Frullo	4024 75th St.	Lubbock	TX	79423	100%
32		224	Tract C5 (51.161 acs. E/2 SW/4)	42	AK	EL&RR	Lubbock	Upland Investments LLC	5026 Frankford Ave.	Lubbock	TX	79424	100%
32, 33		225	Tract D (138.5 acs. SE/4)	42	AK	EL&RR	Lubbock	Upland Investments LLC	5026 Frankford Ave.	Lubbock	TX	79424	100%
33		226	Tract D1 (NE/Cor SE/4)	42	AK	EL&RR	Lubbock	Upland Investments LLC	5026 Frankford Ave.	Lubbock	TX	79424	100%
33	179	227	Connally Tracts Tract 9	42	AK	EL&RR	Lubbock	Juan A. Gonzales	1819 E. 1st St.	Lubbock	TX	79401	100%
33	180	228	Connally Tracts Tract 11	42	AK	EL&RR	Lubbock	Robert & Teresa Garcia	7344 26th St.	Lubbock	TX	79407-4318	100%
33	181	229	Connally Tracts Tract 12	42	AK	EL&RR	Lubbock	Robert Garcia	7344 26th St.	Lubbock	TX	79407-4318	100%
33	182 & 183	230	Connally Tracts 13 & 14	42	AK	EL&RR	Lubbock	Lupe C. Servantez	7340 26th St.	Lubbock	TX	79407-4318	100%
33	184	231	Connally Tracts Tract 15	42	AK	EL&RR	Lubbock	Alfredo Carrizalez	7336 26th St.	Lubbock	TX	79407-4204	100%
33	185	232	Connally Tracts Tract B	42	AK	EL&RR	Lubbock	Svend V. Burns, et al	7305 25th St.	Lubbock	TX	79407-4337	100%
33	186	233	Johnson Tracts Tract 41	42	AK	EL&RR	Lubbock	Mark D. Luchsinger	P. O. Box 6507	Lubbock	TX	79493-6507	100%
33	187	234	Johnson Tracts Tract 43	42	AK	EL&RR	Lubbock	Brian Rosser C/o PMB 199	8100 Wyoming Blvd. NE, Suite M 4	Albuquerque	NM	87113-1963	100%
33	188	235	Johnson Tracts Tract 44	42	AK	EL&RR	Lubbock	Jose Angel & Juanita M. Bocanegra	7322 26th St.	Lubbock	TX	79407-4316	100%
33	190	236	Johnson Tracts Tract 50	42	AK	EL&RR	Lubbock	Svend V. Burns, et al	7305 25th St.	Lubbock	TX	79407-4337	100%
33	191 & 192	237	Johnson Tracts Tract 52	42	AK	EL&RR	Lubbock	Claude, Jr. III & Olevia Williams	415 Stone Canyon Drive	Sunnyvale	TX	75182-5021	100%
33	193	238	Johnson Tracts Tract 53	42	AK	EL&RR	Lubbock	Claude, Jr. III & Olevia Williams	415 Stone Canyon Drive	Sunnyvale	TX	75182-5021	100%
33	194 & 195	239	Johnson Tracts Tract 54	42	AK	EL&RR	Lubbock	Katherine Brown	15016 FM RD	Marshall	TX	75672	100%
33	189	240	Johnson Tracts Tract 36	42	AK	EL&RR	Lubbock	Thelma Ray Butler	P. O. Box 16085	Lubbock	TX	79490-6085	100%
33	199	241	Johnson Tracts Tract 30	42	AK	EL&RR	Lubbock	Wilbert Nelms	7307 25th St.	Lubbock	TX	79407-4337	100%
33	198	242	Johnson Tracts Tract 29	42	AK	EL&RR	Lubbock	Svend V. Burns, et al	7305 25th St.	Lubbock	TX	79407-4337	100%
33	196 & 197	243	Johnson Tracts Tract 27	42	AK	EL&RR	Lubbock	Robbie Murphy-Ussary	7301 25th St.	Lubbock	TX	79407	100%
33	202	244	Tract 1 in SW/4	43	AK	EL&RR	Lubbock	William E. Turner	7115 26th St.	Lubbock	TX	79407-4400	100%
33	205	245	Pine Hills Lot 2	43	AK	EL&RR	Lubbock	Billy Don & Jackie Susan Hampton	2605 Saratoga Ave.	Lubbock	TX	79407-2719	100%
33	200	246	Crenwelge Addition Lot 1	43	AK	EL&RR	Lubbock	Gerald Wayne Crenwelge	2601 Upland Ave.	Lubbock	TX	79407-5003	100%
33	201	247	Tract 13 in NW/Cor SW/4	43	AK	EL&RR	Lubbock	William E. Turner	7115 26th St.	Lubbock	TX	79407-4400	100%
33	203	248	Pine Hills Lot 62	43	AK	EL&RR	Lubbock	Curtis Clymo	2602 Saratoga Ave.	Lubbock	TX	79407-2718	100%
33	204	249	Pine Hills Lot 1	43	AK	EL&RR	Lubbock	Richard Patterson & Stacie Buck	3200 S. Salem Warren Rd.	North Jackson	OH	44451	100%
33		250	Tract A (148.09 acs. NW/4)	43	AK	EL&RR	Lubbock	D. R. Bush Family Partners LTD	934 Green Tree Lane	Duncanville	TX	75137	100%
33		251	Tract A3 (In NE Cor of NW/4)	43	AK	EL&RR	Lubbock	Mr. Postman Inc.	1703 Pontiac Ave.	Lubbock	TX	79416-6911	100%
33	206-245	252	Commanders Addition Lots 1 & 2	43	AK	EL&RR	Lubbock	CP Mobile Home Park LP	P. O. Box 16738	Lubbock	TX	79490	100%

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26		253	Tract E (169.952 acs.) in S/2	13	D6	EL&RR	Lubbock	Zita Ann Enloe Estate Trust/ Lesley Lee Robinson Est. Trst./Alan Bradley Enloe Est. Trst	5207 70th St.	Lubbock	TX	79424	100%
26		254	Tract E3 in SW/w	13	D6	EL&RR	Lubbock	Pelgas Farm Center Inc.	30473 260th St.	Eldora	IA	50627	100%
26		255	RR Corridor in S/2	14	D6	EL&RR	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
26		256	Tract A (125.95 acs.) in N/2	13	D6	EL&RR	Lubbock	Lindsey Ranch LC C/o Cliff Thompson	713 Orchid	Corona Del Mar	CA	92625	100%
26	247	257	Tract A1 (5.21 acs.) in SW/4	13	D6	EL&RR	Lubbock	Crenscio Mojica	1208 FM 2378	Lubbock	TX	79407-9741	100%
26		258	Tract B (134.99 acs.) in N/2	13	D6	EL&RR	Lubbock	City of Lubbock	P. O. Box 2000	Lubbock	TX	79457-0001	100%
26		259	Tract C1 in NE/4	13	D6	EL&RR	Lubbock	City of Lubbock	P. O. Box 2000	Lubbock	TX	79457-0001	100%
26		260	Tract C (NE/Cor of NE/4)	13	D6	EL&RR	Lubbock	Lester E. York	3005 67th St.	Lubbock	TX	79413-6203	100%
35		261	W/2 (290.36 acs.)	3	D6	HE&WT	Lubbock	EC Family LTD	7170 Westwind Dr., Suite #101	El Paso	TX	79912	100%
35		262	RR Corridor (Odd Shaped Tract 13.86 acs.)	3	D6	HE&WT	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
35		263	Tracts 1, 1A, 2, 3, E/2 (162.137 acs.)	3	D6	HE&WT	Lubbock	Cactus Pointe LTD	7170 Westwind Dr., Suite #101	El Paso	TX	79912	100%
35	310	264	Willow Bend Lot 261	3	D6	HE&WT	Lubbock	Melanie F. H. & Herbert J. Knabe	8807 9th St.	Lubbock	TX	79416	100%
35	311	265	Willow Bend Lot 263	3	D6	HE&WT	Lubbock	Mathew White	8803 9th Street	Lubbock	TX	79416	100%
35	312	266	Willow Bend Lot 275	3	D6	HE&WT	Lubbock	Enrique O. & Cynthia C. Moralez	14360 Ted Williams Road	Atascosa	TX	78002	100%
35	313	267	Willow Bend Lot 274	3	D6	HE&WT	Lubbock	Melissa Martinez & Andrew Quevedo	8804 9th St.	Lubbock	TX	79416	100%
35	314	268	Willow Bend Lot 273	3	D6	HE&WT	Lubbock	Sterling Creek Ventures LLC	3411 82nd St., Suite B	Lubbock	TX	79423-1766	100%
35	315	269	Willow Bend Lot 272	3	D6	HE&WT	Lubbock	Denise Hinojosa	8708 9th Street	Lubbock	TX	79416	100%
35	316	270	Willow Bend Lot 271	3	D6	HE&WT	Lubbock	Matthew Hernandez	8706 9th Street	Lubbock	TX	79416	100%
35	317	271	Willow Bend Lot 270	3	D6	HE&WT	Lubbock	Freddy & Rita Elias	8704 9th Street	Lubbock	TX	79416	100%
35		272	Willow Bend Tract C	3	D6	HE&WT	Lubbock	Cactus Pointe LTD	7170 Westwind Dr., Suite #101	El Paso	TX	79912	100%
34, 36		273	E Pt. S/2 (126.88 acs.)	2	D6	HE&WT	Lubbock	Coyote Land LTD	6309 Indiana Ave., Suite B	Lubbock	TX	79413-5739	100%
35		274	West 4th Street Addition Tract A (S/2 NW/4)	2	D6	HE&WT	Lubbock	Huff 80 LTD	17103 Preston Rd., Sute #225	Dallas	TX	75248-1389	100%
34, 35, 36		275	Tract A (145.511 acs. of NE/4)	2	D6	HE&WT	Lubbock	Real Property Resources Inc.	6305 82nd St.	Lubbock	TX	79424-3681	100%
35	319	276	West 4th Street Addition Tract 30	2	D6	HE&WT	Lubbock	Grace Baptist Church	2102 N FM 179	Lubbock	TX	79416	100%
35	318 & 320	277	West 4th Street Addition Tract 29	2	D6	HE&WT	Lubbock	Max Alvarado	801 Inler Ave.	Lubbock	TX	79416-6215	100%
35	321	278	West 4th Street Addition Tract 31	2	D6	HE&WT	Lubbock	Anita Rositas	4103 E. 3rd St., Trlr #NW	Lubbock	TX	79416-6209	100%
35	322	279	Tract A1B in NW/4	2	D6	HE&WT	Lubbock	Lloyd I. Jr. & Gilda A. Rinehart	8321 4th St.	Lubbock	TX	79416-6200	100%
37		280	N/Pt. of SE/4 (117.79 acs.)	1	D6	HE&WT	Lubbock	E. W. Brown Estate C/o Margaret Brown Johnston	2813 Meadow Dr.	Lubbock	TX	79403	100%

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36, 37, 39		281	S 2273.05' of Tracts 1, 2 & 2A-2D	1	D6	HE&WT	Lubbock	Real Property Resources Inc.	6305 82nd St.	Lubbock	TX	79424-3681	100%
37		282	Tract 3 of NW/4 & Tracts C & A1 of NE/4	1	D6	HE&WT	Lubbock	Wayne H. Worley	462 30th St.	Lubbock	TX	79410-2423	100%
37		283	Tract A10 (S/2 NE/4)	1	D6	HE&WT	Lubbock	Nancy Morrow Edwards	4005 16TH St., #18D	Lubbock	TX	79416	75%
37		283	Tract A10 (S/2 NE/4)	1	D6	HE&WT	Lubbock	Gene Clement	174 CR 1215	Quitman	TX	75783-3314	13%
37		283	Tract A10 (S/2 NE/4)	1	D6	HE&WT	Lubbock	Carl D. Morrow	P. O. Box 1797	Buna	TX	77612-1797	13%
37	326	284	Tract A9 SE/Cor in NE/4	1	D6	HE&WT	Lubbock	Dennis K. & Ruth Ann Mote	1114 Upland Ave.	Lubbock	TX	79416-6614	100%
39	386-398	285	Town & Country Mobile Estates Lot 1	1	D6	HE&WT	Lubbock	Lubbock TC MHP LLC	P. O. Box 457	Cedaredge	CO	81413-0457	100%
39		286	N/Pt. of Tracts 1, 2 & 2A-2D of NW/4	1	D6	HE&WT	Lubbock	87th Street Partners LLC	6305 82nd St.	Lubbock	TX	79424	100%
37		287	Tract D (81.65 acs. in W/2)	10	JS	EL&RR	Lubbock	MCP Enterprises LLC	7112 19th St.	Lubbock	TX	79407	100%
37		288	Tracts C & C1 (Mid/3 W/2)	10	JS	EL&RR	Lubbock	Burgamy Development Corp.	7112 19th St.	Lubbock	TX	79407	100%
33, 37, 38, 61, 63, 64		289	Tract A (E/3 W/2)	10	JS	EL&RR	Lubbock	Pevehouse Development Corp.	117 Sheffield Road	Alameda	CA	94502-7422	100%
37	327	290	Frenship Middle School Tract A (SW/Cor NW/4)	10	JS	EL&RR	Lubbock	Frenship ISD	P. O. Box 100	Wolfforth	TX	79382-0100	100%
33, 37, 38	328	291	Westchester Park Lots 877 & 878	10	JS	EL&RR	Lubbock	Denis A. & Kelly L. Breault	1016 Propsect Ave.	Lubbock	TX	79416	100%
38	329	292	Westchester Park Lot 876	10	JS	EL&RR	Lubbock	Amanda & Joshua Pyle	1014 Prospect Ave.	Lubbock	TX	79416-3800	100%
38	330	293	Westchester Park Lot 875	10	JS	EL&RR	Lubbock	William C. & Karen C. Gordy	1012 Prospect Ave.	Lubbock	TX	79416	100%
38	331	294	Westchester Park Lot 874	10	JS	EL&RR	Lubbock	Do Ly, Thuong C. Tran & Ngoc B. Nguyen	1010 Prospect Ave.	Lubbock	TX	79416	100%
38	332	295	Westchester Park Lot 873	10	JS	EL&RR	Lubbock	Kimberly R. B. & Gregory G. Pierce	1008 Prospect Ave.	Lubbock	TX	79416	100%
38	333	296	Westchester Park Lot 872	10	JS	EL&RR	Lubbock	Jeffrey J. & Shanda L. Saucedo	1006 Prospect Ave.	Lubbock	TX	79416	100%
38	334	297	Westchester Park Lot 871	10	JS	EL&RR	Lubbock	Rogelio S. & Daniela C. Diaz	1004 Prospect Ave.	Lubbock	TX	79416	100%
38	335	298	Westchester Park Lot 870	10	JS	EL&RR	Lubbock	Jarrod B. Cook	1002 Prospect Ave.	Lubbock	TX	79416	100%
38	336	299	Westchester Park Lot 770	10	JS	EL&RR	Lubbock	Bernadette P. & Emmanuel Pamintuan	1115 Alexis Lane	Redlands	CA	92374-1841	100%
38	337	300	Westchester Park Lot 771	10	JS	EL&RR	Lubbock	Joel David Turner	6910 10th St.	Lubbock	TX	79416	100%
38	338	301	Westchester Park Lot 730	10	JS	EL&RR	Lubbock	James K. & Amy Garner	6911 9th St.	Lubbock	TX	79416	100%
38	339	302	Westchester Park Lot 729	10	JS	EL&RR	Lubbock	Christy K. Cole	13288 W 87th Terrace	Arvada	CO	80005-1121	100%
38	340	303	Westchester Park Lot 658	10	JS	EL&RR	Lubbock	Edward S. Erinn Anderson	6912 9th St.	Lubbock	TX	79416-3794	100%
38	341	304	Westchester Park Lot 659	10	JS	EL&RR	Lubbock	Thomas Aron Strickland	6910 9th St.	Lubbock	TX	79416	100%
38	342	305	Westchester Park Lot 657	10	JS	EL&RR	Lubbock	Matthew Reid & Jenna Jenkins-Reid	6913 8th St.	Lubbock	TX	79416	100%
38	343	306	Westchester Park Lot 656	10	JS	EL&RR	Lubbock	Kassidy Clanton	6911 8th St.	Lubbock	TX	79416	100%
38	344	307	Westchester Park Lot 573	10	JS	EL&RR	Lubbock	Bernie Mecalco & Rachel Callaway	6914 8th St.	Lubbock	TX	79416	100%
38	345	308	Westchester Park Lot 574	10	JS	EL&RR	Lubbock	Stephanie & Alan Rickman	3126 Stonecliff	Alamagordo	NM	88310-3917	100%
38	346	309	Westchester Park Lot 572	10	JS	EL&RR	Lubbock	Roberto & Graciela A. Chairez	6817 7th St.	Lubbock	TX	79416-3777	100%
38	347	310	Westchester Park Lot 571	10	JS	EL&RR	Lubbock	JLS Endeavors LLC	4925 FM 41	Lubbock	TX	79423	100%
38	348	311	Westchester Park Lot 494	10	JS	EL&RR	Lubbock	Bryan & Carla Lynskey	6818 7th St.	Lubbock	TX	79416	100%
38	349	312	Westchester Park Lot 495	10	JS	EL&RR	Lubbock	Melanie K. Robins	6816 7th St.	Lubbock	TX	79416	100%
38	350	313	Westchester Park Lot 487	10	JS	EL&RR	Lubbock	Michael A. & Michele L. Brooks	6829 6th St.	Lubbock	TX	79416	100%

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38	351	314	Westchester Park Lot 486	10	JS	EL&RR	Lubbock	Braulio, III & Samantha R. Delgado	4015 110th St.	Lubbock	TX	79423-0887	100%
38	352	315	Westchester Park Lot 488	10	JS	EL&RR	Lubbock	Kacey G. & William D. Stevens, III	6832 6th St.	Lubbock	TX	79416	100%
38	353	316	Westchester Park Lot 489	10	JS	EL&RR	Lubbock	Clayton & Kasi Henderson	6830 6th St.	Lubbock	TX	79416	100%
63	401	318	Tract D4 in NW/Cor NW/4	10	JS	EL&RR	Lubbock	Connie McKibben Revocable Trust	1621 124th St.	Lubbock	TX	79423	100%
39, 62, 63	399 & 400	319	Tract D4A in NW/Cor NW/4	10	JS	EL&RR	Lubbock	Connie McKibben Revocable Trust	1621 124th St.	Lubbock	TX	79423	100%
26		322	E/Pt. Tracts 6, 7 & 8 (9.289 acs.) West Place Subdivision	14	D6	EL&RR	Lubbock	Billy J & Jo Beth Walker	11621 CR 6700	Lubbock	TX	79407	50%
26		322	E/Pt. Tracts 6, 7 & 8 (9.289 acs.) West Place Subdivision	14	D6	EL&RR	Lubbock	Billy Walker Trust for Mark S. & Michael L. Walker C/o Jo Beth Walker Trustee	11621 CR 6700	Lubbock	TX	79407	50%
26		323	E 556.2' of Tract 1 of Tract 5 (3.17 acs.)	14	D6	EL&RR	Lubbock	VLB #134792 C/o Brad R. & Clay whitley	3707 63rd Dr.	Lubbock	TX	79413-5309	100%
26	248	324	E 560.5' OF Tract 2 of Tract 5 (3.16 acs.)	14	D6	EL&RR	Lubbock	VLB #160014 Attn: Kelly R. Hendricks	1206 FM 2378	Lubbock	TX	79407-9741	100%
26	249	325	E 564.8' of Tract 3 of Tract 5 (3.18 acs.)	14	D6	EL&RR	Lubbock	William A. Murray	1112 FM 2378	Lubbock	TX	79407-9741	100%
26	250	326	E 569.1' of Tract 4 of Tract 5 (3.2 acs.)	14	D6	EL&RR	Lubbock	William A. Murray	1112 FM 2378	Lubbock	TX	79407-9741	100%
26	251	327	E 573.4' of Tract 5 of Tract 5 (3.23 acs.)	14	D6	EL&RR	Lubbock	Michelle Hover	810 FM 2378	Lubbock	TX	79407-9739	100%
26	252	328	E 577.7' of Tract 6 of Tract 5 (3.25 acs.)	14	D6	EL&RR	Lubbock	VLB #136432 C/o Frank C. Buehner	902 FM 2378	Lubbock	TX	79407-9741	100%
26	253	329	E 582' of Tract 7 of Tract 5 (3.27 acs.)	14	D6	EL&RR	Lubbock	Frank A. & Teresa Buehner	902 FM 2378	Lubbock	TX	79407-9741	100%
26	254 & 255	330	E 586.3' of Tract 8 of Tract 5 (2.3 acs. Less 65 + HS)	14	D6	EL&RR	Lubbock	Terri Adams	1781 CR 252	Hamilton	TX	76531-3945	100%
26	256	331	E 594.9' of Tract 10 of Tract 5 (3.37 acs.)	14	D6	EL&RR	Lubbock	Michelle Hover	810 FM 2378	Lubbock	TX	79407-9739	100%
26	257	332	E 599.2' of Tract 11 of Tract 5 (3.37 acs.)	14	D6	EL&RR	Lubbock	VLB #143199 C/o Phil Reep Attn: Regeana Reep	6817 83rd St.	Lubbock	TX	79424	100%
26		333	Tracts E1, E2 & F1	47	P	ACH&B	Lubbock	City of Lubbock	P. O. Box 2000	Lubbock	TX	79457-0001	100%
26		334	Tract F	47	P	ACH&B	Lubbock	Lester E. York	3005 67th St.	Lubbock	TX	79413-6203	50%
26		334	Tract F	47	P	ACH&B	Lubbock	Shane Gentry	3005 67th St.	Lubbock	TX	79413-6203	50%
26		335	Tract E	47	P	ACH&B	Lubbock	Mary Gentry & Iva York	9304 York Ave.	Lubbock	TX	79424-4833	100%
47		336	Tracts 16 & 17	18	JS	EL&RR	Lubbock	Shadewind LLC	P. O. Box 98375	Lubbock	TX	79499-6375	100%
47	307 & 308	337	Tracts 14 & 15	18	JS	EL&RR	Lubbock	Frank L. Richard	217 N FM 179	Lubbock	TX	79416	100%
47		338	Tract 10E	18	JS	EL&RR	Lubbock	Dale & Janette Cook	9001 CR 6520	Lubbock	TX	79416	100%
47		339	Tracts 5 & 6	18	JS	EL&RR	Lubbock	Justin Brent Bownds	218 Tanglewood Lane	Levelland	TX	79336-6612	100%
47			Tract 7A (12.456 acs.)	18	JS	EL&RR	Lubbock	Randall Halford	P. O. Box 98151	Lubbock	TX	79499	100%
47		340	Tract 9 (9.271 acs.)	18	JS	EL&RR	Lubbock	Carlos De La Cruz	989 Mesa Vista Dr.	Crowley	TX	76036	100%
47	304	341	Tract 1A	18	JS	EL&RR	Lubbock	Julio & Filomena Villanueva	P. O. Box 16917	Lubbock	TX	79490-6917	100%
47	305	342	Tract 1	18	JS	EL&RR	Lubbock	Julio & Filomena Villanueva	P. O. Box 16917	Lubbock	TX	79490-6917	100%
47	306	343	Tract 2A	18	JS	EL&RR	Lubbock	Barbara Sloan Holub	528 N CR 1300	Lubbock	TX	79416-9510	100%
39	323	344	Tract 3 (2 acs.)	17	JS	EL&RR	Lubbock	Morris & Jerri Locknane	7902 4th St.	Lubbock	TX	79416-9509	100%
47		345	Tract 2 Less S 610"	17	JS	EL&RR	Lubbock	Hwy 179 Ltd	7931 19th St.	Lubbock	TX	79407	100%

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47	309	346	Tracts A6 & A9	17	JS	EL&RR	Lubbock	Frederick & June Marble Trust	5423 12th St.	Lubbock	TX	79416-5405	100%
47		347	Tract D	17	JS	EL&RR	Lubbock	Tommy Floyd Altman & Trustee for Benefit of Allen Grady Anderson	558 CR 1743	Chico	TX	79431-2106	100%
47		348	SW 26.97 ac of NE/4	17	JS	EL&RR	Lubbock	Linda S. Bryan	8011 CR 6500	Lubbock	TX	79416-9557	100%
47		349	Tract 1 of NE/4	17	JS	EL&RR	Lubbock	Scharlotte Kay Bean	4803 Dorcheat Rd.	Minden	LA	71055-5855	100%
39	324	350	Tract C1	4	JS	TT RR	Lubbock	Marla Sue Hanna	P. O. Box 98842	Lubbock	TX	79499-8842	100%
39	325	351	S 660' of Tract C, Balance of SW/4	4	JS	TT RR	Lubbock	Travis L. Casler	4613 7th St.	Lubbock	TX	79416-4714	100%
39		352	S 660' of Tracts C2 & C2A	4	JS	TT RR	Lubbock	Jerry Wayne Altman	P. O. Box 98502	Lubbock	TX	79499-8502	100%
39		353	S 610' of W/2 of SE/4	4	JS	TT RR	Lubbock	Wayne L. White	9401 Nashville Ave.	Lubbock	TX	79423	100%
39		354	Friendship Estates Lot 1	4	JS	TT RR	Lubbock	Dennis I & Carrie J. Dodd Living Trust C/o Trustees Dennis & Carrie Dodd	1804 Albany Ave.	Lubbock	TX	79416	100%
39	384 & 385	355	Friendship Estates Lot 2	4	JS	TT RR	Lubbock	Frances D. Fitzgerald	300 Venita Ave.	Lubbock	TX	79416-3515	100%
39	383	356	Friendship Estates Lot 3	4	JS	TT RR	Lubbock	Frances D. Fitzgerald	300 Venita Ave.	Lubbock	TX	79416-3515	100%
39		357	Friendship Estates Lot 61	4	JS	TT RR	Lubbock	Jack Kastman	3810 110th St.	Lubbock	TX	79423-0891	100%
39		358	Friendship Estates Lot 62	4	JS	TT RR	Lubbock	Jack Kastman	3810 110th St.	Lubbock	TX	79423-0891	100%
39	379	359	Friendship Estates Lot 63	4	JS	TT RR	Lubbock	Chapparal Investments Inc.	P. O. Box 788	Friona	TX	79035	100%
39, 62, 63	378	360	Friendship Estates Lot 64	4	JS	TT RR	Lubbock	Chapparal Investments Inc.	P. O. Box 788	Friona	TX	79035	100%
39	382	361	Friendship Estates Lot 60	4	JS	TT RR	Lubbock	Frances E. Celaya	7327 3rd St.	Lubbock	TX	79416	100%
39	381	362	Friendship Estates Lot 59	4	JS	TT RR	Lubbock	William & Shameeka Taylor	7321 3rd St.	Lubbock	TX	79416	100%
39	380	363	Friendship Estates Lot 58	4	JS	TT RR	Lubbock	Charles Catherina Farrar	7315 3rd St.	Lubbock	TX	79416	100%
39 & 62	377	364	Friendship Estates Lot 57	4	JS	TT RR	Lubbock	Frank & Nancy Mitchell/Tiffany Lyons	7301 3rd St.	Lubbock	TX	79416-3505	100%
62	376	365	Friendship Estates Lot 56	4	JS	TT RR	Lubbock	Oscar Mata	7302 3rd St.	Lubbock	TX	79416-3504	100%
62	375	366	Friendship Estates Lot 49	4	JS	TT RR	Lubbock	Rodney & Nancy Hardy	2509 Alma St., #16	Lubbock	TX	79415-9626	100%
62	374	367	Friendship Estates Lot 48	4	JS	TT RR	Lubbock	Everardo & Emigdio Rodriguez	7302 2nd St.	Lubbock	TX	79416	100%
62	373	368	Friendship Estates Lot 41	4	JS	TT RR	Lubbock	Charla Campbell	7301 1st St.	Lubbock	TX	79416-3501	100%
62	372	369	Friendship Estates Lot 40	4	JS	TT RR	Lubbock	Robert J. & Catherine Creager	7302 1st St.	Lubbock	TX	79416-3500	100%
62	371	370	Friendship Estates Lot 33	4	JS	TT RR	Lubbock	Linda Stephenson	1513 Nottingham Ave.	Wolfforth	TX	79382-3202	100%
62	370	371	Friendship Estates Lot 32	4	JS	TT RR	Lubbock	William George Burleson	7302 Amherst St.	Lubbock	TX	79416-3506	100%
47		372	Tract C Less S 660'	4	JS	TT RR	Lubbock	Travis L. Casler	4613 7th St.	Lubbock	TX	79416-4714	100%
47		373	W/2 SE/4 Less S 610'	4	JS	TT RR	Lubbock	Wayne L. White	9401 Nashville Ave.	Lubbock	TX	79423	100%
59, 60, 62	368 & 369	374	Friendship Estates Lot 25	4	JS	TT RR	Lubbock	Alfonso B. Lopez	401 N. Yuma Ave.	Lubbock	TX	79416-9593	100%
47	360	375	Friendship Estates Lot 18	4	JS	TT RR	Lubbock	Stephanie Moyers	7420 Auburn St.	Lubbock	TX	79416	100%
47	361	376	Friendship Estates Lot 19	4	JS	TT RR	Lubbock	Ken & Jackie Marley	7414 Auburn St.	Lubbock	TX	79416-3510	100%
47	362	377	Friendship Estates Lot 20	4	JS	TT RR	Lubbock	Delia Moreno	7402 Auburn St.	Lubbock	TX	79416	100%
47	363	378	Friendship Estates Lot 21	4	JS	TT RR	Lubbock	William Thomas Tweedy	P. O. Box 98125	Lubbock	TX	79499	100%
47	364	379	Friendship Estates Lot 22	4	JS	TT RR	Lubbock	Mrs. J. B. O'Hair	205 Oak Brook Cv.	Florence	MS	39073-5005	100%
47, 57, 59	365 & 366	380	Friendship Estates Lot 23	4	JS	TT RR	Lubbock	Leroy Jones III	7314 Auburn St.	Lubbock	TX	79416-3508	100%
47, 57, 59, 60, 62	367	381	Friendship Estates Lot 24	4	JS	TT RR	Lubbock	Alfonso B. Lopez	401 N. Yuma Ave.	Lubbock	TX	79416-9593	100%
47		382	Western Ranch Acres Lot 8	4	JS	TT RR	Lubbock	Roy & Pam Sue	7629 Baylor St.	Lubbock	TX	79416	100%
47		383	Western Ranch Acres Lot 14	4	JS	TT RR	Lubbock	Joseph & Kristina Ellis	7601 Baylor St.	Lubbock	TX	79416	100%
47, 57, 59		384	Tract B1 in NE/4	4	JS	TT RR	Lubbock	Chase & Allison McClain	3118 21st St.	Lubbock	TX	79410-1428	100%
54, 56, 57		385	Tract B in NE/4	4	JS	TT RR	Lubbock	Huff 80 LTD	17103 Preston Rd., Suite #225	Dallas	TX	75248-1389	100%

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54		386	Tract B2 in NE/4	4	JS	TT RR	Lubbock	Steve & Lucia Mata	613 Ironton Ave.	Lubbock	TX	79416	100%
39, 61, 62, 63, 64	418	387	S 610' of SW/4	3	JS	TT RR	Lubbock	Truman & Mona Lewis	5507 27th St.	Lubbock	TX	79407	100%
61	417	388	Terra Estates North W 100' of Lot 168	3	JS	TT RR	Lubbock	Byron Boyd Investments Co.	5611 CR 1440	Lubbock	TX	79407	100%
61	415	389	Terra Estates North Lot 167	3	JS	TT RR	Lubbock	Jerry D. Denton	6812 3rd St.	Lubbock	TX	79416-3724	100%
61	416	390	Terra Estates North Lot 166	3	JS	TT RR	Lubbock	Rodney & Donna Burd	15409 N CR 1900	Lubbock	TX	79415-7338	100%
58, 59, 60, 61, 62		391	SW/4 Less S 610'	3	JS	TT RR	Lubbock	Truman & Mona Lewis	5507 27th St.	Lubbock	TX	79407	100%
61	413	392	Terra Estates North Lot 120	3	JS	TT RR	Lubbock	Danny B. & Carolyn S. Poe	6811 2nd St.	Lubbock	TX	79416-3715	100%
61	414	393	Terra Estates North Lot 121 & W 38' of Lot 122	3	JS	TT RR	Lubbock	Michael E. & Ginni L. Stanton	6807 2nd St.	Lubbock	TX	79416-3715	100%
61	411	394	Terra Estates North Lot 119	3	JS	TT RR	Lubbock	Occupant/Landowner	6812 2nd St.	Lubbock	TX	79416	??
61	412	395	Terra Estates North Lot 118	3	JS	TT RR	Lubbock	Jana Fitchett	6810 2nd St.	Lubbock	TX	79416	100%
61	409	396	Terra Estates North Lot 72	3	JS	TT RR	Lubbock	Michael & Irene Strahan	6811 1st St.	Lubbock	TX	79416-3707	100%
61	410	397	Terra Estates North Lot 73	3	JS	TT RR	Lubbock	Larry E. Conley	6809 1st St.	Lubbock	TX	79416-3707	100%
61	407	398	Terra Estates North Lot 65	3	JS	TT RR	Lubbock	Jess J. & Marilyn Dickey	6812 1st St.	Lubbock	TX	79416-3708	100%
61	408	399	Terra Estates North Lot 64 & W 45' of Lot 63	3	JS	TT RR	Lubbock	Jimmy H. & Mary A. Smith	6810 1st St.	Lubbock	TX	79416-3708	100%
61	406	400	Terra Estates North Lot 67	3	JS	TT RR	Lubbock	Kendall Eugene Howard	8212 University	Lubbock	TX	79423	100%
61	405	401	Terra Estates North Lot 68	3	JS	TT RR	Lubbock	Melissa Carney	114 N. Quincy Ave.	Lubbock	TX	79416-3700	100%
61	404	402	Terra Estates North Lot 69	3	JS	TT RR	Lubbock	Kevin J. & Irene F. Kandik	116 N. Quincy Ave.	Lubbock	TX	79416-3700	100%
58, 60, 61	403	403	Terra Estates North Lot 70	3	JS	TT RR	Lubbock	Mohamad M. & Lillian L. Arzaghi	118 N. Quincy Ave.	Lubbock	TX	79416-3700	100%
58, 60, 61	402	404	Terra Estates North Lot 71	3	JS	TT RR	Lubbock	Raichard A. & Karen Renee Wallin	120 N. Quincy Ave	Lubbock	TX	79416-3700	100%
56, 58, 59		405	NW/4	3	JS	TT RR	Lubbock	Kui Y Chen, Fong Chen & Carmen Fu-Yu	7231 SW 128th St.	Miami	FL	33156	100%
26		406	SE/4	46	P	ACH&B	Lubbock	Morrow Estate Ptsp C/o Mary Drake	4202 64th St	Lubbock	TX	79413-5110	50%
26		406	SE/4	46	P	ACH&B	Lubbock	Loys Smith Tilger	5214 44th St.	Lubbock	TX	79414	50%
26		407	NE/4	46	P	ACH&B	Lubbock	Western Commercial LTD	4284 FM 3261	Ropesville	TX	79358-4302	100%
26	258	408	Tracts 6, 7 & 8 Less W 3.23 acs, Tract 9 Less W 466.69 acs.	45	P	ACH&B	Lubbock	Curtis Lynn & Cynthia Cheryl Harrist	3411 N CR 1100	Shallowater	TX	79363	100%
26	259	409	Tract 3	45	P	ACH&B	Lubbock	Billie S. & Frances E. Smith	1806 N CR 1100	Shallowater	TX	79363	100%
26, 40, 41	260	410	Tract 1	45	P	ACH&B	Lubbock	Randy Ervin Hathorn	2106 N CR 1100	Shallowater	TX	79363-3853	100%
47		411	Tract B	20	JS	EL&RR	Lubbock	Gilmore, Girls Inc.	202 Mike St.	Levelland	TX	79336-2864	100%
47		412	Tract B2	20	JS	EL&RR	Lubbock	Benny D. Edwards, Jr.	1211 N CR 1300	Lubbock	TX	79416	100%
47		413	Tract B1	20	JS	EL&RR	Lubbock	VLB C/o Benny Edwards, Jr.	1211 N CR 1300	Lubbock	TX	79416	100%
47		414	Tract B1A	20	JS	EL&RR	Lubbock	Benny D. Edwards, Jr.	1211 N CR 1300	Lubbock	TX	79416	100%
47		415	Tract A	20	JS	EL&RR	Lubbock	Walter O. Heinrich	11117 E FM 2150	Slaton	TX	79364-7812	100%
47		416	SW 89.47 acs. SW/4	19	JS	EL&RR	Lubbock	Walton Dale Wesley	P. O. Box 6602	Lubbock	TX	79493	100%
47		417	Tract A2 of SE 144 acs.	19	JS	EL&RR	Lubbock	Martha Jean Womack Junca	1017 Raymond Dr.	Metairie	LA	70001-5752	100%
47		418	RR Corridor (Odd Shaped Tract 13.366 acs.)	19	JS	EL&RR	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
47	303	419	Tract 2 Reese Acres	19	JS	EL&RR	Lubbock	Rebecca Regina Seagraves	1306 N CR 1300	Lubbock	TX	79416	100%
47	301 & 302	420	Tract 3 Reese Acres	19	JS	EL&RR	Lubbock	Jimmy J. Hernandez	1406 N CR 1300	Lubbock	TX	79416-9511	100%
47	300	421	Tract 4A Reese Acres	19	JS	EL&RR	Lubbock	Wilbur Jones	1510 N CR 1300	Lubbock	TX	79416	100%
47	297-299	422	Tracts 5 & 6 Reese Acres	19	JS	EL&RR	Lubbock	Larry & Virginia Landon	1706 N CR 1300	Lubbock	TX	79416-1846	100%
47	296	423	Tracts 5B1 & 6A1 Reese Acres	19	JS	EL&RR	Lubbock	Yolanda Diaz & Sergio Barrera	2004 N. County Road 1300	Lubbock	TX	79416	100%

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47	293 & 295	424	Tracts 5B & 6A Reese Acres	19	JS	EL&RR	Lubbock	Yolanda Diaz	2004 N. County Road 1300	Lubbock	TX	79416	100%
47 & 48	267 & 268	425	Tract 5A Reese Acres	19	JS	EL&RR	Lubbock	William P. Glenn	P. O. Box 16830	Lubbock	TX	79490-6830	100%
48	269	426	Tract 6B Reese Acres	19	JS	EL&RR	Lubbock	Leonard J. & Elyse M. Duff	9409 CR 6400	Shallowater	TX	79363	100%
48	270	427	Tract 7 Reese Acres	19	JS	EL&RR	Lubbock	Karen Williams	9303 CR 6400	Shallowater	TX	79363	100%
48	271 & 272	428	Tract 8A Reese Acres	19	JS	EL&RR	Lubbock	Mrs. Edith B. Squires	9313 CR 6400	Shallowater	TX	79363	100%
48	273 & 274	429	Tract 8 Reese Acres	19	JS	EL&RR	Lubbock	Roy Lee Burch	9311 CR 6400	Shallowater	TX	79363	100%
48	275	430	Tract 9A Reese Acres	19	JS	EL&RR	Lubbock	Cloyce Williams	9303 CR 6400	Shallowater	TX	79363	100%
48	276	431	Tract 9 Reese Acres	19	JS	EL&RR	Lubbock	Wayne & Wanda Welch	9227 CR 64	Shallowater	TX	79363	100%
48	277	432	Tract 10 Reese Acres	19	JS	EL&RR	Lubbock	Ygnacia Gonzales Prado	120 N. Ave. V	Lubbock	TX	79415-3010	100%
50	279	433	NE 58.194 acs.	19	JS	EL&RR	Lubbock	Gregory A. Noyola	P. O. Box 16904	Lubbock	TX	79490-6904	100%
50, 51, 52	280	434	Tract 1 Plott Acres	16	JS	EL&RR	Lubbock	Federal National Mortgage Assn.	4250 N. Fwy	Fort Worth	TX	76137-5021	100%
52	281 & 282	435	Tract 11 Plott Acres	16	JS	EL&RR	Lubbock	Jose Gomez & Felicitas Lopez	6605 County Road 6400	Shallowater	TX	79363	100%
52	283	436	Tract 13 Plott Acres	16	JS	EL&RR	Lubbock	Billie Marie Langston	8524 CR 6430, Unit #7	Lubbock	TX	79416-9427	100%
52	284	437	Tract 17B Plott Acres	16	JS	EL&RR	Lubbock	Manuela G. Martinez	P. O. Box 1654	Lubbock	TX	79408-1654	100%
52	285	438	Tract 17A Plott Acres	16	JS	EL&RR	Lubbock	Leveta N. Dillon	RR 1, Box 138C	Shallowater	TX	79363-9402	100%
52	286	439	Tract 23 Carlisle Acres	16	JS	EL&RR	Lubbock	Ricky Dale Pinkerton	319 Buddy Holly Ave.	Lubbock	TX	79401-1410	100%
52	287	440	Tracts 19 & 20 Carlisle Acres	16	JS	EL&RR	Lubbock	Everett McCulloch	2011 N. CR 1460	Lubbock	TX	79416-9645	100%
52	288-290	441	Tract 11 Carlisle Acres	16	JS	EL&RR	Lubbock	Joel B. & Josephine Montoya	2106 N CR 1460	Lubbock	TX	79416-9639	100%
52	291	442	W 89.79' of Tract 10 Carlisle Acres	16	JS	EL&RR	Lubbock	Tracy & Michael Morris	806 N CR 1450	Lubbock	TX	79416-9559	100%
54		443	Tracts A & C	15	JS	EL&RR	Lubbock	Jay H. Stanton	9502 York Ave.	Lubbock	TX	79424-4853	100%
54		444	Tracts C1 & D	15	JS	EL&RR	Lubbock	Blue Goose LTD	6309 Indiana Ave, Suite B	Lubbock	TX	79413-5739	100%
54, 56, 57	354	445	North Upland Estates Lot 1	15	JS	EL&RR	Lubbock	M. Swade & M. Kelly Truelock	7302 CR 6500	Lubbock	TX	79416-9647	100%
54		446	Tract B	15	JS	EL&RR	Lubbock	Mary Gayle Greenhill, Prosperity Bank Trust	1401 Ave Q	Lubbock	TX	79401-3819	100%
56	355	447	North Upland Estates Lot 10	8	J	EL&RR	Lubbock	Ronnie & Betty Gustin	103 E. Circle Dr.	Ruidoso Downs	NM	88346	100%
56	356	448	Tract B17	8	J	EL&RR	Lubbock	Earl S. Maples, Jr.	7214 CR 6500	Lubbock	TX	79416	100%
56	357		Tract B11	8	J	EL&RR	Lubbock	Efrain Monreal	3005 Baylor St.	Lubbock	TX	79415-2227	100%
56	357	449	Tract B9	8	J	EL&RR	Lubbock	David & Vickie Cates	7112 CR 6500	Lubbock	TX	79416	100%
56	358	450	Tract B10	8	J	EL&RR	Lubbock	David B. Cates	7112 CR 6500	Lubbock	TX	79416	100%
56	359	451	Tracts B1 & C	8	J	EL&RR	Lubbock	Blue Goose LTD	6309 Indiana Ave., Suite B	Lubbock	TX	79413-5739	100%
26	261	452	Tract 11	55	P	C&M RR	Lubbock	Misty Basquez	1431 Cactus Dr.	Levelland	TX	79336-8011	100%
41	262 & 263	453	10 acs. in NE/4	55	P	C&M RR	Lubbock	Curtis Lynn & Cynthia Cheryl Harrist	3411 N CR 1100	Shallowater	TX	79363	100%
26, 40, 41		454	All	56	P	C&M RR	Lubbock	Curtis Lynn & Cynthia Cheryl Harrist	3411 N CR 1100	Shallowater	TX	79363	100%
40, 42, 43, 44, 45		455	SW/4	37	JS	EL&RR	Lubbock	Walter O. Heinrich	11117 E FM 2150	Slaton	TX	79364-7812	100%
44		456	Tract C1 in SW/4	37	JS	EL&RR	Lubbock	Lubbock Reese Redevelopment Authority	9801 Reese Blvd. N. Suite 200	Lubbock	TX	79416	100%
44, 45, 47, 48		457	SE/4	37	JS	EL&RR	Lubbock	Walter O. Heinrich	11117 E FM 2150	Slaton	TX	79364-7812	100%
44, 47, 48	266	458	SE/Cor SE/4	37	JS	EL&RR	Lubbock	David M. Uptain	2301 N CR 1300	Shallowater	TX	79363	100%
43		459	NW/4	37	JS	EL&RR	Lubbock	Herschel V. Newman, Jr.	P. O. Box 277	Shallowater	TX	79363	100%
45 & 46	265	460	NE/4	37	JS	EL&RR	Lubbock	Ronald Gregg Hohertz	103 Aster CV	Buda	TX	78610	100%
45, 48, 50, 51		461	S/2 Less SE/Cor	28	JS	EL&RR	Lubbock	Herschel V. Newman, Jr.	P. O. Box 277	Shallowater	TX	79363	100%
50, 51, 52	278	462	SE/Cor S/2	28	JS	EL&RR	Lubbock	Hueston Gibson, Jr.	2209 N FM 179	Shallowater	TX	79363-3818	100%
46		463	N/2 Less RR ROW	28	JS	EL&RR	Lubbock	Anna Belle Foerster	2601 Newcomb	Lubbock	TX	79415-1707	100%

Southwestern Public Service Company

Wolfforth to Carlisle CCN
Directly Affected Landowner List

Segment	*Habitable Structure #*	*Tract #*	*Portion*	*Section*	*Block*	*Survey*	*County*	*Landowner*	*Address*	*City*	*State*	*Zip*	*Interest*
45, 46, 48		464	RR Corridor (Odd Shaped Tract 12.4 acs.)	19	JS	EL&RR	Lubbock	West Texas & Lubbock Railroad Inc. C/o Iowa Pacific Holdings LLC	118 S. Clinton St., Suite 400	Chicago	IL	60661-5772	100%
46, 50, 51, 52, 53	292	465	S/2	27	JS	EL&RR	Lubbock	Edwards Heirs Partnership	P. O. Box 797125	Dallas	TX	75379-7125	100%
46		466	N/2	27	JS	EL&RR	Lubbock	Edwards Heirs Partnership	P. O. Box 797125	Dallas	TX	75379-7125	100%
53		467	Tracts 7 & 8, S/Pt. SW/4	26	JS	EL&RR	Lubbock	Jay H. Stanton	9502 York Ave.	Lubbock	TX	79424-4853	100%
53, 54		468	Tract 9, S/Pt. SE/4	26	JS	EL&RR	Lubbock	Mary Gayle Greenhill, Prosperity Bank Trust	1401 Ave Q	Lubbock	TX	79401-3819	100%
53		469	S/Pt. of Tracts 4 & 5	26	JS	EL&RR	Lubbock	Ginalu Hamilton & Tanya T. Pakan & Adler Farms, LLC	10714 Orlanda Ave.	Lubbock	TX	79423	100%
41		470	Tract A1 of W/Pt.	51	P	ACH&B	Lubbock	The Hardberger 200 Irrev Trust	P. O. Box 1219	Lubbock	TX	79408-1219	100%
41		471	W 88 acs. of SE/4	51	P	ACH&B	Lubbock	Jeannie A. Gravitt	4497 Hackberry Ct.	Midland	TX	79707	100%
41, 43, 46		472	SE/74 acs.	51	P	ACH&B	Lubbock	Jeannie A. Gravitt	4497 Hackberry Ct.	Midland	TX	79707	100%
41, 43, 46		473	S/14 acs. of W/28 acs.	32	JS	EL&RR	Lubbock	Jeannie A. Gravitt	4497 Hackberry Ct.	Midland	TX	79707	100%
46		474	S/100 acs. of Mid/Pt.	32	JS	EL&RR	Lubbock	Garland Boozer, Jr.	P. O. Box 595	Shallowater	TX	79363-0595	100%
46		475	E 255 acs.	32	JS	EL&RR	Lubbock	Garland Boozer, Jr.	P. O. Box 595	Shallowater	TX	79363-0595	100%
46		476	SW/4 & SE/4 N of RR ROW	31	JS	EL&RR	Lubbock	Mary V. Parsley	4617 10th St.	Lubbock	TX	79416	100%
46	264	477	SE/4 S of RR ROW	31	JS	EL&RR	Lubbock	Herschel V. Newman, Jr.	P. O. Box 277	Shallowater	TX	79363	100%

ATTACHMENT 10

OVERSIZED MAP

Xcel Energy℠

SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Mr. David McCalla, Interim Electric Utility Director
Lubbock Power and Light
P.O. Box 2000
Lubbock, TX 79457

Dear Mr. McCalla:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the complete application, which includes other more detailed maps pertinent to the project, is

available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

Persons who wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their requests to intervene or their comments to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P. O. Box 13326
Austin, Texas 78711-3326

The deadline for intervention in the proceeding is October 6, 2014, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠

SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Mr. Dale Ancell, General Manager
South Plains Electric Cooperative
P.O. Box 1830
Lubbock, TX 79408

Dear Mr. Ancell:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the complete application, which includes other more detailed maps pertinent to the project, is

available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

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Austin, Texas 78711-3326

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If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Mr. Mark W. Schwirtz, President and General Manager
Golden Spread Electric Cooperative, Inc.
PO Box 9898
Amarillo, TX 79105

Dear Mr. Schwirtz:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the complete application, which includes other more detailed maps pertinent to the project, is

available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

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If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Tom Head
Lubbock County Judge
P.O Box 10563
Lubbock, TX 79408

Dear Judge Head:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

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Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the

complete application, which includes other more detailed maps pertinent to the project, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

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Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P. O. Box 13326
Austin, Texas 78711-3326

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If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Larry Sprowls
Hockley County Judge
802 Houston Street
Suite 101
Levelland, TX 79336

Dear Judge Sprowls:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

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Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are***

available for selection and approval by the Public Utility Commission of Texas. A copy of the complete application, which includes other more detailed maps pertinent to the project, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

Persons who wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their requests to intervene or their comments to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P. O. Box 13326
Austin, Texas 78711-3326

The deadline for intervention in the proceeding is October 6, 2014, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are enclosed and are also available from Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

James W. Loomis
City Manager
P.O Box 2000
Lubbock, TX 79457

Dear Mr. Loomis:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the

complete application, which includes other more detailed maps pertinent to the project, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

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The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are enclosed and are also available from Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Darrell Newsom
City Manager
P.O. Box 36
Wolfforth, TX 79382

Dear Mr. Newsom:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the

complete application, which includes other more detailed maps pertinent to the project, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

Persons who wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their requests to intervene or their comments to:

Public Utility Commission of Texas
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Austin, Texas 78711-3326

The deadline for intervention in the proceeding is October 6, 2014, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are enclosed and are also available from Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures

Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 42729

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project.

SPS is proposing to construct and operate a single circuit, 230-kilovolt (kV) electric transmission line between the existing Wolfforth and Carlisle Substations, both located in Lubbock County, Texas. The proposed transmission line is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Persons with questions about the transmission line may contact SPS's representatives Nisha Patel at 806-378-213 or James Bagley at 806-378-2868. This notice contains a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. Larger, more detailed routing maps may be viewed at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101, City of Lubbock Library, 6601 Quaker Ave, Lubbock Texas, 79413, City of Wolfforth Library, 508 East Highway 62/82, Wolfforth, Texas, 79413, and the Wolfforth City Hall, 302 Main Street, Wolfforth, Texas, 79382. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

All routes and route segments included in this notice are available for selection and approval by the Commission.

Persons who are affected by the proposed transmission line and wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their request to intervene or their comments to:

Public Utility Commission of Texas

Central Records
Attn: Filing Clerk
1701 N. Congress Ave.
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is mailed to the PUC. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

The deadline for intervention in the proceeding is October 6, 2014, and the PUC should receive a letter from anyone requesting intervention by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Nisha Patel at 806-378-2713 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing-and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

WOLFFORTH TO CARLISLE 230-KV TRANSMISSION LINE PROJECT

Route	Segments	Route Length
A	2, 7, 19, 26, 41, 46, 53, 54, 56, 58, 61, 64	22.84
B	2, 7, 19, 26, 40, 42, 43, 46, 53, 54, 57, 59, 60, 61, 64	22.85
C	2, 7, 19, 26, 41, 43, 45, 51, 52, 53, 54, 56, 58, 61, 64	22.94
D	2, 6, 8, 19, 26, 40, 44, 48, 50, 52, 53, 54, 57 ,59, 62, 63, 64	18.83
E	3, 5, 8, 19, 26, 40, 44, 47, 59, 62, 63, 64	18.44
F	1, 9, 10, 13, 22, 33, 38	11.10
G	1, 9, 10, 12, 14, 17, 20, 21, 22, 33, 38	11.66
H	3, 5, 8, 16, 15, 17, 20, 23a, 23c, 25, 31, 32, 33, 38	12.96
I	2, 6, 8, 16, 18, 20, 23a, 23b, 28, 29, 35, 36, 37, 38	12.88
J	2, 6, 8, 19, 24a, 28, 29, 35, 36, 37, 38	12.82
K	2, 6, 8, 19, 24a, 24b, 25, 31, 34, 36, 37, 38	12.73
L	2, 6, 8, 19, 24a, 28, 29, 30, 31, 34, 36, 37, 38	12.93
M	2, 6, 8, 19, 27, 29, 30, 31, 34, 36, 39, 63, 64	13.05
N	3, 4, 11, 14, 17, 20, 21, 22, 33, 38	11.01

SEGMENT DESCRIPTIONS

Segment 1
Segment 1 begins at the southeast corner of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 1 exits the substation to the south and immediately crosses an existing 230-kV transmission line and FM 1585, and enters the northwest portion of Section 26. From here the segment travels east, paralleling the south side of FM 1585 along the northern boundary of Section 26 for approximately 0.6 mile and reaches a railroad track west of U.S. Highway (US) 62/82. It angles northeast and parallels the northwest side of the railroad track, crosses FM 1585 and the existing 230-kV transmission line and enters the southwest corner of Section 32. From this point it continues northeast, paralleling the northwestern side of the railroad track for approximately 0.6 mile and terminates at its junction with Segment 9, in the south-central portion of Section 32 on the northwestern side of the railroad track west of US 62/82.

Segment 2
Segment 2 begins on the west side of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 2 exits the substation and runs west approximately 300 feet, then angles southwest and extends an additional 275 feet where it reaches an existing 230-kV transmission line. Then the segment angles west and extends approximately 0.1 mile paralleling the northern side of the 230-kV transmission line, north of FM 1585, along the southern boundary of Section 29. There it crosses an existing 115-kV transmission line and continues approximately 200 ft where it terminates at the junction of segments 6 and 7 northeast of the FM 1585 and County Road (CR) 1100 intersection in the southwest corner of Section 29.

Segment 3
Segment 3 begins on the northeast side of the Wolfforth Substation located immediately north of FM 1585 in the southwestern portion of Section 29 in Lubbock County. Segment 3 extends north approximately 580 feet, paralleling the east side of two existing 115-kV transmission lines and terminates at the junction of segments 4 and 5, south of an existing 115-kV transmission line in the southwestern portion of Section 29.

Segment 4
Segment 4 begins at the junction of segments 3 and 5, south of an existing 115-kV transmission line in the southwestern portion of Section 29 in Lubbock County. Segment 4 extends northeast, paralleling the south side of the existing 115-kV transmission line for approximately 0.8 mile and enters Section 32. From there, it continues paralleling the south side of the existing 115-kV transmission line for approximately 0.6 mile, crosses into Section 23, and terminates at the junction of segments 9, 10, and 11, on the south side of the existing 115-kV transmission line approximately 0.5 mile west of the CR 1300 and 5th Street intersection.

Segment 5
Segment 5 begins at its junction with segments 3 and 4, south of an existing 115-kV transmission line in the southwestern portion of Section 29 in Lubbock County. It extends north approximately 90 feet, where it crosses an existing 115-kV transmission line, turns west, and extends across cropland approximately 0.3 mile where it terminates at the junction of segments 6 and 8, on the east side of CR 1100 adjacent to the western boundary of Section 29, approximately 0.2 mile north of the FM 1585 and CR 1100 intersection.

Segment 6
Segment 6 begins at the junction of segments 2 and 7, northeast of the FM 1585 and CR 1100 intersection in the southwest corner of Section 29 in Lubbock County. It extends north, paralleling the east side of CR 1100 along the western boundary of Section 29, for approximately 0.2 mile, and terminates at the junction of segments 5 and 8.

Segment 7
Segment 7 begins at the junction of segments 2 and 6, northeast of the FM 1585 and CR 1100 intersection in the southwest corner of Section 29 in Lubbock County. It extends west immediately crossing CR 1100 and enters the southeast corner of Section 30. It parallels the north side of an existing 230-kV transmission line

along the southern boundary of Section 30 for approximately 0.5 mile, then turns north and extends approximately 1.0 mile paralleling the west side of a property line to the northern boundary of Section 30. At this point, the segment turns west and extends approximately 0.5 mile along the northern boundary of Section 30 to the east side of FM 2378. Here, the segment turns north and extends approximately 1.0 mile paralleling the east side of FM 2378 along the western boundary of Section 27 to the southeast corner of the FM 2378 and CR 7100 intersection. The segment then turns east and parallels the south side of CR 7100 along the northern boundary of Section 27 for approximately 1.0 mile where it crosses CR 1100 and terminates at the junction of segments 8, 16, and 19, southeast of the CR 7100 and CR 1100 intersection, in the northwest corner of Section 28.

Segment 8
Segment 8 begins at the junction of segments 5 and 6, on the east side of CR 1100, adjacent to the western boundary of Section 29, approximately 0.2 mile north of the FM 1585 and CR 1100 intersection in Lubbock County. It extends north, paralleling the east side of CR 1100 for approximately 1.7 miles along the western boundaries of Section 29 and 28, respectively. It terminates at the junction of segments 7, 16, and 19, southeast of the CR 7100 and CR 1100 intersection, in the northwest corner of Section 28.

Segment 9
Segment 9 begins at its junction with Segment 1, in the south-central portion of Section 32 on the northwestern side of a railroad track west of US 62/82 in Lubbock County. The segment extends north across agricultural fields for approximately 0.7 mile, crosses into Section 23, and terminates at the junction of segments 4, 10, and 11, on the south side of an existing 115-kV transmission line approximately 0.5 mile west of the CR 1300 and 5th Street intersection.

Segment 10
Segment 10 begins at the junction of segments 4, 9, and 11 north of the southern boundary of Section 23 approximately 0.5 mile west of the CR 1300 and 5th Street intersection in Lubbock County. From this junction, segment 10 extends east, paralleling the north side of the southern boundary of Section 23 for approximately 0.4 mile. There, it angles northeast and extends approximately 0.2 mile and terminates at the junction of segments 12 and 13, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300, approximately 0.2 mile north of the CR 1300 (Quitsna Ave.) and 5th Street intersection.

Segment 11
Segment 11 begins at the junction of segments 4, 9, and 10, north of the southern boundary of Section 23 and the south side of an existing 115-kV transmission line, approximately 0.5 mile west of the CR 1300 (Quitsna Ave.) and 5th Street intersection in Lubbock County. Segment 11 extends northeast, paralleling the south side of an existing 115-kV transmission line for approximately 0.60 mile, where it terminates at the junction of segments 12 and 14, along the eastern boundary of Section 23, south of an existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.).

Segment 12
Segment 12 begins at the junction of segments 10 and 13, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300 (Quitsna Ave.), approximately 0.2 mile north of the CR 1300 and 5th Street intersection in Lubbock County. From this point it extends north, parallel to the west side of the pipeline along the eastern boundary of Section 23 for approximately 0.2 mile, where it terminates at the junction of segments 11 and 14, along the eastern boundary of Section 23, south of the existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.).

Segment 13
Segment 13 begins at the junction of segments 10 and 12, in the southeastern portion of Section 23 on the west side of a pipeline located west of CR 1300 (Quitsna Ave.), approximately 0.2 mile north of the CR 1300 (Quitsna Ave.) and 5th Street intersection in Lubbock County. From there it extends east, immediately crossing the pipeline and CR 1300 (Quitsna Ave.) and enters Section 24, where it continues east for approximately 0.3 mile. There it angles slightly northeast and extends approximately 0.4 mile until it reaches the western side of a railroad track. It then angles further northeast, and parallels the northwest side of

railroad tracks for approximately 0.3 mile where it crosses FM 179 (Dowden Rd.) into Section 25. The segment continues to parallel the northwest side of the railroad tracks for approximately 0.6 mile, then angles east, extends approximately 0.1 mile to cross to the southeastern side of the railroad tracks, then angles slightly northeast. At this point, Segment 13 parallels the southeast side of the railroad tracks for approximately 0.2 mile, and angles north for approximately .1 mile to cross back to the northwest side of the railroad tracks at CR 7100 (Donald Preston Drive), and into the southeast corner of Section 32. The segment then parallels the northwest side of the railroad tracks approximately 0.2 mile and reaches the eastern boundary of Section 32 at CR 1500 (Alcove Avenue). Segment 13 then turns north to parallel the west side of CR 1500 (Alcove Ave.) along the eastern boundary of Section 32 for approximately 0.6 mile where it crosses an existing 115-kV transmission line, then continues north to parallel the west side of CR 1500 (Alcove Ave.) an additional 0.2 mile where it crosses CR 7000 and an existing 69-kV transmission line and enters the southeast corner of Section 33. The segment then continues north, paralleling the west side of CR 1500 and the eastern boundary of Section 33 for approximately 0.4 mile where it angles slightly northeast, and crosses to the east side of CR 1500 and enters the western boundary of Section 34. From there, the segment parallels the east side of CR 1500 along the western boundary of Section 34 to the north for approximately 0.5 mile where it crosses CR 6900 and terminates at the junction of segments 21 and 22, northeast of the CR 1500 and CR 6900 intersection, in the southwest corner of Section 39.

Segment 14
Segment 14 begins at the junction of segments 11 and 12 along the eastern boundary of Section 23, south of the existing 115-kV transmission line, and west of an existing pipeline and CR 1300 (Quitsna Ave.) in Lubbock County. It extends north, immediately crossing the 115kV transmission line and paralleling the west side of the pipeline and CR 1300 along the eastern boundary of Section 23 for approximately 0.6 mile, where it terminates at the junction of segments 15 and 17, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23, just west of the existing pipeline.

Segment 15
Segment 15 begins at the junction of segments 16 and 18, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28 in Lubbock County. It extends east, crosses into Section 23, and parallels the south side of CR 7100 along the northern boundary of Section 23 for approximately 1.0 mile. It then terminates at the junction of segments 14 and 17, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23, just west of an existing pipeline.

Segment 16
Segment 16 begins at the junction of segments 7, 8, and 19, southeast of the CR 7100 and CR 1100 intersection in the northwest corner of Section 28 in Lubbock County. It extends east, parallel to the south side of CR 7100 and the northern boundary of Section 28 for approximately 1.0 mile where it terminates at the junction of segments 15 and 18, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28.

Segment 17
Segment 17 begins at the junction of segments 14 and 15, southwest of the CR 7100 and CR 1300 (Quitsna Ave.) intersection in the northeast corner of Section 23 in Lubbock County, just west of an existing pipeline. It extends northeast and immediately crosses a pipeline, CR 7100, and CR 1300 (Quitsna Ave.) and enters the southwest corner of Section 21. It then extends north, paralleling the east side of CR 1300 along the western boundary of Section 21, for approximately 0.8 mile where it crosses a pipeline. It then parallels the east side of CR 1300 (Quitsna Ave.) and the western boundary of Section 21 for approximately 0.1 mile and terminates at the junction of segments 18 and 20, southwest of the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21.

Segment 18
Segment 18 begins at the junction of segments 15 and 16, southwest of the CR 7100 and CR 1200 intersection in the northeast corner of Section 28 in Lubbock County. It extends north, immediately crossing CR 7100 and enters the southeast corner of Section 19. It parallels the west side of CR 1200 along the eastern boundary of Section 19 for approximately 0.6 mile, where it crosses a pipeline. From there, it angles slightly northeast and crosses CR 1200 into the northwestern portion of Section 22. The segment then parallels the east side of CR 1200 along the western boundary of Section 22 to the north for approximately

0.2 mile to the northwest corner of Section 22 (southeast of the CR 1200 and CR 7000 intersection). The segment then turns east and parallels the south side of CR 7000 along the northern boundary of Section 22 for approximately 1.0 mile and crosses CR 1300 (Quitsna Ave.). The segment terminates at the junction of segments 17 and 20, southeast of the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21.

Segment 19
Segment 19 begins at the junction of segments 7, 8, and 16, southeast of the CR 7100 and CR 1100 intersection in the northwest corner of Section 28 in Lubbock County. It extends north and immediately crosses CR 7100 into the southwest corner of Section 19, and parallels the east side of CR 1100 along the western boundary of Section 19 for approximately 0.4 mile where it crosses a pipeline. It then continues to parallel the western boundary of Section 19 approximately 0.6 mile and crosses CR 7000, enters the southwest corner of Section 18, and crosses an existing 69-kV transmission line. The segment continues north paralleling the east side of CR 1100 along the western boundary of Section 18 for approximately 1.0 mile, where it crosses CR 6900 and enters the southwest corner of Section 15. The segment continues north paralleling the east side of CR 1100 along the western boundary of Section 15 for approximately 1.0 mile, and terminates at its junction with the segments 24a, 26, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15.

Segment 20
Segment 20 begins at the junction of segments 17 and 18, southeast the CR 7000 and CR 1300 (Quitsna Ave.) intersection in the northwest corner of Section 21 in Lubbock County. It extends north immediately crossing CR 7000, enters the southwest corner of Section 10, and crosses an existing 69-kV transmission line. It continues north paralleling the east side of CR 1300 (Quitsna Ave.) along the western boundary of Section 10 for approximately 0.8 mile to a point where the segment angles northeast. From that point, it extends northeast approximately 0.2 mile and terminates in Section 10 at the junction of segments 21 and 23a on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) .

Segment 21
Segment 21 begins at the junction of segments 20 and 23a, in the northwestern portion of Section 10 on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) in Lubbock County. It parallels the south side of CR 6900 along the northern boundary of Section 10 to the east for approximately 0.4 mile and crosses a pipeline. The segment continues paralleling the south side of CR 6900 to the east approximately 0.4 mile and angles slightly northwest. From there, it extends 0.1 mile and crosses to the northern side of CR 6900 in the southeastern corner of Section 7, then crosses FM 179 and enters the southwestern corner of Section 40. The segment parallels the north side of CR 6900 along the southern boundary of Section 40 for approximately 1.0 mile, crosses CR 1500 and terminates at the junction of segments 13 and 22 northeast of the CR 1500 and CR 6900 intersection in the southwest corner of Section 39.

Segment 22
Segment 22 begins at the junction of segments 13 and 21, northeast of the CR 1500 and CR 6900 intersection in the southwest corner of Section 39 in Lubbock County. It proceeds east, paralleling the north side of CR 6900 along the southern boundary of Section 39 for approximately 0.5 mile. The segment then turns north, and parallels property lines in the center of Section 39 for approximately 0.9 mile. It angles slightly northeast, crosses a railroad track, then continues north approximately 0.1 mile where it crosses CR 6800 (34th Street) and an existing 115-kV transmission line adjacent to the southern boundary of Section 42. The segment terminates at the junction of segments 32 and 33, on the north side of CR 6800 (34th Street) along the southern boundary of Section 42 approximately 0.5 mile west of CR 1600 (Upland Avenue).

Segment 23a
Segment 23a begins at the junction of segments 20 and 21, in the northwestern portion of Section 10 on the south side of CR 6900, approximately 0.1 mile east of CR 1300 (Quitsna Ave.) in Lubbock County. It extends north, immediately crossing CR 6900 into Section 7 and parallels a property line for approximately 0.5 mile. It then angles northwest and extends northwest for approximately 0.1 mile to the western boundary of Section 7. The segment then angles north and parallels the east side of CR 1300 (Quitsna Ave.) along the western boundary of Section 7 for approximately 0.3 mile, where it terminates at the junction of

segments 23b and 23c, southeast of the CR 1300 and CR 6800 (34th Street) intersection in the northwest corner of Section 7.

Segment 23b
Segment 23b begins at the junction of segments 23a and 23c, southeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the northwest corner of Section 7 in Lubbock County. It extends north 170 feet, immediately crossing CR 6800 (34th Street) and enters the southwest corner of Section 6. It terminates at the junction of segments 24a, 24b, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6.

Segment 23c
Segment 23c begins at the junction of segments 23a and 23b, southeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the northwest corner of Section 7 in Lubbock County. It parallels the south side of CR 6800 (34th Street) along the northern boundary of Section 7 for approximately 565 ft and terminates at the junction of segments 24b and 25 on the south side of CR 6800 (34th Street) along the northern boundary of Section 7 approximately 0.1 mile east of CR 1300 (Research Blvd.).

Segment 24a
Segment 24a begins at the junction of segments 19, 26, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It angles northeast and extends approximately 0.2 mile crossing CR 6800 into the southwest portion of Section 12. It angles east and parallels the north side of CR 6800 along the southern boundary of Section 12 for approximately 0.8 mile where it crosses CR 1200 into Section 5. The segment then continues east paralleling the north side of CR 6800 along the southern boundary of Section 5 for approximately 1.0 mile, where it crosses CR 1300 (Research Blvd.) into Section 6, and terminates at the junction of segments 23b, 24b, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6.

Segment 24b
Segment 24b begins at the junction of segments 23b, 24a, and 28, northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6 in Lubbock County. It extends southeast a total of approximately 0.1 mile, crossing CR 6800 (34th Street) into Section 7, and terminating at the junction of segments 23c and 25 on the south side of CR 6800 (34th Street) along the northern boundary of Section 7, approximately 0.1 mile east of CR 1300 (Research Blvd.).

Segment 25
Segment 25 begins at the junction of segments 23c and 24b on the south side of CR 6800 (34th Street) along the northern boundary of Section 7, approximately 0.1 mile east of CR 1300 (Research Blvd.) in Lubbock County. It parallels the south side of CR 6800 (34th Street), along the northern border of Section 7 to the east for approximately 0.4 mile, and crosses a pipeline. It then continues east approximately 0.4 mile, angles northeast and extends 0.1 mile as it crosses CR 6800 (34th Street) and enters the southeast corner of Section 6, northwest of the CR 6800 (34th Street) and FM 179 (Inler Ave.) intersection. At this point, it turns north and parallels the western side of FM 179 (Inler Ave.) along the eastern boundary of Section 6 for approximately 0.3 mile. It then angles northeast, and extends approximately 0.1 mile as it crosses FM 179 (Inler Ave.), enters Section 41 and crosses a railroad track. It terminates at the junction of segments 30 and 31, on the north side of the railroad tracks, east of FM 179 (Inler Ave.), along the western boundary of Section 41.

Segment 26
Segment 26 begins at the junction of segments 19, 24a, and 27, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It extends west and immediately crosses CR 1100 into Section 16. It parallels the south side of CR 6800 along the northern boundary of Section 16 for approximately 0.5 mile, where it angles northwest and crosses CR 6800 into the southern portion of Section 11. From there, the segment turns west and parallels the north side of CR 6800 along the southern boundary of Section 11 for approximately 0.4 mile, where it angles northwest and extends 0.1 mile to the eastern side of FM 2378 along the western boundary of Section 11. Here, the segment turns north and parallels the east side of FM 2378 along the western boundary of Section 11 for approximately 0.9 mile to the northwest corner of Section 11, southeast of the FM 2378 and CR 6700 intersection. The segment then

angles northeast and extends approximately 415 ft, crosses CR 6700 into Section 13, then angles back to the northwest and extends approximately 0.2 mile and crosses to the west side of FM 2378 into Section 14. It parallels the west side of FM 2378 for an approximate total of 0.2 mile as it crosses a railroad track and State Highway (SH) 114 into Section 14. The segment angles northeast and crosses to the east side of FM 2378 along the western boundary of Section 13. It turns north, and parallels the east side of FM 2378 along the western boundary of Section 13 for approximately 0.5 mile to the northwest corner of Section 13. There, it turns east and parallels the south side the northern boundary of Section 13 for approximately 1.0 mile to the northeast corner of Section 13, just west of CR 1100. Segment 26 then turns north, crosses into Section 47, and parallels the west side of CR 1100 along the eastern boundary of Section 47 for approximately 1.0 mile where it crosses CR 6500 into Section 46. The segment then continues north paralleling, the west side of CR 1100 along the eastern boundary of Section 46 for approximately 0.9 mile and crosses a pipeline. It parallels the west side of CR 1100 for approximately 0.1 mile to the northeast corner of Section 46 (southwest of the CR 1100 and CR 6400 intersection). It angles northeast and stretches into the southwest corner of Section 56, northwest of the CR 1100 and CR 6400 intersection and terminates at the junction of segments 40 and 41.

Segment 27
Segment 27 begins at the junction of segments 19, 24a, and 26, southeast of the CR 6800 and CR 1100 intersection in the northwest corner of Section 15 in Lubbock County. It extends north, immediately crossing CR 6800 into the southwest corner of Section 12, and parallels the east side of CR 1100 along the western boundary of Section 12 for approximately 0.5 mile. There it turns east and parallels a property line for approximately 1.0 mile where it crosses CR 1200 just south of the CR 1200 and CR 6740 intersection into Section 5. It continues east paralleling the south side of a property line for approximately 0.5 mile, where it angles northeast, extends 0.1 mile, and turns back to the east just south of another property line. It parallels the property line for approximately 0.5 mile, and crosses CR 1300 (Research Blvd.) into Section 6. Segment 27 terminates at the junction of segments 28 and 29, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track.

Segment 28
Segment 28 begins at the junction of segments 23b, 24a and 24b northeast of the CR 1300 (Research Blvd.) and CR 6800 (34th Street) intersection in the southwest corner of Section 6 in Lubbock County. It proceeds north, paralleling the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 for approximately 0.5 mile, and terminating at the junction of segments 27 and 29, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track.

Segment 29
Segment 29 begins at the junction of segments 27 and 28, on the east side of CR 1300 (Research Blvd.) along the western boundary of Section 6 approximately 0.2 mile south of a railroad track in Lubbock County. It extends east approximately 0.5 mile, paralleling a property line the final 0.2 mile. It terminates at the junction of segments 30 and 35 on the south side of a railroad track and the west side of a pipeline in the central portion of Section 6.

Segment 30
Segment 30 begins at the junction of segments 29 and 35 on the south side of a railroad track and the west side of a pipeline in the central portion of Section 6 in Lubbock County. It extends southeast, immediately crossing the pipeline, and parallels the south side of the railroad track for approximately 0.5 mile. It angles to the east, and crosses FM 179 (Inler Ave.) and the railroad track into Section 41. It terminates at the junction of segments 25 and 31, east of FM 179 (Inler Ave.) and north of railroad tracks just east of the western boundary of Section 41.

Segment 31
Segment 31 begins at the junction of segments 25 and 30, east of FM 179 (Inler Ave.) and north of railroad tracks just east of the western boundary of Section 41 in Lubbock County. It extends southeast, paralleling the north side of a railroad track for approximately 0.5 mile where the segment terminates at the junction of segments 32 and 34, east of a property line on the north side of the railroad tracks in the south-central portion of Section 41.

Segment 32
Segment 32 begins at the junction of segments 31 and 34, east of a property line on the north side of a railroad track in the south-central portion of Section 41 in Lubbock County. It extends southeast, paralleling the north side of the railroad track for approximately 0.5 mile and crosses CR 1500 (Alcove Ave.), and enters Section 42. It parallels the north side of the railroad track approximately 0.2 mile and turns east. It then parallels the north side of CR 6800 (34th Street) for approximately 0.1 mile and crosses an existing 115-kV transmission line. It then extends an additional 0.2 mile parallel to the north side of the existing 115-kV transmission line, north of CR 6800 (34th Street), and terminates at the junction of segments 22 and 33 on the north side of 34th Street along the southern boundary of Section 42 approximately 0.5 mile west of the CR 6800 (34th Street) and CR 1600 (Upland Avenue) intersection.

Segment 33
Segment 33 begins at the junction of segments 22 and 32 north of an existing 115-kV transmission line on the north side of CR 6800 (34th Street) along the southern boundary of Section 42, approximately 0.5 mile west of the CR 6800 (34th Street) and CR 1600 (Upland Ave.) intersection in Lubbock County. It extends north approximately 0.5 mile paralleling a property line across an open field to the south side of 26th Street. At that point, it turns east and parallels the south side of 26th street for approximately 0.5 mile. The segment then angles to the northeast and crosses the 26th Street and CR 1600 (Upland Ave.) intersection, enters the western portion of Section 43, and an existing 69-kV transmission line. It angles and extends east, paralleling the north side of 26th Street for approximately 0.4 mile to the west side of two existing transmission lines. The segment then turns north and parallels the west side of the existing transmission lines for approximately 0.5 mile, crosses SH 114 (19th Street), enters the southern portion of Section 10, and parallels the existing transmission lines to the north an additional 0.5 mile. Segment 33 terminates at the junction of segments 37 and 38 on the west side of two existing transmission lines, approximately 0.5 mile east of the 12th Street and CR 1600 (Upland Ave.) intersection in the center of Section 10.

Segment 34
Segment 34 begins at the junction of segments 31 and 32 east of a property line on the north side of a railroad track in the south-central portion of Section 41 in Lubbock County. It extends north, paralleling a property line for approximately 0.7 mile where it angles slightly to the northeast. It extends approximately 0.1 mile and crosses SH 114 (19th Street) and enters the southern portion of Section 2 at a point approximately 0.5 mile west of the SH 114 (19th Street) and CR 1500 (Alcove Ave.) intersection. The segment then turns back to the north and parallels a property line to the north for approximately 0.5 mile and terminates at the junction of segments 35 and 36 in the center of Section 2.

Segment 35
Segment 35 begins at the junction of segments 29 and 30 on the south side of a railroad track and the west side of a pipeline in the center of Section 6 in Lubbock County. It extends north parallel to the west side of the pipeline and immediately crosses the railroad track, then parallels the pipeline approximately 0.2 mile and crosses a rail spur that curves west. From there, it parallels the west side of the pipeline, which is now west of a railroad track, to the north for approximately 0.3 mile and crosses SH 114 (19th Street) and enters Section 3. It continues to parallel the pipeline to the north approximately 0.2 mile, angles to the northeast and crosses the pipeline, and then parallels the northwest side of the railroad track to the northeast for approximately 0.6 mile. The segment then turns east and crosses the railroad track and extends 0.1 mile, where it crosses FM 179 (Inler Ave.) and enters the northwestern portion of Section 2, approximately 0.3 mile south of FM 2255 (4th Street). It continues east paralleling a property line for approximately 0.5 mile, and turns south and parallels a property line for approximately 0.2 mile. At this point, the segment angles to the southeast, extends approximately 170 feet, crosses a property line and terminates at the junction of segments 34 and 36, in the center of Section 2.

Segment 36
Segment 36 begins at the junction of segments 34 and 35 in the center of Section 2 in Lubbock County. It parallels a property line to the east for approximately 0.5 mile, crosses CR 1500 (Alcove Ave.), and terminates at the junction of segments 37 and 39, northeast of the CR 1500 (Alcove Ave.) and 12th Street intersection adjacent to the western boundary of Section 1.

Segment 37

Segment 37 begins at the junction of segments 36 and 39, northeast of the CR 1500 (Alcove Ave.) and 12th Street intersection adjacent to the western boundary of Section 1 in Lubbock County. It extends east paralleling the north side of 12th Street for approximately 0.2 mile to a point where 12th Street ends, and then parallels the north side of a property line 0.3 mile. It then angles slightly southeast and extends approximately 0.5 mile following a property line to CR 1600 (Upland Ave.). Segment 37 crosses CR 1600 (Upland Ave.), enters the western boundary of Section 10 just south of 12th Street, and crosses an existing 69-kV transmission line. The segment then extends to the east an additional 0.5 mile where it terminates at the junction of segments 33 and 38 on the west side of two existing transmission lines in the center of Section 10.

Segment 38
Segment 38 begins at the junction of segments 33 and 37 on the west side of two existing transmission lines, approximately 0.5 mile east of the 12th Street and CR 1600 (Upland Avenue) intersection in the center of Section 10 in Lubbock County. It extends north, paralleling the western side of two existing 115-kV transmission lines for approximately 0.4 mile and terminates at the Carlisle Substation in the north-central portion of Section 10.

Segment 39
Segment 39 begins at the junction of segments 36 and 37, northeast of the CR 1500 (Alcove Avenue) and 12th Street intersection along the western boundary of Section 1 in Lubbock County. It proceeds north, parallel to the east side of CR 1500 (Alcove Avenue), along the western boundary of Section 1 for approximately 0.5 mile to the northwest corner of Section 1, southeast of the FM 2255 (4th Street) and CR 1500 (Alcove Ave.) intersection. It turns east and parallels south of FM 2255 (4th Street) along the northern boundary of Section 1 for approximately 0.1 mile. The segment then angles northeast and crosses FM 2255 (4th Street) and enters the southwest corner of Section 4. It then parallels the north side of FM 2255 (4th Street) along the southern boundary of Section 4 for approximately 0.9 mile where it crosses CR 1600 (Upland Avenue) and terminates at the junction of segments 62 and 63, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Ave.) intersection in the southwest corner of Section 3.

Segment 40
Segment 40 begins at the junction of segments 26 and 41 in the southwest corner of Section 56, northeast of the CR 1100 and CR 6400 intersection in Lubbock County. It extends east paralleling north of the Section 56 southern boundary for approximately 0.2 mile and crosses a pipeline. It then continues paralleling the southern boundary of Section 56 to the east another 0.8 mile where it terminates at the junction of segments 42 and 44 in the southwest corner of Section 37.

Segment 41
Segment 41 begins at the junction of segments 26 and 40, in the southwest corner of Section 56, northeast of the CR 6400 and CR 1100 intersection in Lubbock County. It proceeds north paralleling the east side of CR 1100 along the western boundary of Section 56 for approximately 1.0 mile, crosses CR 6300, and turns east in the southwestern corner of Section 51. From there, the segment parallels the north side of CR 6300 along the southern boundary of Section 51 for approximately 1.0 mile, and terminates at the junction of segments 43 and 46 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection.

Segment 42
Segment 42 begins at the junction of segments 40 and 44 in the southwest corner of Section 37 in Lubbock County. It extends north paralleling the east side of property line along the western boundary of Section 37 for approximately 0.5 mile and terminates at the junction of segments 43 and 45 south of a property line along the western boundary of Section 37.

Segment 43
Segment 43 begins at the junction of segments 42 and 45, south of a property line along the western boundary of Section 37 in Lubbock County. It extends north, paralleling the east side of the western boundary of Section 37 for approximately 250 ft, crosses two pipelines, then continues north along the western boundary of Section 37 for approximately 0.5 mile. There it crosses CR 6300 into Section 32 and terminates at the junction of segments 41 and 46 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection.

Segment 44
Segment 44 begins at the junction of segments 40 and 42 in the southwest corner of Section 37 in Lubbock County. It proceeds east, parallel to the north side of the southern boundary of Section 37 for approximately 1.0 mile, and terminates at the junction of segments 47 and 48 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection.

Segment 45
Segment 45 begins at the junction of segments 42 and 43, south of a property line along the western boundary of Section 37 in Lubbock County. It extends east, paralleling the south side of the property line for approximately 1.0 mile, where it crosses CR 1300, crosses the western boundary of Section 28, and immediately crosses a pipeline. The segment continues east paralleling the south side of a property line for approximately 0.5 mile where it crosses a railroad track and terminates at the junction of Segment 51 in the center of Section 28.

Segment 46
Segment 46 begins at the junction of segments 41 and 43 in the southwest corner of Section 32, northwest of the CR 6300 and CR 1200 intersection in Lubbock County. It extends east, immediately crosses CR 1200, and parallels the north side of CR 6300 along the southern boundary of Section 32 for approximately 0.7 mile where it crosses two pipelines. It then parallels the north side of CR 6300 to the east approximately 0.2 mile, angles southeast for approximately 0.1 mile, crossing the CR 6300 and CR 1300 intersection and a pipeline and entering the northwest corner of Section 28. The segment then angles back to the east and parallels the south side of the northern boundary of Section 28 for approximately 0.5 mile and crosses a railroad track. It then continues to parallel the northern boundary of Section 28 for another 0.5 mile and crosses FM 179, enters the northwest corner of Section 27, crosses a pipeline, and parallels the south side of the northern boundary of Section 27 for approximately 1.0 mile to the northeast corner of Section 27, just west of CR 1500. Segment 46 then turns to the south, and parallels the west side of CR 1500 along the eastern boundary of Section 27 for approximately 0.9 mile and terminates at the junction of segments 52 and 53 in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection.

Segment 47
Segment 47 begins at the junction of segments 44 and 48 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection in Lubbock County. It extends south, immediately crossing into the northeast corner of Section 20, and parallels the west side of CR 1300 along the eastern boundary of Section 20 to the south for approximately 0.5 mile. Here, a pipeline crosses from the east side to the west side of CR 1300. Segment 47 now parallels the west side of the pipeline to the south approximately 0.5 mile to the southeast corner of Section 20. At this point, it turns east and immediately crosses the pipeline and CR 1300 into the southwest corner of Section 19, and parallels the southern boundary of Section 19 to the east for approximately 0.5 mile to the west side of a railroad track. Segment 47 then crosses the railroad track, angles to the southeast, enters the northern boundary of Section 18, and parallels the east side of the railroad track for approximately 0.6 mile. The segment then turns east, extends approximately 350 feet where it crosses FM 179 and the western boundary of Section 17 at a point approximately 0.2 mile south of CR 6520. It then parallels the north side of a property line to the east for approximately 0.2 mile and crosses a pipeline. From there, it continues east paralleling a property line for approximately 0.8 mile to the west side of CR 1500 along the eastern boundary of Section 17. It then angles slightly southeast, crosses CR 1500, and enters the western portion of Section 4, where it parallels the south side of a property line to the east for approximately 0.5 mile, and angles slightly northeast to the north side of the property line. It then parallels the property line to the east approximately 0.5 mile and terminates at the junction of segments 57 and 59 adjacent to the eastern boundary of Section 4 on the west side of CR 1600, approximately 270 feet north of Auburn Street.

Segment 48
Segment 48 begins at the junction of segments 44 and 47 in the southeast corner of Section 37, northwest of the CR 1300 and CR 6400 intersection in Lubbock County. It extends east, immediately crosses CR 1300, enters the southwest corner of Section 28, crosses a pipeline, and parallels the north side of CR 6400 to the east along the southern boundary of Section 28 for approximately 0.4 mile and crosses a railroad track. Segment 48 terminates at the junction with Segment 50, on the east side of the railroad track, northeast of the CR 6400 and CR 1330 intersection, along the southern boundary of Section 28.

Segment 50
Segment 50 begins at its junction with segment 48, on the east side of a railroad track, northeast of the CR 6400 and CR 1330 intersection, along the southern boundary of Section 28 in Lubbock County. It parallels the north side of CR 6400 to the east along the southern boundary of Section 28 for approximately 0.6 mile where it crosses FM 179, enters the southwestern corner of Section 27, crosses a pipeline and terminates at the junction of segments 51 and 52, northeast of the FM 179 and CR 6400 intersection.

Segment 51
Segment 51 begins at its junction with segment 45 on the east side of a railroad track in the center of Section 28 in Lubbock County. It parallels the south side of a property line to the east for approximately 0.4 mile where it angles to the southeast and extends 0.1 mile as it crosses FM 179, the western boundary of Section 27, and a pipeline. The segment then turns south and parallels the east side of FM 179 and the pipeline to the south for approximately 0.4 mile along the western boundary of Section 27, where it terminates at the junction of segments 50 and 52, northeast of the FM 179 and CR 6400 intersection, in the southwest corner of Section 27.

Segment 52
Segment 52 begins at the junction of segments 50 and 51, northeast of the FM 179 and CR 6400 intersection, in the southwest corner of Section 27 in Lubbock County. It parallels the north side of CR 6400 along the southern boundary of Section 27 to the east for approximately 0.8 mile, where it angles northeast and extends approximately 0.1 mile, then angles back east and extends 0.1 mile where it terminates at the junction of segments 46 and 53, in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection.

Segment 53
Segment 53 begins at the junction of segments 46 and 52, in the southeastern portion of Section 27, northwest of the CR 1500 and CR 6400 intersection in Lubbock County. It extends east, immediately crosses CR 1500, enters the southwest corner of Section 26 and parallels the north side of CR 6400 for approximately 0.2 mile. At this point, it angles southeast for approximately 0.1 mile, crossing CR 6400. It then angles east to parallel the south side of CR 6400 for approximately 0.4 mile where it terminates at the junction of Segment 54 on the south side of CR 6400 in the southern portion of Section 26.

Segment 54
Segment 54 begins at its junction with segment 53 on the south side of CR 6400 in the southern portion of Section 26 in Lubbock County. It extends south parallel to the east side of a property line for approximately 0.1 mile where it enters Section 15. It then parallels the property line another 0.4 mile, and angles southwest to the west side of the property line. It then parallels the property line south an additional 0.4 mile, crosses a pipeline, and parallels the property line south another 0.1 mile where it crosses CR 6500, enters Section 4, and crosses another pipeline. The segment then turns east and parallels the south side of the pipeline to the east along the south side of the northern boundary of Section 4 for approximately 0.4 mile, and terminates at the junction of segments 56 and 57, south of a pipeline, and southwest of CR 1600 and CR 6500 intersection in the northeast corner of Section 4.

Segment 56
Segment 56 begins at the junction of segments 54 and 57, south of a pipeline, southwest of the CR 1600 and CR 6500 intersection in the northeast corner of Section 4 in Lubbock County. It extends east, and immediately crosses CR 1600 into the northwest corner of Section 3. It parallels a pipeline south of CR 6500 to the east along the south side of the northern boundary of Section 3 to the west side of an existing transmission line. Segment 56 terminates at the junction of Segment 58 on the south side of the pipeline located south of CR 6500, and west of an existing transmission line along the northern boundary of Section 3.

Segment 57
Segment 57 begins at the junction of segments 54 and 56, south of a pipeline and southwest of the CR 1600 and CR 6500 intersection in the northeast corner of Section 4 in Lubbock County. It parallels the west side of CR 1600 to the south along the eastern boundary of Section 4 for approximately 0.5 mile where it

terminates at the junction of segments 47 and 59 along the eastern boundary of Section 4 on the west side of CR 1600 (approximately 270 feet north of Auburn St).

Segment 58
Segment 58 begins at its junction with segment 56 on the south side of a pipeline located south of CR 6500, and west of an existing transmission line along the northern boundary of Section 3 in Lubbock County. It parallels the west side of the existing transmission line to the south for approximately 0.5 mile and terminates at the junction of segments 60 and 61, on the west side of the existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3.

Segment 59
Segment 59 begins at the junction of segments 47 and 57 along the eastern boundary of Section 4 on the west side of CR 1600 (Upland Ave.), approximately 270 feet north of Auburn St in Lubbock County. It extends southeast approximately 200 feet crossing CR 1600 (Upland Avenue), and enters Section 3 where it terminates at the junction of segments 60 and 62, east of the CR 1600 (Upland Ave.) and Auburn Street intersection.

Segment 60
Segment 60 begins at the junction of segments 59 and 62 on the east side of CR 1600 (Upland Avenue) at Auburn Street along the western boundary of Section 3 in Lubbock County. It extends east paralleling the south side of a property line approximately 0.5 mile where it terminates at the junction of segments 58 and 61, on the west side of the existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3.

Segment 61
Segment 61 begins at the junction of segments 58 and 60, on the west side of an existing transmission line, west of the Auburn Street and Quincy Avenue intersection in the center of Section 3 in Lubbock County. It parallels the west side of the existing transmission line to the south for approximately 0.4 mile. It then angles to the southwest, and extends approximately 425 ft, crosses FM 2255 (4th Street) and an existing 69 kV transmission line, and terminates at the junction of segments 63 and 64 in Section 10 on the south side of FM 2255 (4th Street) and on the west side of the Carlisle Substation.

Segment 62
Segment 62 begins at the junction of segments 59 and 60 on the east side of CR 1600 (Upland Avenue) at Auburn Street along the western boundary of Section 3 in Lubbock County. It parallels the east side of CR 1600 (Upland Avenue) along the western boundary of Section 3 to the south for approximately 0.5 mile, and terminates at the junction of segments 39 and 63, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Avenue) intersection in the southwest corner of Section 3.

Segment 63
Segment 63 begins at the junction of segments 39 and 62, northeast of the FM 2255 (4th Street) and CR 1600 (Upland Ave.) intersection in the southwest corner of Section 3 in Lubbock County. It parallels the north side of FM 2255 (4th Street) to the east along the north side of the southern boundary of Section 3 for approximately 0.3 mile, where it angles to the southeast and extends 0.1 mile, as it crosses FM 2255 (4th Street) and an existing 69-kV transmission line, and terminates at the junction of segments 61 and 64, in Section 10 on the south side of FM 2255 (4th Street) and on the west side of the Carlisle Substation.

Segment 64
Segment 64 begins at the junction of segments 61 and 63 on the south side of FM 2255 (4th Street) and the west side of the Carlisle Substation in Section 10 in Lubbock County. It extends south approximately 315 feet, west of the Carlisle Substation, then turns east and extends 365 feet where it terminates at the south side of the Carlisle Substation.

List of Newspapers

Lubbock Avalanche-Journal
710 Ave. J
Lubbock, TX 79401
806-762-8844

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: 806-378-2436
Facsimile: 806-378-2724

August 21, 2014

Julie Wicker
Wildlife Habitat Assessment Program
Wildlife Division
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Dear Ms. Wicker:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed for your review is a copy of the application, which includes the Environmental Assessment of the proposed project.

If you have any questions or need additional information, please call James Bagley at 806-378-2868.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosure

SOUTHWESTERN PUBLIC SERVICE COMPANY

Siting and Land Rights

P.O. Box 1261
Amarillo, TX 79105-1261
Telephone: **806-378-2436**
Facsimile: 806-378-2724

August 21, 2014

Michele Gregg
Office of Public Utility Counsel
P.O. Box 12397
Austin, TX 78711-2397

Dear Ms. Gregg:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new 230-kilovolt (kV) transmission line within Lubbock County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 42729 - ***Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 230-kV Transmission Line Within Lubbock County, Texas)*** and is requesting the approval of the Commission for this project. This project is needed for reliability.

The project will involve the construction of a new 230-kV transmission line, which will originate at the existing Wolfforth Substation located on Farm-to-Market Road (FM) 1585 (114th Street) approximately 0.75 mile west of U.S. Highway (US) 62 in western Lubbock County, and the existing Carlisle Substation, located at the intersection of FM 2255 (4th Street) and Quincy Avenue, in the western portion of the City of Lubbock. The Southwest Power Pool has issued a Notification to Construct for this project in order to address the overload of the 115-kV Indiana-Stanton transmission line in the case of an outage on the Carlisle to TUCO 230-kV transmission line. The transmission line will be constructed using single-circuit, self-supporting steel monopole structures. The proposed transmission line will be constructed on new right-of-way (ROW) with a proposed permanent easement of 90 feet (wider in exceptional circumstances) and a proposed temporary easement of an additional 30 feet during construction. The proposed transmission line is presented with 14 alternative routes consisting of a combined 65 segments and is estimated to be 11 to 23 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately $24.9 million and $36.5 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. ***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.*** A copy of the complete application, which includes other maps pertinent to the project, is available for review at

SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 2700, Amarillo, Texas, 79101. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

Persons who wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their requests to intervene or their comments to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P. O. Box 13326
Austin, Texas 78711-3326

The deadline for intervention in the proceeding is October 6, 2014, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Nisha Patel at 806-378-2713 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Nisha Patel or James Bagley.

Sincerely,

Sean L. Frederiksen, Manager
Siting and Land Rights

Enclosures