

SPS 10-Year Plan

December 2012

This report contains transmission planning data that may be conceptual in nature and is subject to change. The transmission projects listed may change scope or not be constructed.

Purpose and Scope

- **Purpose:**
 - ◆ **Document the Southwestern Public Service Company (SPS) transmission system plans looking forward 10 years**
- **Scope of work:**
 - ◆ **Perform an annual assessment and update of the SPS transmission requirements**
 - NERC reliability standards compliance requirements
 - Load forecast, including wholesale loads (2012)
 - Resource plan (2012)
 - Applicable TX, NM Renewable Energy Standards
 - Sold firm transmission service from generation interconnection requests
- **Stakeholder input**
 - ◆ **Input on needs and responsive plans are encouraged from stakeholders**
 - ◆ **SPS system plan rolls up to Southwest Power Pool (SPP) regional plan and SPP stakeholder process**

Executive Summary

■ 10-Year Transmission Plan

- ◆ **Core Reliability Projects (2012 – 2016)**
- ◆ **States Renewable Energy Standards**
 - TX standard has been met
 - Xcel Energy is working on complying with NM standard for wind, solar, and other renewables through various initiatives
- ◆ **Significant SPP Regional and Sub-Regional Transmission Development Projects Ongoing**
 - **Balanced Portfolio – Tuco – Woodward, ISD 2014**
 - **Priority Projects – Hitchland – Woodward, ISD 2014**
- ◆ **SPS Plan must ultimately be approved through SPP Integrated Transmission Plan (ITP) process**

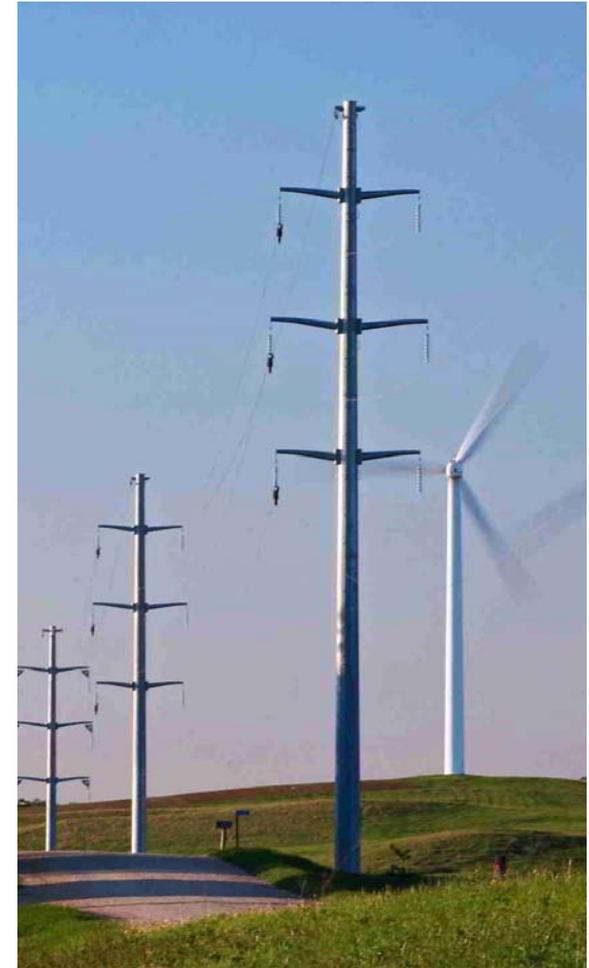
Key Messages

■ 10-Year Plan

- ◆ Continued load growth
- ◆ Wind/solar development will continue
- ◆ Clarity on balancing area's resource plan could modify and lessen transmission capital requirements from this assessment

SPS System Statistics 2012

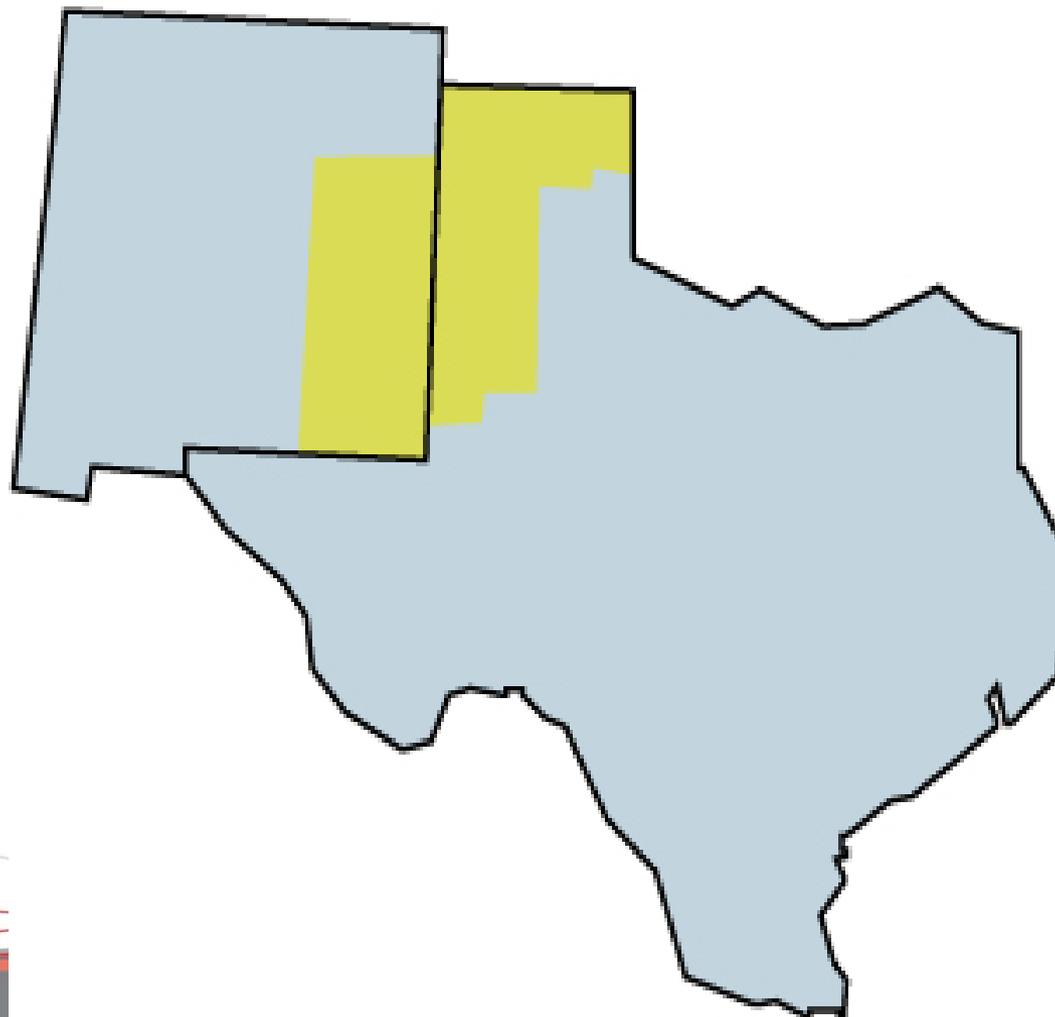
- **7,005 Miles of Transmission**
- **705 Substations Served**
- **62 Generators Served (6,694 MW)**
- **30 Wind Generators (1004 MW)**
- **10 Solar Facilities (53.5 MW)**
- **SPS Balancing Authority All-Time Peak Load 6079 MW (August 2, 2012)**



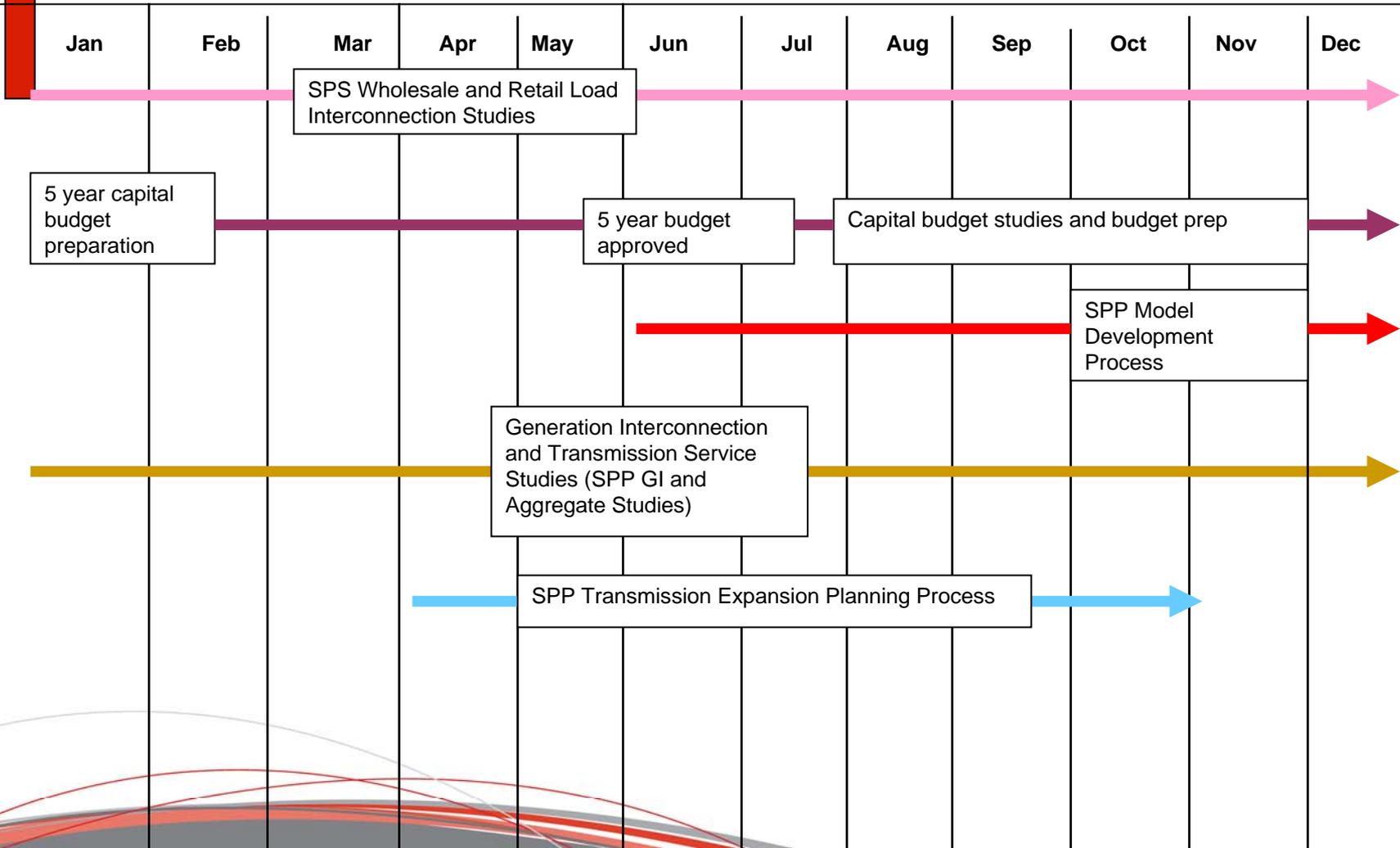
SPS Transmission System

- **SPS's transmission assets are in TX, NM, OK and KS**
 - ◆ Under operational control of the Southwest Power Pool (SPP) RTO
- **Major Utility Interconnections**
 - ◆ American Electric Power
 - West Texas Utilities
 - Public Service Company of Oklahoma
 - ◆ Sunflower Electric Corp.
 - ◆ Public Service Company of New Mexico (HVDC)
 - ◆ El Paso Electric Company (HVDC)
 - ◆ Public Service Company of Colorado (HVDC)

SPS Retail Service Territory



Planning Process Calendar 2012



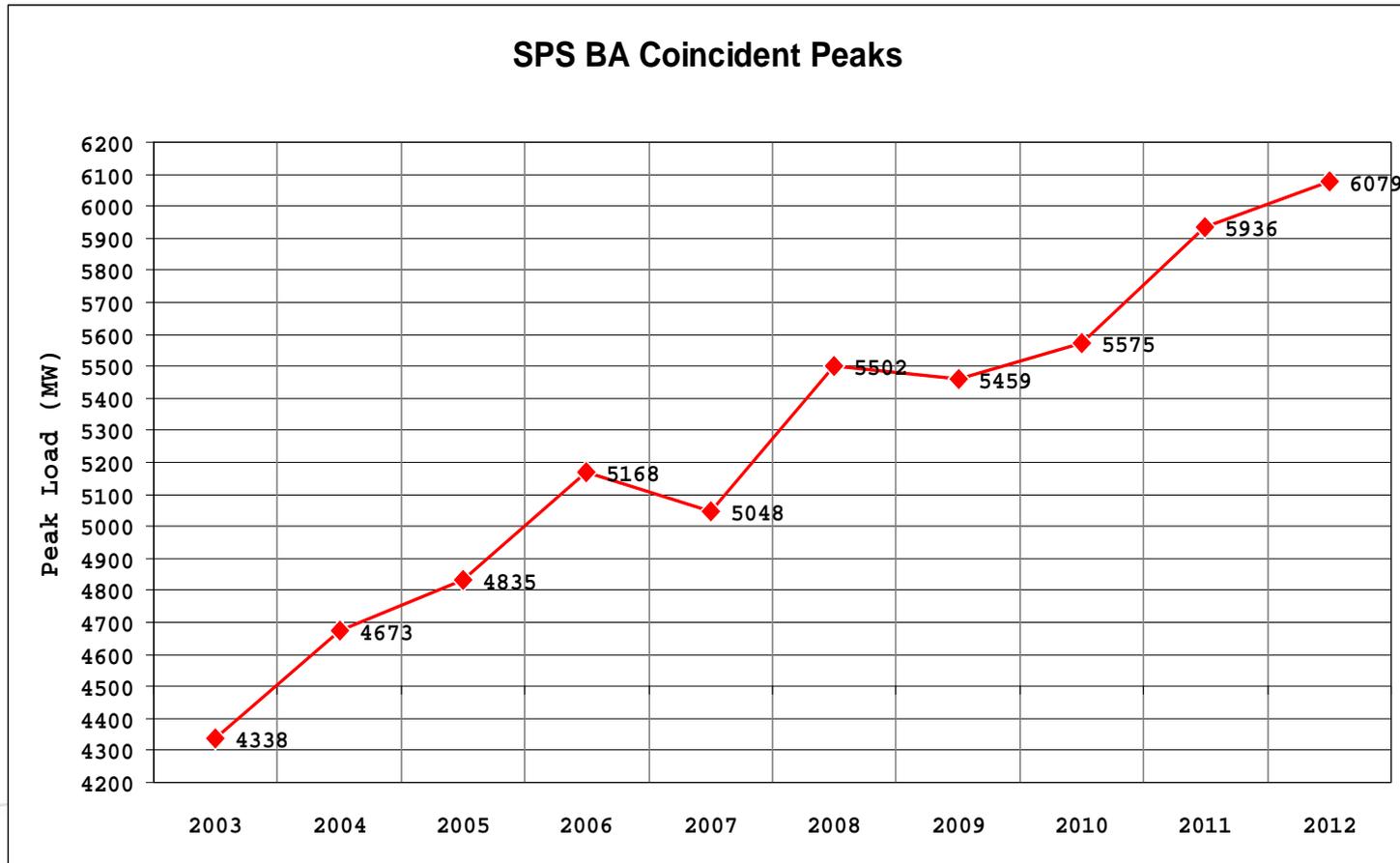
Drivers of Transmission Planning

- **Regulatory/Environmental Concerns**
 - ◆ TX and NM mandates for renewable energy
- **SPP Generator Interconnection Requests**
 - ◆ Large amount of requests
- **Transmission Service Requests**
 - ◆ Internal and thru-transactions
- **Wholesale and Retail Load Additions**
 - ◆ Geographically diverse
 - ◆ Economically sensitive
 - ◆ Oil and gas commodity price sensitive
- **NERC Reliability Standards**

NERC Reports

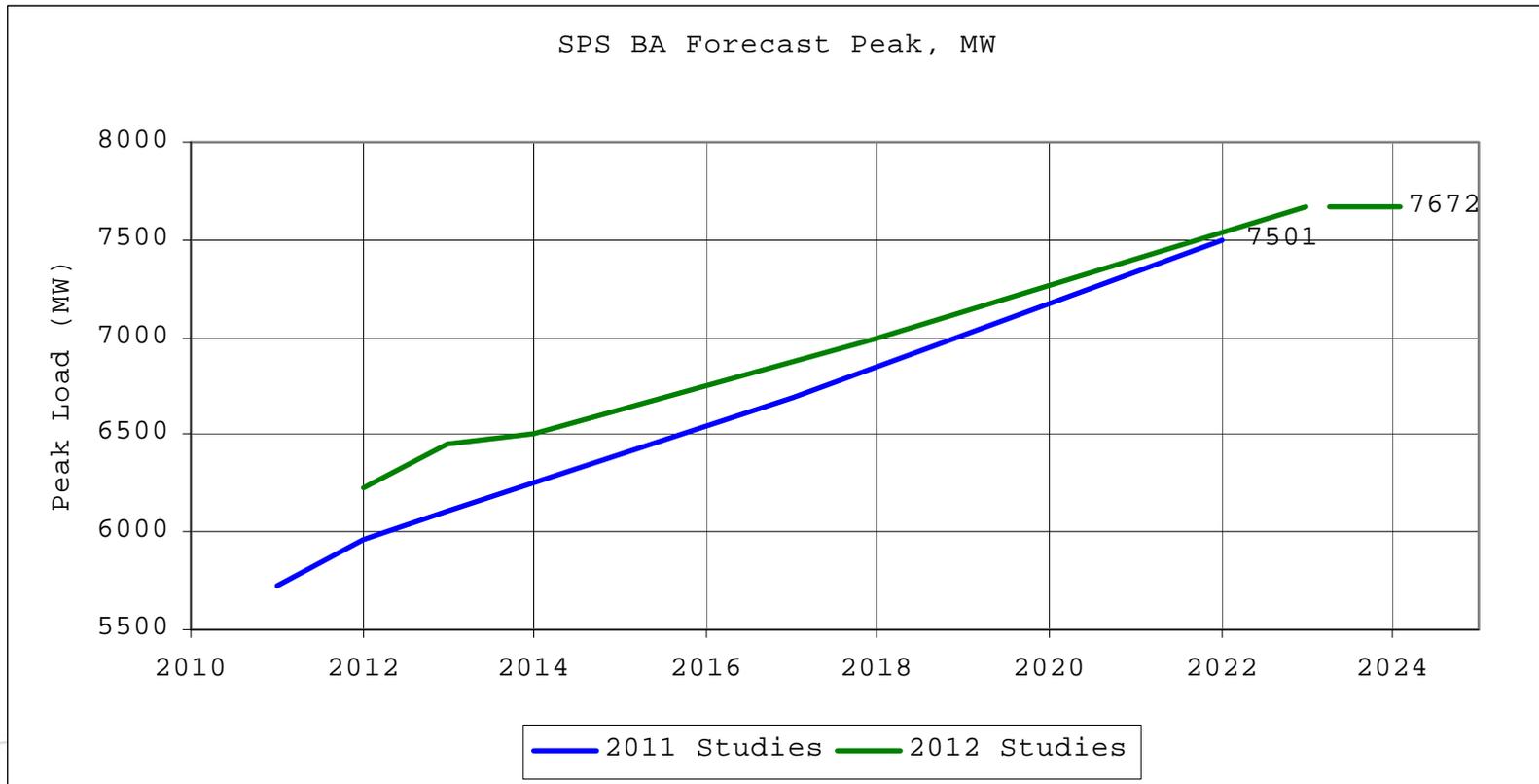
- **TPL-001-2, update to existing TPL-001 through TPL-004 standards**
 - ◆ **TPL-001-2 may increase the scope of annual assessment due to new performance requirements**
- **Ongoing compliance studies may identify new network upgrade projects**
- **Ongoing Standards development**
- **NERC 754 System Protection Single Point of Failure Analysis**
 - ◆ **Due by July 2014 with milestone work due over 24 months**

SPS BA Coincident Peaks



SPS BA Coincident Peaks (to August 2, 2012)

SPS BA Forecast Peak, MW



State Renewable Energy Mandates

■ TX Mandate for SPS Retail Loads

- ◆ 5,880 MW by 2015, 10,000 MW by 2025. SPS has energy sales ratio share of total.

■ NM Mandate for SPS Retail Loads

- ◆ 405,766 MWH (10% of NM retail sales) by 2012
- ◆ 15% of NM retail sales by 2016
- ◆ 20% of NM retail sales by 2021
- ◆ Minimums required
 - Greater or equal to – 20% wind, 20% solar, 10% biomass/biogas
 - Distributed Generation – 1.5% to 3% in 2015, and 48.5% from any category
- ◆ SPS has met its 2012 requirements for wind and solar and is currently negotiating with a potential developer to meet its biomass/biogas requirements. SPS has received a variance to extend the time of implementation to 2012.

Generation Interconnection Requests

- ◆ **SPP Generation Interconnection queue for SPS area**
 - 889 MW fossil based requests
 - 3,215 MW wind based requests
 - 56 MW solar based requests
- ◆ **SPS has 1,004 MW connected wind generation**
 - Approximately 160 MW are on SPS distribution
- ◆ **SPS has 960 MW of projects with signed interconnection agreements and in suspension, not included in above numbers**
- ◆ **SPS has 2,660 MW of projects (wind) with signed IAs and on schedule for interconnection.**

Transmission Congestion

- **SPP Flowgates**
 - ◆ **External – SPPSPSTIES Flowgate**
 - **Bisects all AC tielines between SPS and SPP**
- **SPS Internal Flowgates**
 - ◆ **North-South Flowgate**
 - **Bisects SPS transmission lines south of Amarillo**
 - ◆ **Temporary Flowgates may limit ahead of N-S flowgate**
 - ◆ **Limiting behavior may be due to non-firm energy flows from north of Amarillo**

Transmission Congestion Map



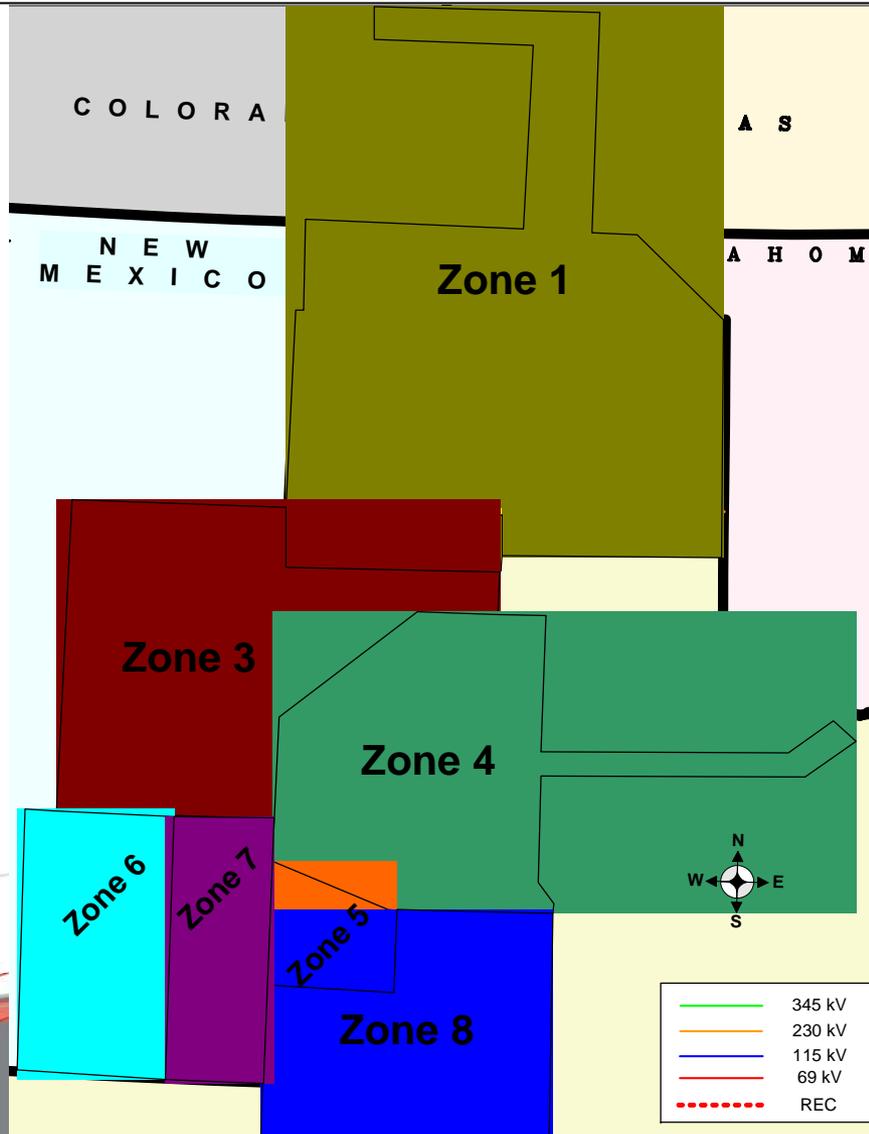
Economic Planning

- **SPS reviews studies by others and is actively involved in regional and sub-regional economic planning efforts such as:**
 - ◆ **The Department Energy (DOE) national transmission congestion studies**
 - ◆ **SPP Integrated Transmission Plan (ITP) process**
 - ◆ **Eastern Interconnection Planning Collaborative (EIPC)**

Economic Planning

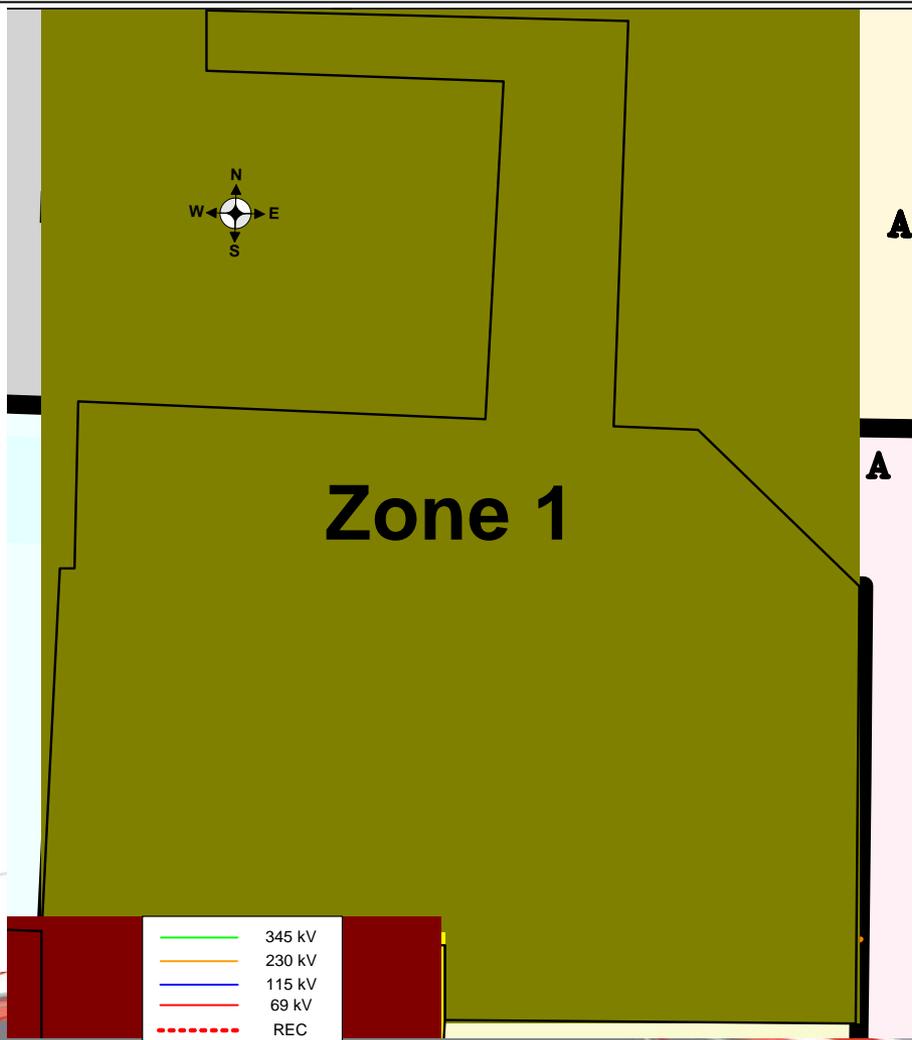
- **Economic planning involves**
 - ◆ **Various resource scenario evaluations**
 - ◆ **Economic impact of market congestion on transmission elements**
 - ◆ **Energy and demand loss evaluation on transmission elements**
- **Economic Benefits coupled with other benefits (reliability, local or regional policy, etc) together enter into transmission alternative evaluation**
- **SPS relies on SPP's economic planning processes**
 - ◆ **ITP10 – 10 year economic and reliability analysis**

Planning Zone Map



Zone 1	Western Kansas, Oklahoma Panhandle, & Texas North Area
Zone 2	Amarillo Area: Adrian, Vega, Channing, Amarillo, Groom and McLean.
Zone 3	Clovis, Hereford, and Canyon Area
Zone 4	Central Plains and Lubbock Area
Zone 5	Yoakum and Gaines Area
Zone 6	Pecos Valley
Zone 7	Hobbs/Jal Area
Zone 8	Caprock Area

Zone 1: Western Kansas, Oklahoma Panhandle, & Texas North Areas



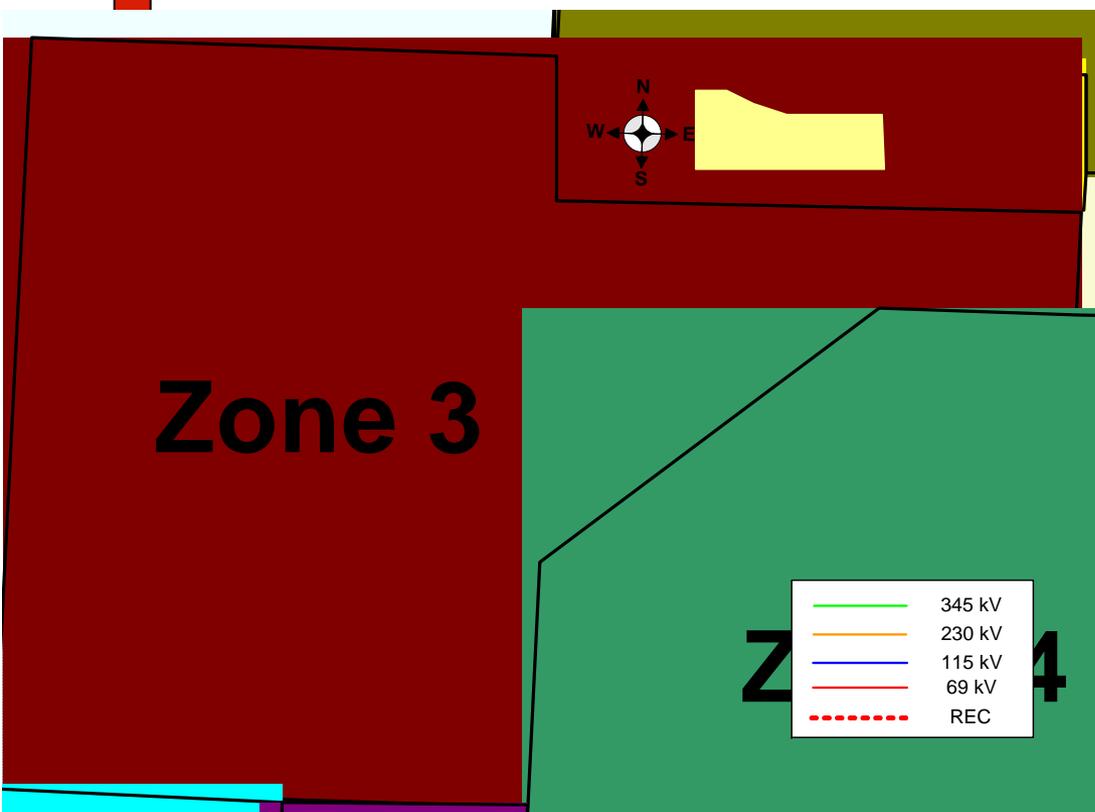
- Agricultural, large industrial, small residential loads
- Includes Oklahoma Panhandle – Tri-County Electric Cooperative is retail provider
- Towns of Guymon, OK, Dalhart, TX, Perryton, TX
- 230 kV , 115 kV, and 69 kV transmission
- High wind energy potential
- Issues - wind generation, load expansion in transmission remote areas, 69 kV capacity

Zone 2: Amarillo Area



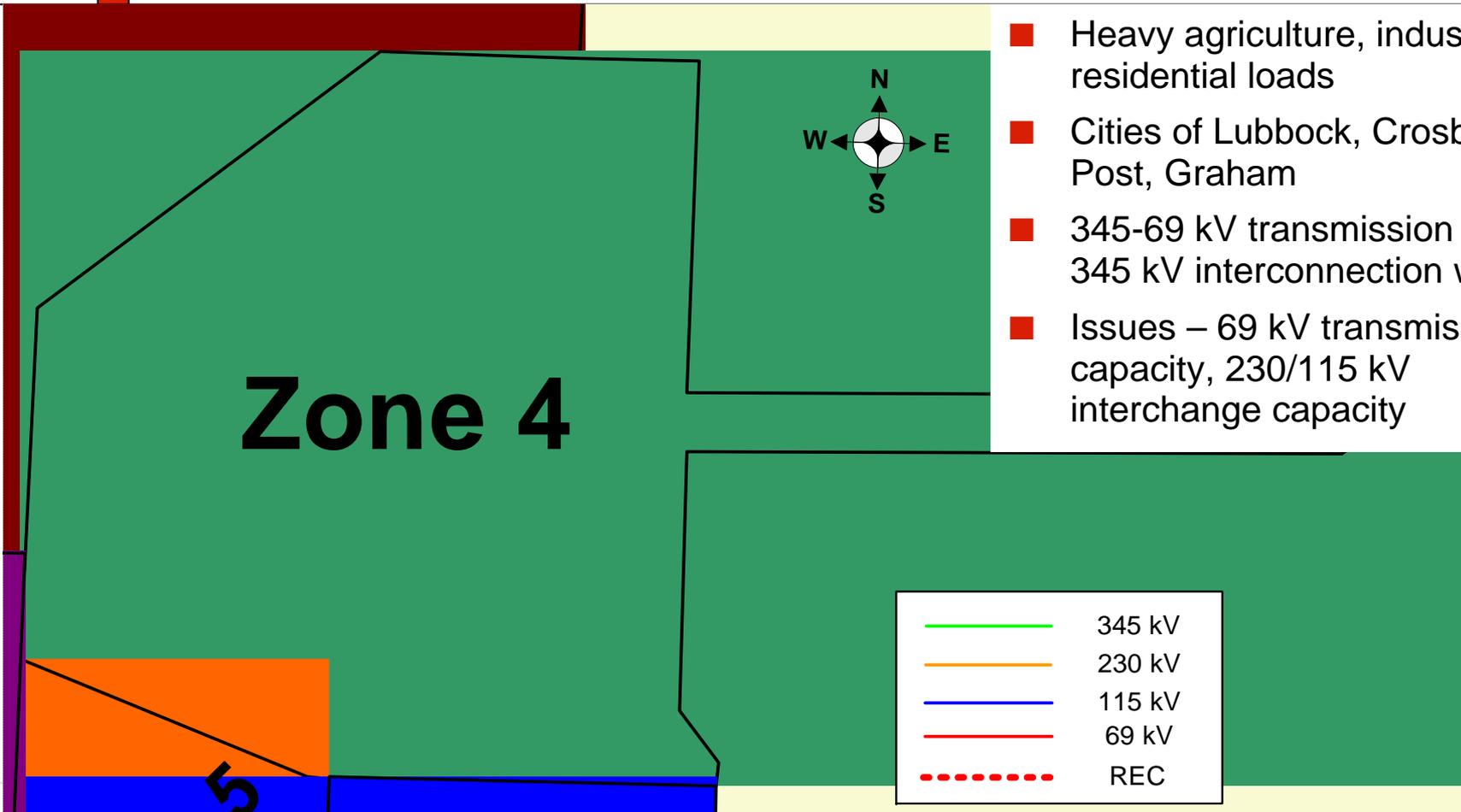
- Industrial, oilfield, agricultural, residential, and commercial loads
- Cities of Amarillo and Channing
- 345-69 kV transmission
- Good growth in past years
- 230 kV interconnection with AEP
- Issues – growth, Amarillo transmission upgrades needed

Zone 3: Clovis, Hereford, and Canyon Area



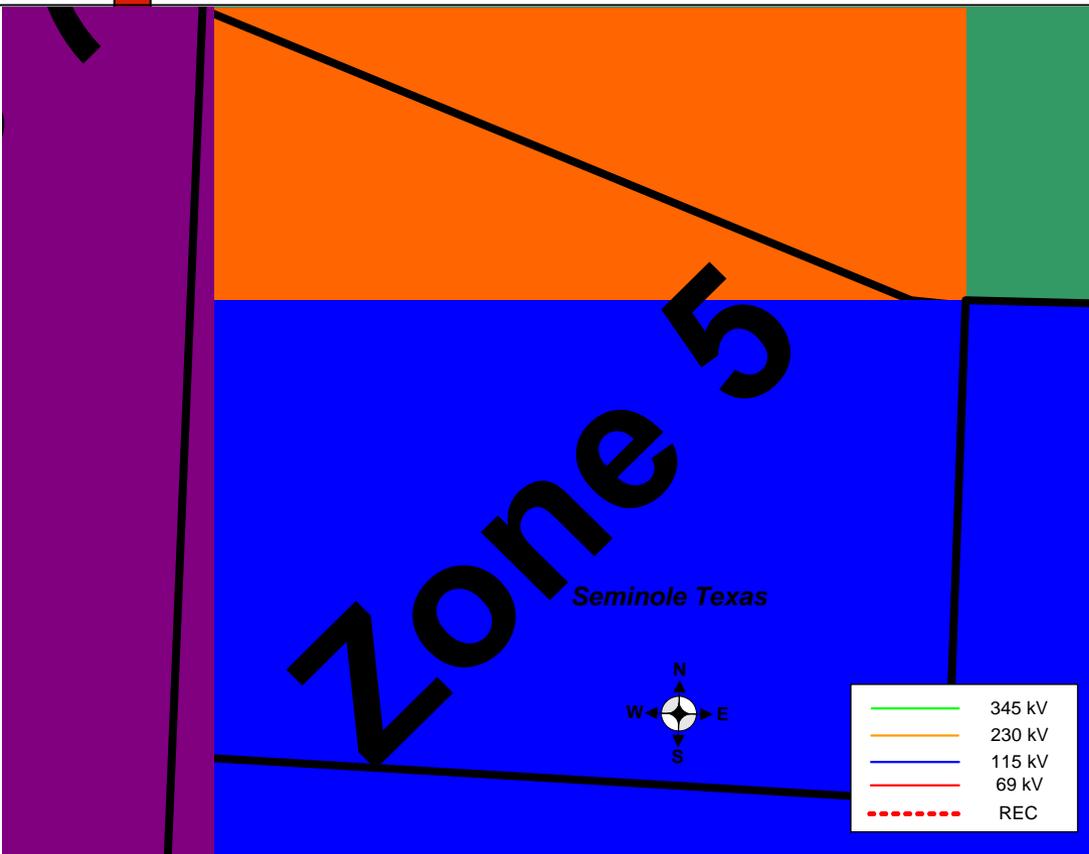
- Heavy agricultural and industrial area
- Cities of Portales, Clovis, Tucumcari, Muleshoe, Friona, Hereford, and Canyon
- 230, 115, and 69 kV transmission, Blackwater HVDC interconnection with PNM
- High wind energy potential
- Issues – Clovis transmission system upgrading, Hereford area transmission loading

Zone 4: Central Plains and Lubbock Area



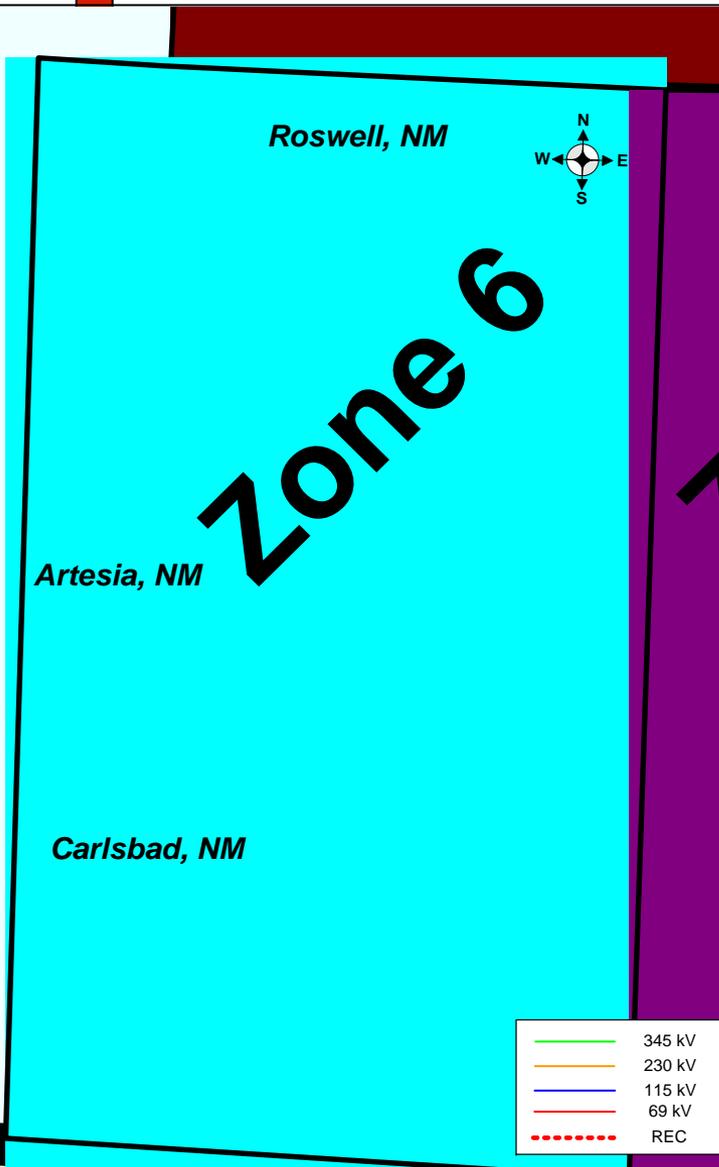
- Heavy agriculture, industrial, and residential loads
- Cities of Lubbock, Crosbyton, Post, Graham
- 345-69 kV transmission system. 345 kV interconnection with AEP
- Issues – 69 kV transmission capacity, 230/115 kV interchange capacity

Zone 5: Yoakum and Gaines Area



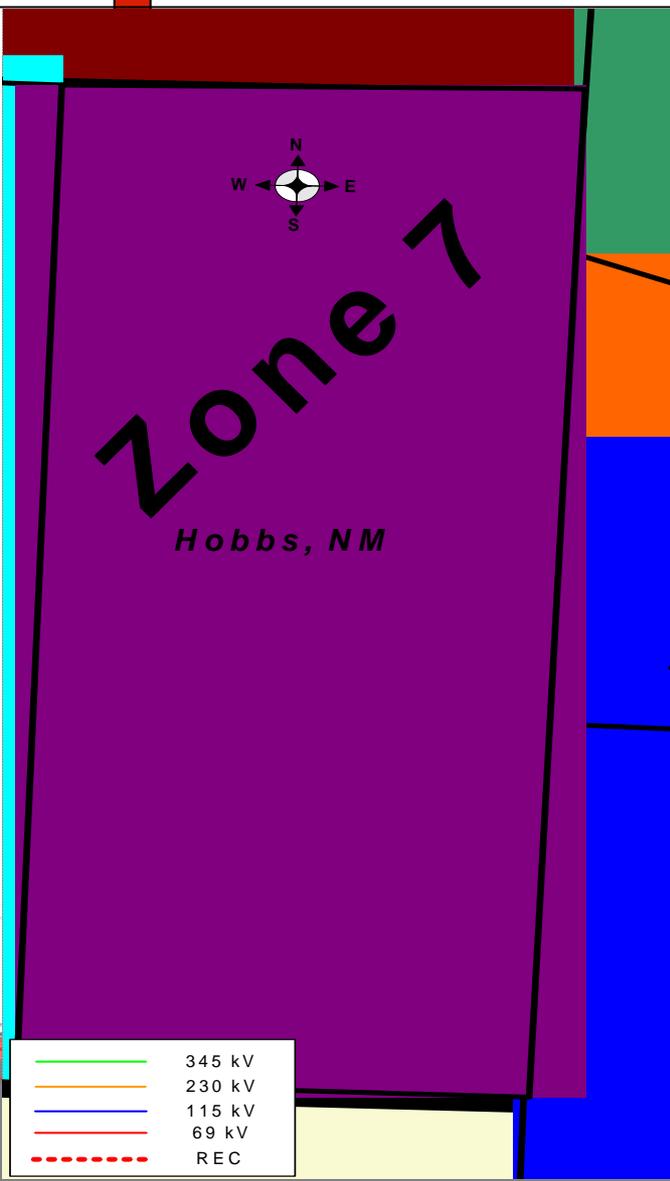
- Heavy industrial and oilfield loads, residential and agricultural loads
- High load factor area
- 230-69 kV transmission system
- Issues – continued industrial and oilfield load development, 69 kV transmission capacity

Zone 6: Pecos Valley



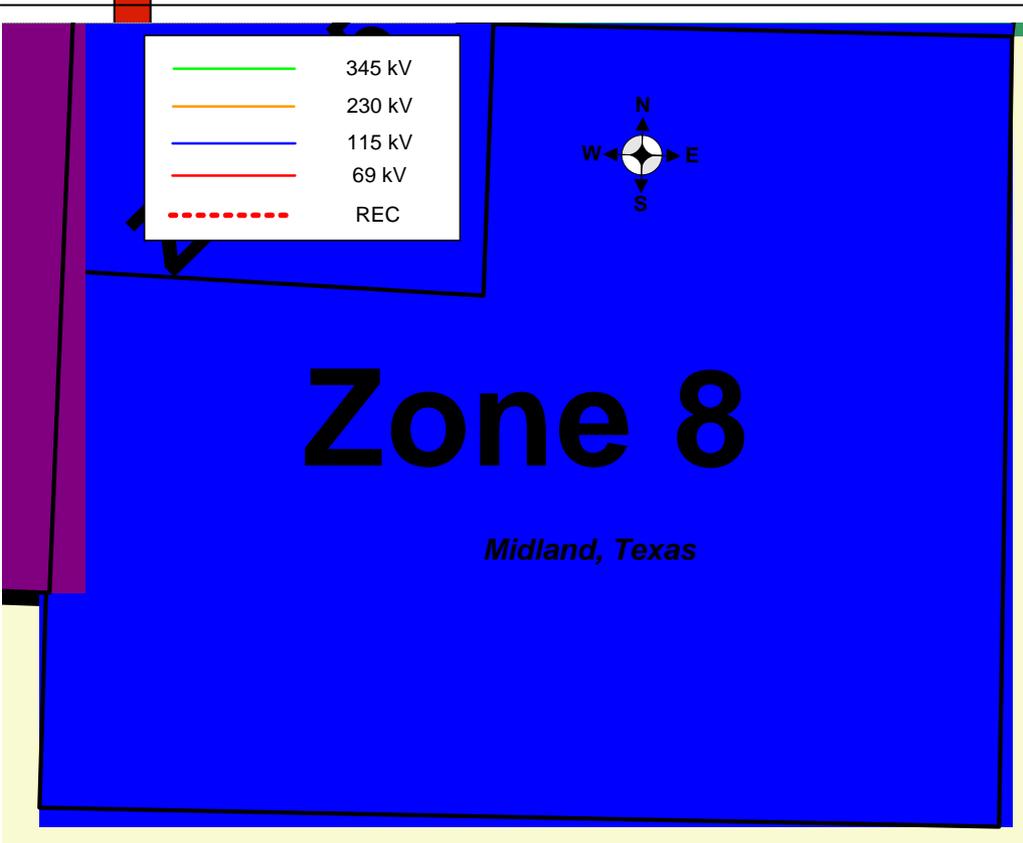
- Agricultural, industrial, oilfield, and residential loads
- Cities of Carlsbad, Roswell, Artesia, and Lovington
- Eddy Co HVDC – interconnection with El Paso Electric
- 345-69 kV transmission system
- Issues – Roswell 69 kV to 115 kV loop conversion, Carlsbad 69 kV capacity

Zone 7: Hobbs/Jal Area



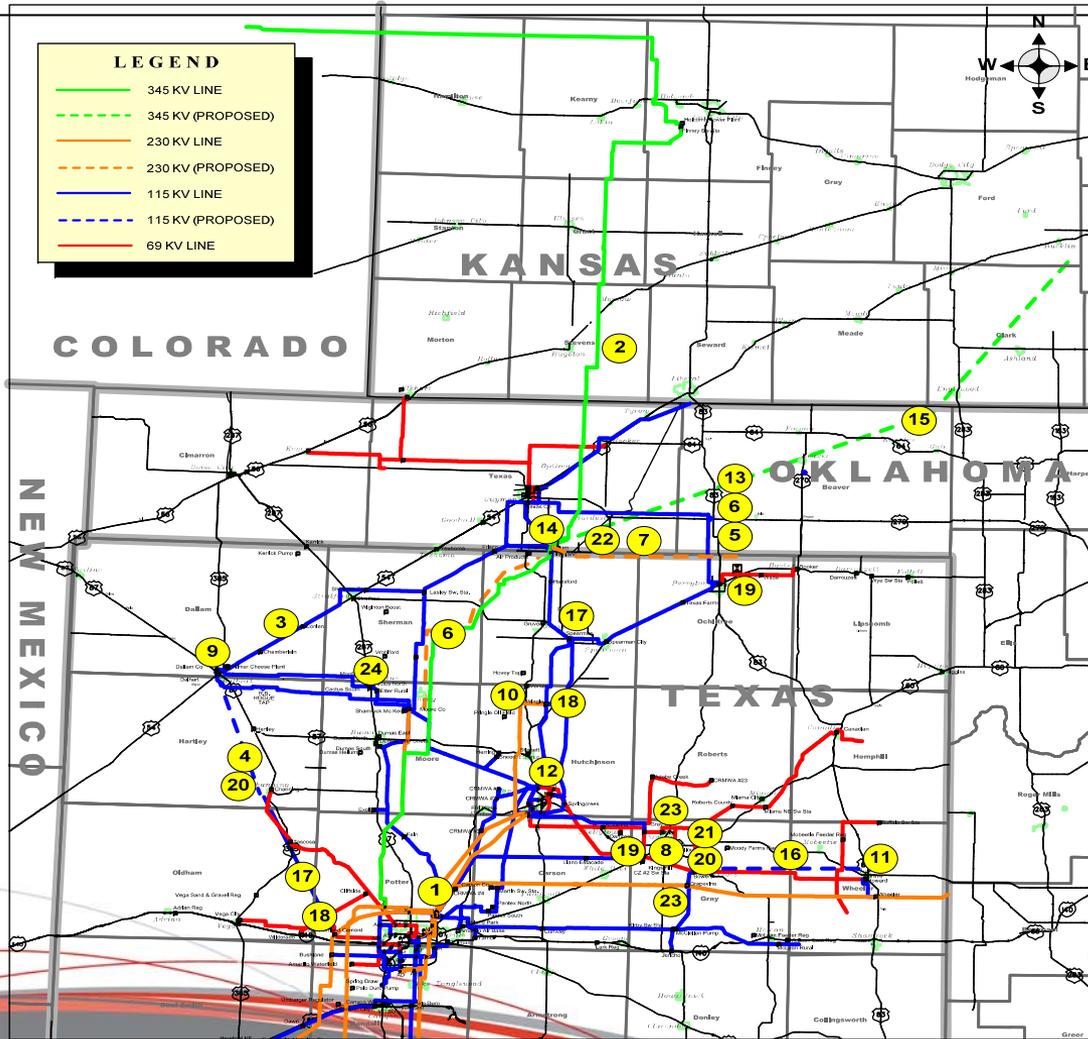
- Industrial and oilfield, with residential loads
- Cities of Hobbs, Jal, and Eunice
- 230 and 115 kV transmission
- Issues - upgrading the 115 kV system around Hobbs, variable generation dispatch

Zone 8: Caprock Area



- Industrial, oilfield, and residential load
- Sharyland Utilities bought Caprock Electric's entire system
- Sharyland Utilities is the only customer on this system
- Sharyland Utilities' 138 kV transmission system overlays ERCOT
- This area has experienced rapid growth, voltage issues in lighter load periods
- SPS's settlement agreement with Sharyland Utilities limits Sharyland Utilities load to 150 MW or less.

Current and Proposed Transmission Projects Zone 1:



Current and Proposed Transmission Projects Zone 1:

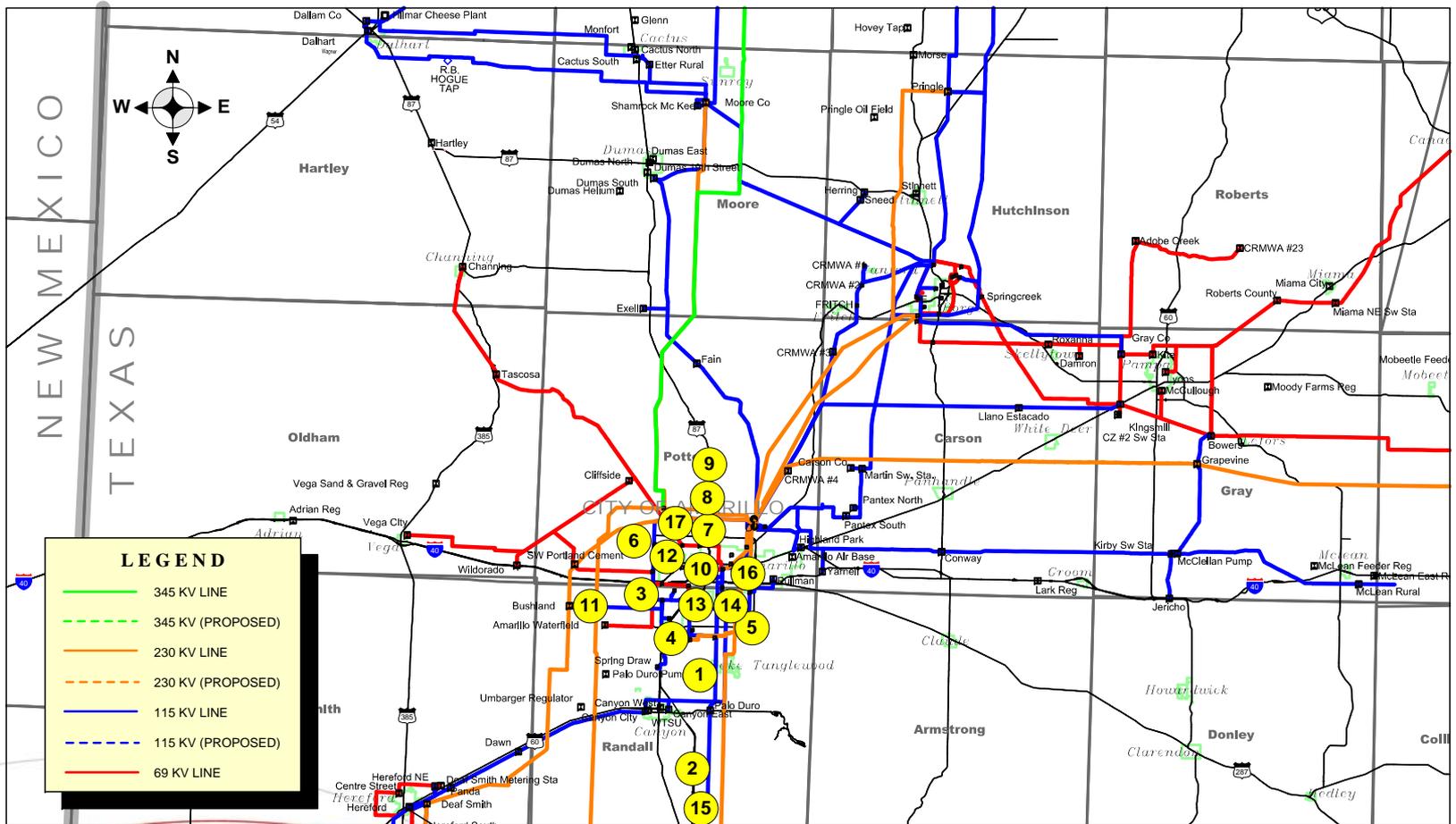
No.	Project Name	Est. ISD	Status	Drivers
1	Potter County 230/115 kV 250 MVA TF	12/2011	Complete	Reliability
2	Novus II (250 MW)	12/2011	Current	IA
3	Etter Rural 2 nd Stage 115 kV 14.4Mvar Capacitor	06/2012	Complete	Reliability
4	Potter Co- Channing to Dallam 115 kV line	06/2012	Complete	Reliability
5	Ochiltree 230/115 kV 172.5 MVA Autotransformer	03/2013	Current	Reliability
6	Ochiltree Co. 115 kV line terminations	03/2013	Current	Reliability
7	Hitchland- Ochiltree Co. 230 kV line	03/2013	Current	Reliability
8	Kingsmill 2 nd 115/69 kV Autotransformer	05/2013	Current	Reliability
9	Install 230/115/13.2 kV Transformer at Dallam County Jr. (XIT) Sub	06/2013	Proposed	Reliability
10	Install the Backup protection system and Breaker Failure Relay on Breaker 1H45 at Pringle Intg.	06/2013	Proposed	Reliability
11	Howard 2nd 115/69 kV Autotransformer	06/2013	Proposed	Reliability
12	Install the Backup protection system and Breaker Failure Relay on Breaker 1956 at Hutchinson.	06/2013	Proposed	Reliability
13	Rebuild 16.9 miles Ochiltree-TRI-County RECs Cole 115 kV ckt 1	06/2013	Proposed	Reliability

Current and Proposed Transmission Projects Zone 1: (cont.)

No.	Project Name	Est. ISD	Status	Drivers
14	Hitchland 2nd 345/230 kV 560 MVA Auto	02/2014	Proposed	Reliability
15	Hitchland– Woodward Dbl 345 kV Transmission Project	06/2014	Current	Reliability
16	Bowers– Howard 115 kV line	06/2014	Current	Reliability
17	Spearman 115/69 kV Autotransformer Upgrade	06/2014	Proposed	Reliability
18	Pringle Distribution	06/2015	Proposed	Reliability
19	Z66 Booker/Wade Conversion	12/2015	Current	Reliability
20	Potter- Channing-Dallam 115 to 230 kV Conversion	12/2015	Proposed	Reliability
21	Bowers 2nd 115/69 kV Autotransformer	06/2016	Current	Reliability
22	Hitchland II	06/2016	Proposed	Reliability
23	Replace 230/115 kV transformer at Grapevine substation with 250 MVA transformer	06/2017	Proposed	Reliability

Current and Proposed Transmission Projects

Zone 2:



Current and Proposed Transmission Projects Zone 2:

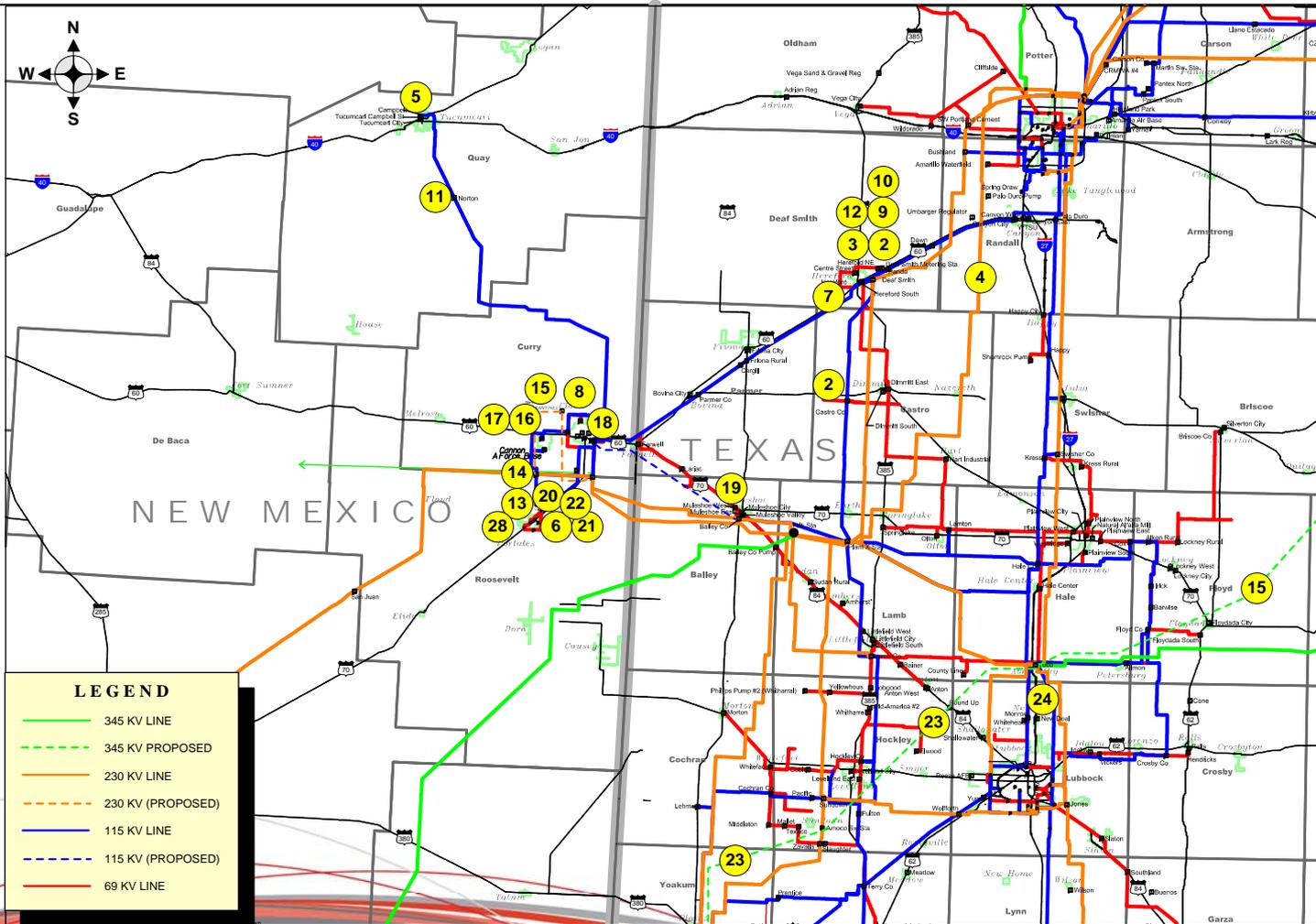
#	Project Name	Est. ISD	Status	Drivers
1	Randall Co- Palo Duro Sub 115 kV Re-conductor line	05/2012	Complete	Zonal
2	Palo Duro Sub- Happy Interchange 115 kV Re-conductor Line	05/2012	Complete	Zonal
3	Hillside Substation	06/2012	Complete	Reliability
4	Randall 2 nd 230/115 kV Autotransformer	04/2013	Current	Reliability
5	Randall- Amarillo South 230 kV line	04/2013	Current	Reliability
6	Install the Backup protection system and Breaker Failure Relay on Breaker 5910 at Northwest Intg.	06/2013	Proposed	Reliability
7	Cherry St.- Hastings New 115 kV line	06/2013	NTC	Reliability
8	Hastings Sub Convert to 115 kV	09/2013	Current	Reliability
9	Cherry St Interchange 230/115 kV 252 MVA TF	10/2013	Current	Reliability
10	East Plant- Hastings 115 kV line.	12/2013	Current	Reliability

Current and Proposed Transmission Projects Zone 2 (Cont.):

#	Project Name	Est. ISD	Status	Drivers
11	Bushland Interchange 230 kV 100Mvar Capacitor	12/2013	Proposed	Reliability
12	Soncy Sub Convert to 115 kV	06/2015	Current	Reliability
13	Osage Station and 115 kV Line re-termination	06/2015	Current	Reliability
14	Randal Co. (Osage)- South Georgia 115kV Re-conductor Line	06/2015	Proposed	Reliability
15	Happy Interchange 115/69 kV Upgrade Autotransformers	06/2016	Current	Reliability
16	Harrington – Randall 230kV Circuit #2	06/2017	Proposed	Reliability
17	Re-conductor 115 kV NORTHWEST-ROLLHILLS line	06/2017	Proposed	Reliability

Current and Proposed Transmission Projects

Zone 3:



Current and Proposed Transmission Projects

Zone 3 (Cont.):

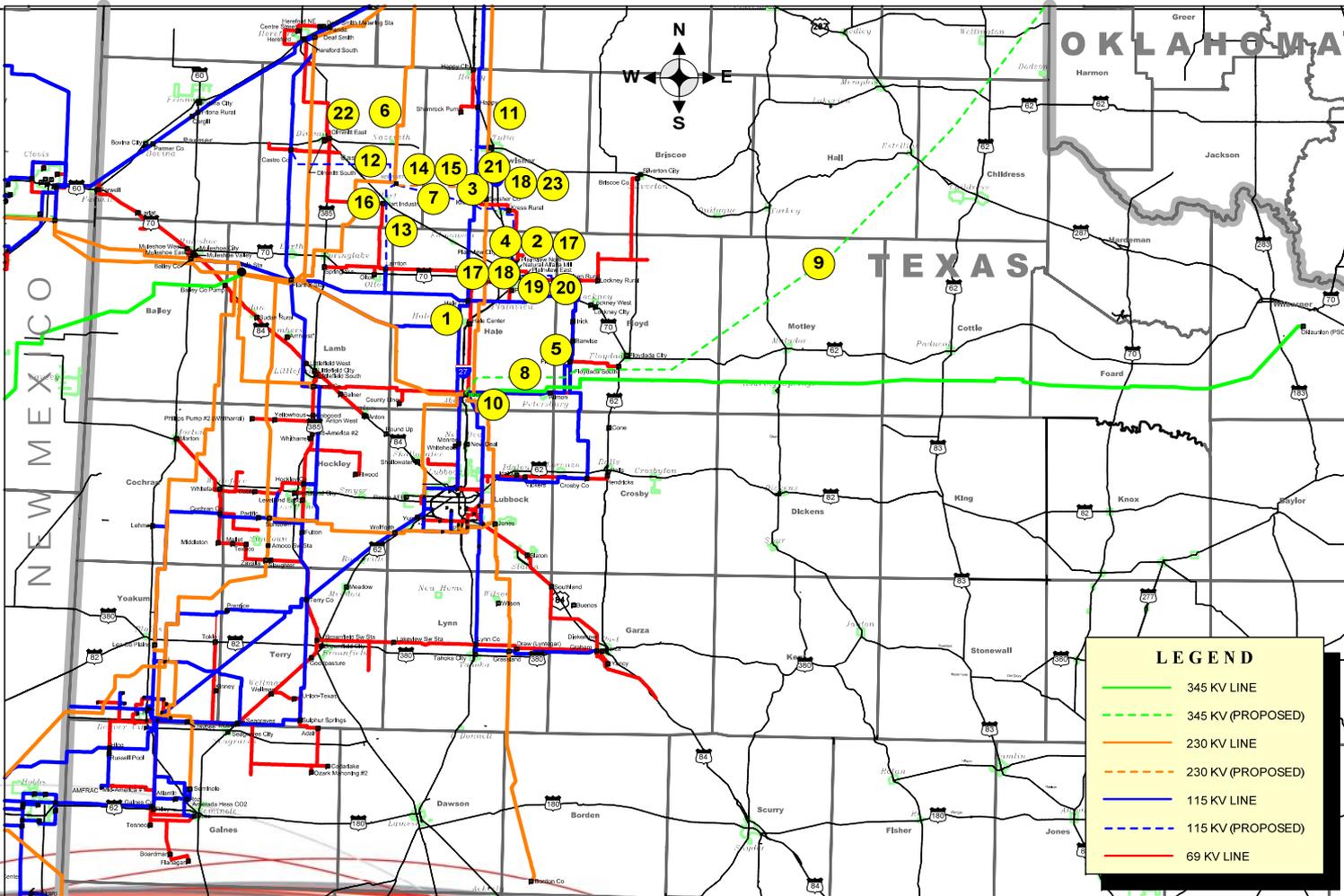
	Project Name	Est. ISD	Status	Drivers
1	Parmer Co. Cap Bank	05/2012	Current	Reliability
2	Deaf Smith # 24 GSEC	06/2012	Complete	IA
3	Re-terminate T3 in & out of Deaf Smith Interchange (Re-conductor from Deaf Smith to Hereford 115 kV line)	06/2012	Current	Reliability
4	Clipper Wind (400 MW)	10/2012	Current	IA
5	Campbell St Modifications (Lopez)	03/2013	Current	Reliability
6	Zodiac Substation Convert to 115 kV	06/2013	Current	Reliability
7	Hereford – NE Hereford (Z72) re-insulate 69 kV line	06/2013	Current	Reliability
8	East Clovis Sub Convert to 115 kV	06/2013	Current	Reliability
9	Deaf Smith 230 kV Bus Rebuild	06/2013	Proposed	Reliability
10	Upgrade Deaf Smith County Interchange 230/115 kV Ckt 1 & 2 transformers to 250 MVA	06/2013	Proposed	Reliability
11	Norton Reactor 115 kV	09/2013	Suspended	Zonal
12	NE-Hereford 2nd 115/69 kV 84 MVA Autotransformer	04/2014	Proposed	Reliability
13	Portales – Zodiac Convert to 115 kV	06/2014	Current	Reliability

Current and Proposed Transmission Projects Zone 3 (Cont.):

	Project Name	Est. ISD	Status	Drivers
14	Portales – Zodiac 115kV line	06/2014	Current	Reliability
15	Pleasant Hill- Oasis Interchange 230 kV line	09/2014	Current	Reliability
16	Pleasant Hill- Roosevelt Co. 230 kV line	09/2014	Current	Reliability
17	Pleasant Hill 230/115 kV interchange	12/2014	Current	Reliability
18	Curry Co – Bailey Co 115 kV line	06/2015	NTC Pending	Reliability
19	East Muleshoe & Valley Subs Convert to 115 kV	11/2015	Proposed	Reliability
20	PORTALES 115/69 kV autotransformers upgrade	06/2017	Proposed	Reliability
21	Build 7 miles of 115 kV from Market St to Portales substation and install necessary terminal equipment	06/2018	Proposed	Reliability
22	Build 1.9 miles of 115 kV from S Portales to Market St 115 kV and install necessary terminal equipment	06/2018	Proposed	Reliability
23	TUCO-Amoco Switch-Hobbs	06/2020	Proposed	Reliability
24	East New Deal Interchange	06/2020	Proposed	Reliability
25	Install the Backup protection system and Breaker Failure Relay on Breaker 4K25 at Roosevelt Intg.	06/2013	Proposed	Reliability

Current and Proposed Transmission Projects

Zone 4:



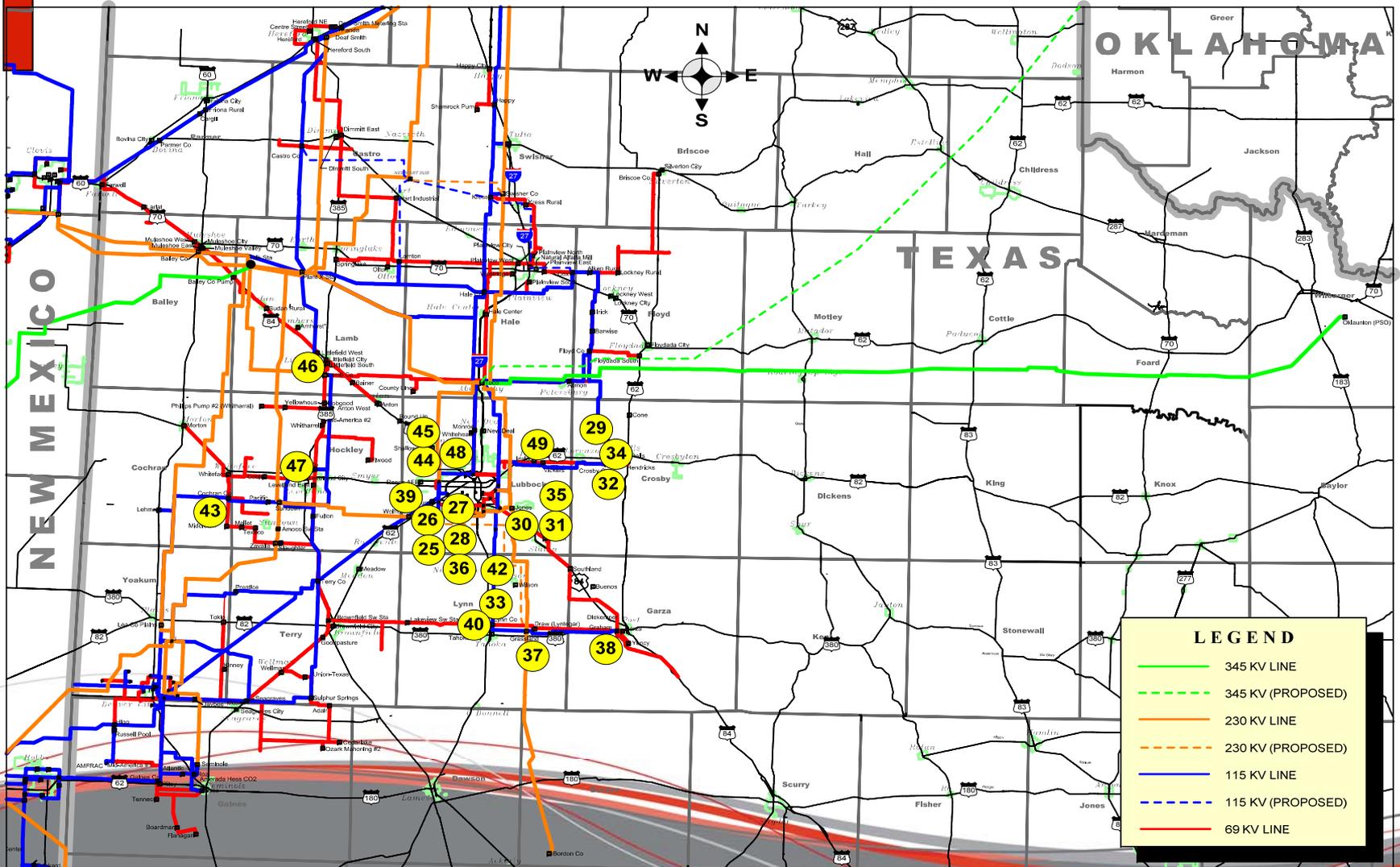
Current and Proposed Transmission Projects Zone 4:

#	Project Name	Est. ISD	Status	Drivers
1	Tulia Tap- Kress Interchange Re-conductor 115 kV line	04/2012	Complete	Zonal
2	Happy Interchange- Tulia Tap Re-conductor 115 kV line	04/2012	Complete	Zonal
3	Build new 22-mile Kress Interchange - Kiser 115 kV	06/2013	Proposed	Reliability
4	Build new 10-mile Cox - Kiser 115 kV line	06/2013	Proposed	Reliability
5	Install two 14.4 MVA 115 kV capacitors at Floyd Intg.	06/2013	Proposed	Reliability
6	Happy Whiteface Wind (240 MW)	10/2013	Current	IA
7	Newhart - Kress 115 kV line	03/2014	Current	Reliability
8	TUCO Interchange 2nd 345/230 kV 560 MVA TF	06/2014	Current	Balanced Portfolio
9	Tuco – Woodward 345 kV Project	06/2014	Current	Reliability
10	Tuco Interchange 3 rd 115/69 kV Autotransformer	06/2014	NTC Pending	Reliability
11	Happy Sub Upgrade both 115/69 kV transformers to 84/96 MVA.	06/2014	NTC	Reliability
12	Newhart - Castro Co 115 kV line	06/2014	Current	Reliability

Current and Proposed Transmission Projects Zone 4 (cont.):

#	Project Name	Est. ISD	Status	Drivers
13	Newhart - Lamton 115 kV line (with Hart Ind. Tap)	11/2014	Current	Reliability
14	Newhart - Swisher Co. 230 kV line	12/2014	Current	Reliability
15	Newhart - Kress 115 kV line	03/2014	Current	Reliability
16	Hart Industrial Sub Convert to 115 kV	06/2015	Current	Reliability
17	Kress - Kiser 115 kV line	03/2014	Current	Reliability
18	Kiser Substation (New) 115/69 kV	04/2014	Current	Reliability
19	Kiser Substation - Cox Interchange New 115 kV line	12/2014	Current	Reliability
20	Plainview North Convert to 115 kV	06/2014	Current	Reliability
21	Swisher Co. Upgrade 230/115 kV TF to 252 MVA	06/2017	NTC Pending	Reliability
22	Dimmit Substation Convert to 115 kV	06/2016	Proposed	Reliability
23	Kress - Swisher Co. Upgrade the 115 kV line terminal equipment	06/2021	Proposed	Reliability

Current and Proposed Transmission Projects Zone 4 (cont.):



Current and Proposed Transmission Projects Zone 4 (cont.):

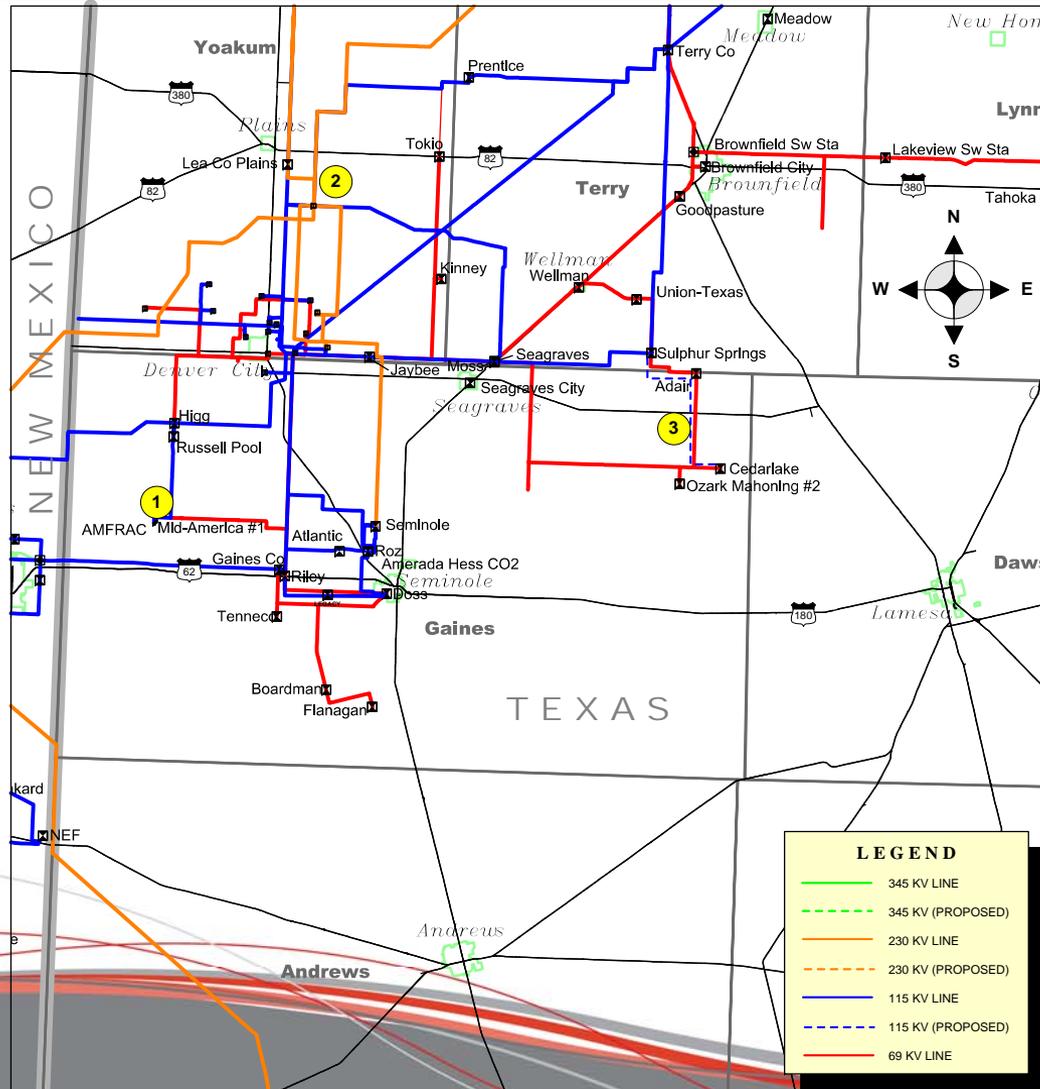
#	Project Name	Est. ISD	Status	Drivers
25	Wolfforth - Yuma terminal Upgrade 115 kV line terminal equipment	10/2012	NTC	Reliability
26	Wolfforth – Yuma T72 115 kV Upgrade line terminal equipment	12/2012	Current	Reliability
27	GSEC-SP Milwaukee Interconnection	03/2013	Current	IA
28	Install a second 230/115/13.2 kV transformer at Lubbock South	06/2013	Proposed	Reliability
29	Rebuild 28 miles 115 kV Crosby-Floyd ckt 1	06/2013	Proposed	Reliability
30	Jones 4	06/2013	Current	Reliability
31	Jones Plant Bus	06/2013	Current	Reliability
32	Crosby Co Upgrade Both 115/69 kV transformers to 84 MVA	06/2013	Proposed	Reliability
33	Lynn Co. Substation Convert load to 115 kV	11/2013	NTC	Reliability
34	Crosby Co 115 kV 14.4 MVAr Capacitor Project	03/2014	Proposed	Reliability
35	Jones Bus #2 -Lubbock S. Upgrade 230 kV line terminal equipment	06/2014	Proposed	Reliability
36	Allen – Lubbock South 115 kV rebuild line	06/2014	Proposed	Reliability
37	Grassland Interchange Upgrade 230/115 kV TF to 150 MVA	06/2015	Proposed	Reliability
38	Graham Upgrade 115/69 kV transformer to 84/96 MVA	06/2017	Proposed	Reliability

Current and Proposed Transmission Projects Zone 4 (cont.):

#	Project Name	Est. ISD	Status	Drivers
39	Build new 230kV line from Carlisle to Wolfforth So. and install terminal equipment	06/2017	Proposed	Reliability
40	LYNN_CNTY 115/69 kV autotransformers upgrade	06/2017	Proposed	Reliability
41	Wolfforth – Grassland 230/345 kV Project	03/2018	Proposed	Reliability
42	Wolfforth – Grassland 230 kV Line	06/2018	Proposed	Reliability
43	Install a 2 stage 28.8 115 kV capacitor bank each stage 14.4 MVA at Cochran Interchange	06/2018	Proposed	Reliability
44	GSEC-SP Alcove Interconnection	Unknown	Pending	IA
45	GSEC-SP Wolfforth Interconnection	Unknown	Pending	IA
46	LC-Littlefield 115 kV conversion	Unknown	Pending	Reliability
47	East Levelland 115 kV conversion	Unknown	Pending	Reliability
48	Carlisle Intg. 2nd 168 MVA 230/115 kV TF	Unknown	Pending	Reliability
49	Vickers Sub Convert to 115 kV	Unknown	Pending	Reliability

Current and Proposed Transmission Projects

Zone 5:

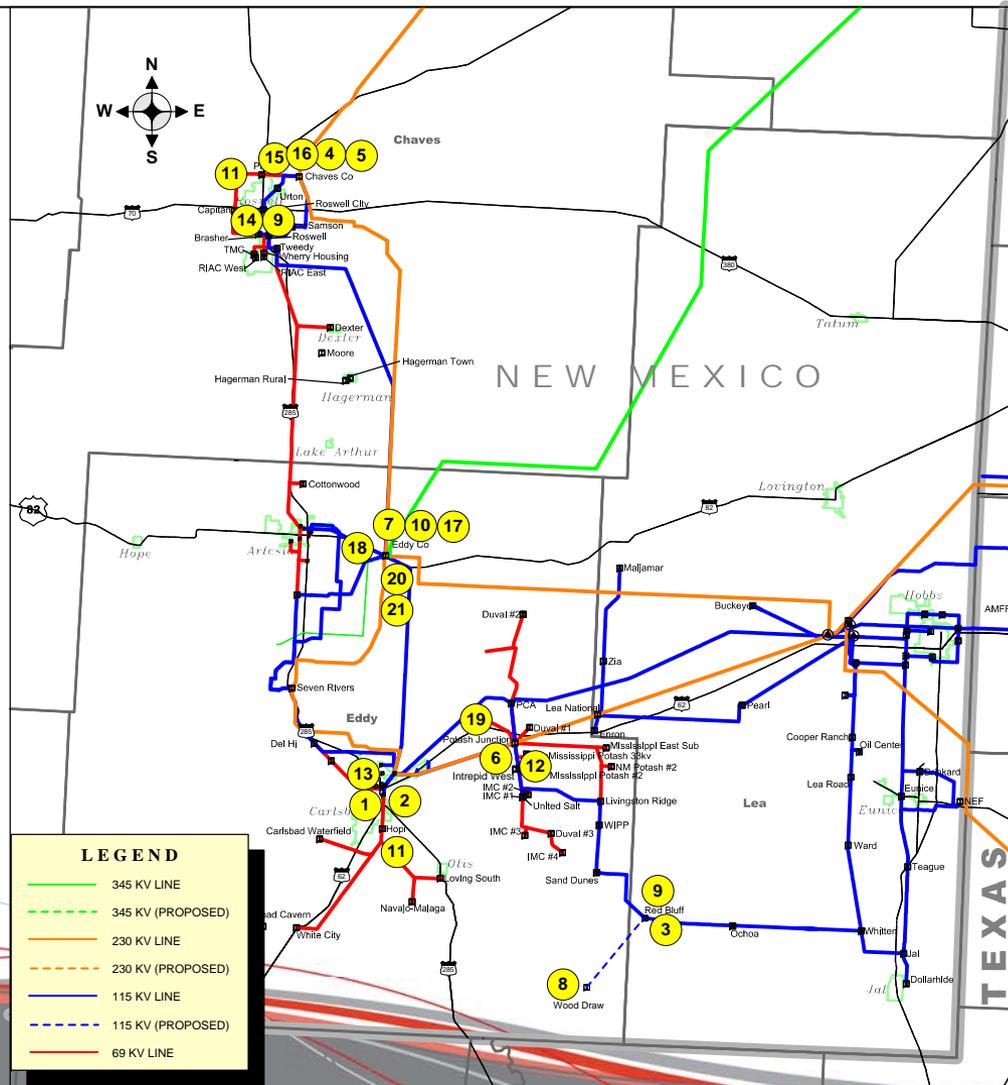


Current and Proposed Transmission Projects Zone 5:

#	Project Name	Est. ISD	Status	Drivers
1	Johnson Draw Project 115 kV	09/2012	Complete	Reliability
2	Yoakum Co. bus rebuild	06/2014	Current	Reliability
3	Sulphur Springs – Cedar Lake 115 kV line	06/2015	Proposed	Reliability

Current and Proposed Transmission Projects

Zone 6:



Current and Proposed Transmission Projects Zone 6:

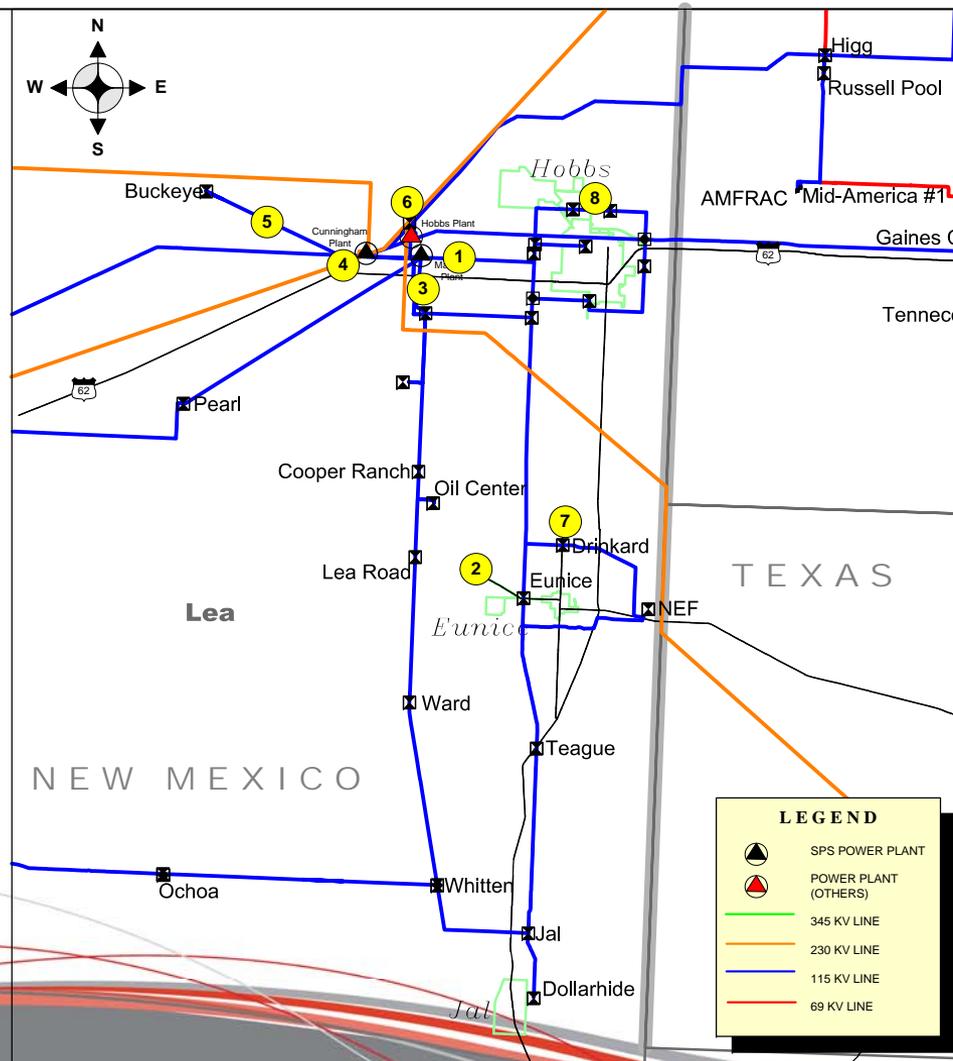
#	Project Name	Est. ISD	Status	Drivers
1	Ocotillo Substation Convert to 115 kV	02/2012	Complete	Reliability
2	Ocotillo – Pecos 115 kV line	04/2012	Complete	Reliability
3	Red Bluff – Wood Draw 115 kV line Tap T41	07/2012	Complete	Reliability
4	Chaves 115 kV Bus Rebuild	12/2012	Current	Reliability
5	Chaves 230 kV Bus Rebuild	12/2012	Current	Reliability
6	POTASH_JCT 115/69 kV autotransformers upgrade	06/2013	Proposed	Reliability
7	Eddy County Breaker Failure Relaying	6/1/2013	Current	Reliability
8	Wood Draw 7.2 MVAR Capacitor	06/2013	Current	Reliability
9	Red Bluff 2-14.4 MVAR Capacitor	06/2013	Current	Reliability
10	Eddy Co 2nd 230/115 kV Autotransformer	06/2013	Current	Reliability
11	Hopi Conversion	10/2013	Proposed	Reliability

Current and Proposed Transmission Projects Zone 6 (Cont.):

#	Project Name	Est. ISD	Status	Drivers
12	Intrepid West	12/2013	Proposed	Reliability
13	North Canal to Pecos	12/2013	Proposed	Reliability
14	Brasher Tap - Roswell Interchange Re-conductor 115 kV line	12/2013	Current	Reliability
15	Chaves Co. Interchange - Roswell Interchange Convert 69 kV line to 115 kV from (Convert Capitan & Price substations to 115 kV)	12/2013	Current	Reliability
16	Chaves Co 230/115 kV Transformer replacement	06/2014	Current	Reliability
17	Eddy Co SVC Controls Upgrade	12/2014	Current	Reliability
18	Build a new 115 kV line from Atoka-Eagle Creek and install terminal equipment	06/2015	Proposed	Reliability
19	Intercontinental Potash	12/2015	Proposed	Reliability
20	UPGRADE EDDY CO transformer 230-115 KV 250 MVA CKT 1	06/2016	Proposed	Reliability
21	Install a new 230 kV breaker in series with Breaker 4K70 at Eddy Co. Intg.	06/2017	Proposed	Reliability

Current and Proposed Transmission Projects

Zone 7:



Current and Proposed Transmission Projects Zone 7:

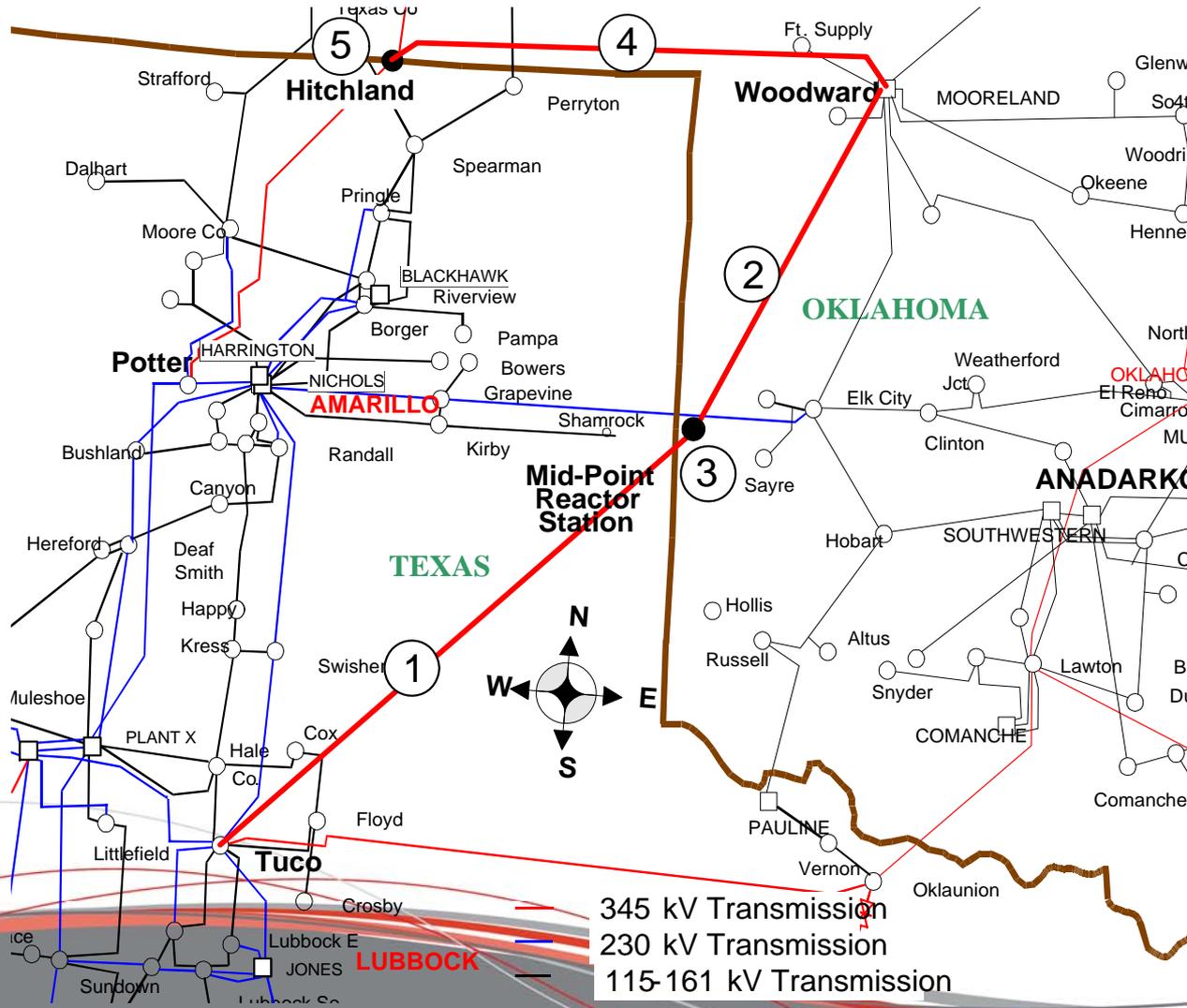
#	Project Name	Est. ISD	Status	Drivers
1	Maddox Station - Sanger SW (T14) Re-conductor 115 kV line	05/2012	NTC	Reliability
2	Eunice Capacitor	06/2012	Complete	Reliability
3	Maddox Station - Monument (T42) Re-conductor 115 kV line	11/2012	Current	Reliability
4	Cunningham Station Breaker Failure Relaying	11/2012	Current	Reliability
5	Re-conductor 115 kV line from Cunningham Station to Buckeye Tap (V98)	10/2013	Current	Reliability
6	Lea County lines Re-terminate at Hobbs Interchange	12/2013	Current	Reliability
7	Drinkard 115 kV 14.4Mvar Capacitor	06/2015	Proposed	Reliability
8	Sanger SW - OXY Permian Sub (T14) Re-conductor 115 kV line	06/2017	Pending NTC	Reliability



Current and Proposed Transmission Projects Zone 8:

There are no current projects scheduled for this zone. All previous projects have been put on hold pending Sharyland's intent to transfer all of Caprock load back to the ERCOT system by January 1, 2014.

SPS Tielines - Current and Proposed Transmission Projects



SPS Ties - Current and Proposed Transmission Projects

#	Project Name	Est. ISD	Status	Drivers
1	Tuco – Mid-Point Reactor Station 345 kV line	05/2014	Current	SPP-Bal-Port
2	Mid-Point Reactor Station - Woodward 345 kV line	05/2014	Current	SPP-Bal-Port
3	345 kV Mid-Point Reactor Station	05/2014	Current	SPP-Bal-Port
4	Hitchland to Woodward double-circuit 345 kV line	12/2015	Current	SPP EHV
5	XFR - Hitchland 345/230 kV ckt 2	06/2014	Current	Priority

Links to additional information on transmission Plans

- **The Southwest Power Pool (SPP)**
 - ◆ <http://spp.org>
- **SPS Study Plans and Results**
 - ◆ [http://www.xcelenergy.com/About Us/Transmission/About Transmission/Planning for the SPS Transmission System](http://www.xcelenergy.com/About_Us/Transmission/About_Transmission/Planning_for_the_SPS_Transmission_System)
- **SPS Transmission Planning Points of Contact**
 - ◆ [http://www.xcelenergy.com/About Us/Transmission/About Transmission/Planning for the SPS Transmission System](http://www.xcelenergy.com/About_Us/Transmission/About_Transmission/Planning_for_the_SPS_Transmission_System)