

PUBLIC SERVICE COMPANY OF COLORADO

SENATE BILL 07-100
DESIGNATION OF ENERGY
RESOURCE ZONES AND
TRANSMISSION PLANNING
REPORT

PROCEEDING NO. 15M-___E

October 30, 2015

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I. INTRODUCTION

Public Service Company of Colorado ("Public Service" or the "Company") submits this report in compliance with Senate Bill ("SB") 07-100, codified at § 40-2-126 (2), C.R.S. This report is the sixth¹ that Public Service has filed since the enactment of SB 07-100 in 2007. The purpose of this report is to inform the Colorado Public Utilities Commission ("CPUC" or "Commission") and interested parties of the status of our proposed transmission projects that we recommend to deliver electric power consistent with the timing of the development of beneficial energy resources in or near designated Energy Resource Zones ("ERZs" or "Zones").

In this report, we will present the following information:

- Background, including, among other things, a description of our transmission planning process and a summary of our most recent resource plan and its implications to our transmission plans;
- Identification of ERZs; and
- Specific transmission projects intended to expand transmission capability for the delivery of beneficial energy resources from ERZs and their status.

In 2011, the Commission adopted new transmission planning Rule 3627, which required the filing of a 10-year transmission plan and supporting documentation biennially, beginning with the first plan filed on February 1, 2012. By Decision No. C12-0178 in Proceeding Nos. 11M-872E, 11M-873E, and 12M-102E,

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¹ SB 07-100 Reports were filed in 2007, 2009, 2011, and 2013. An "Informational" Report was filed in October 2008.

the Commission consolidated the Company's 2011 SB 07-100 report with that of the 10-year transmission plan due February 1, 2012, to allow both filings to be considered together. Subsequently, Public Service, Black Hills/Colorado Electric Utility Company ("Black Hills") and Tri-State Generation and Transmission Association ("Tri-State") submitted their first joint filing of their 10-Year Transmission Plan, dated February 1, 2012, which was supplemented by a filing in July of 2012. By Decision No. R12-1431, dated December 13, 2012, the Commission determined that the Rule 3627 plan filed by Public Service, Tri-State, and Black Hills on February 1, 2012, as supplemented, was adequate, but gave guidance for future plans.²

II. <u>BACKGROUND</u>

A. Requirements of SB 07-100

Section 40-2-126 (2), C.R.S., requires rate-regulated electric utilities, such as Public Service, on or before October 31 of each odd-numbered year, to do the following:

- (a) Designate ERZs;
- (b) Develop plans for the construction or expansion of transmission facilities necessary to deliver electric power consistent with the timing of the development of beneficial energy resources located in or near such zones;

² Because no exceptions were filed to the Administrative Law Judge's Recommended Decision and the Commission did not stay the decision, the Recommended Decision became the decision of the Commission.

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- (c) Consider how transmission can be provided to encourage local ownership of renewable energy facilities, whether through renewable energy cooperatives as provided in § 7-56-210, C.R.S., or otherwise; and
- (d) Submit proposed plans, designations, and applications for certificates of public convenience and necessity ("CPCN") to the Commission for simultaneous review.

B. Description of the Public Service Transmission System

Our entire transmission network is located within the State of Colorado. We own and maintain approximately 4,670 circuit-miles of transmission lines, all of which are located inside of Colorado. The transmission lines are rated 44 kilovolt ("kV"), 69 kV, 115 kV, 138 kV, 230 kV, and 345 kV. Colorado is on the eastern edge of the Western Electricity Coordinating Council ("WECC") transmission system, which is also referred to as the "Western Interconnection." The Western Interconnection operates asynchronously from the Eastern Interconnection. Our transmission system is interconnected with the transmission system of our affiliate, Southwestern Public Service Company, via a jointly-owned tie line with a 210 megawatt ("MW") High Voltage Direct Current ("HVDC") back-to-back converter station (the "Tie Line"), which has been in service since December 31, 2004. The Tie Line provides the first link in Colorado to the Eastern Interconnection.

Our transmission network runs primarily along the Front Range of Colorado. However, it utilizes transmission across the entire State to bring generation resources to serve our load centers. Our retail service territory includes the DenverBoulder metro area, as well as the Interstate-70 ("I-70") corridor to Grand Junction, the San Luis Valley, Greeley, Sterling, and Brush. We also serve the following Holy Cross Energy, Yampa Valley Electric Association, wholesale customers: Grand Valley Rural Power Lines, Intermountain Rural Electric Association, the Town of Center, and the City of Burlington. The transmission system also serves to integrate Company owned, as well as purchased power from generating stations, with our load. The neighboring transmission systems connected to Public Service include Arkansas River Power Authority, Black Hills Energy, Colorado Springs Utilities ("CSU"), Platte River Power Authority ("PRPA"), Tri-State, and the Western Area Power Administration ("Western"). In addition, Public Service has an ownership interest in jointly-owned transmission facilities, including western slope transmission facilities extending from the Craig/Hayden area in Northwestern Colorado south to the Four Corners area. Figure 1, below, depicts our transmission system ownership in Colorado.

Xcel Energy CEDAR CREEK PSCO 345KV TRANSMISSION LINES
PSCO 230KV TRANSMISSION LINES
PSCO 136KV TRANSMISSION LINES
PSCO 115KV TRANSMISSION LINES
PSCO 65KV TRANSMISSION LINES
PSCO 65KV TRANSMISSION LINES
PSCO 65KV TRANSMISSION LINES
TRI-STATE TRANSMISSION LINES
JOHN TRANSMISSION LINES
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SUBSTANTON MAP FOR FURTHER DETAIL
REVISION DATE AND JOHN SHOULD BE AUGUST AND BURRO TRANSMISSION OWNERSHIP OF COLORADO 2015 TO FOUR CORNERS

Figure 1 Colorado State Transmission Map

C. Summary of Public Service Company's SB 07-100 Coordinated Transmission Planning Activities

The transmission planning activities that we have undertaken to comply with SB 07-100 have not been undertaken in isolation, but are part of a larger coordinated transmission planning effort to assure that we have adequate transmission infrastructure to serve our customers' needs. Our transmission planning process is intended to achieve the following objectives:

- Maintain reliable electric service;
- Improve the efficiency of electric system operations, including the provision of open and non-discriminatory access to our transmission facilities pursuant to Federal Energy Regulatory Commission ("FERC") requirements;
- Identify and promote new investments in transmission infrastructure in a coordinated, open, transparent, and participatory manner; and
- Involve stakeholders during the transmission planning process and review alternatives.

The planning process is coordinated with all the other transmission providers in the state to avoid duplication and reduce costs to the end use customer.

The Company's joint planning efforts began even before the adoption of Rule 3627. For example, in concert with the Colorado Coordinated Planning Group ("CCPG"), in 2008, Public Service developed and implemented our own stakeholder outreach process, in which we actively sought the participation of regulatory agencies, local, municipal and county governments, wind and solar developers, and

interested participants from the general public. The goal was to provide stakeholders with the opportunity to participate in, and provide comments on, the transmission planning process.

Towards the end of 2009, CCPG created a dedicated subcommittee, called the SB 07-100 Work Group that was integrated into the CCPG Charter. In 2013, the SB 07-100 Work Group was folded into a work group called the Long Range Planning Group ("LRPG"), which performs coordinated transmission planning in the 10-year horizon.

Stakeholders from the CCPG footprint were invited to participate in the SB 07-100 planning through the LRPG activities as well. The LRPG continues to meet on a regular basis. CCPG meetings are typically held in the Denver area at least four times a year, with LRPG work group meetings and conference calls held throughout At each of these CCPG and LRPG meetings, there is additional the year. opportunity for stakeholders to give input into the Public Service planning process. We update all stakeholders on the status of all transmission plans, including those related to SB 07-100, answer questions and solicit comments and input.³ Stakeholders in attendance have included representatives of neighboring utilities; wind, solar and other generation developers; state, municipal, and county regulatory bodies; environmental groups; land-owners, and other parties interested in our transmission plans. We have posted all of the materials, presentations, summaries list stakeholders comments. and of on public website at http://www.westconnect.com.

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³ The minutes of the CCPG meetings are recorded and posted on the WestConnect Sub Regional Planning Group web site at http://www.westconnect.com.

Membership in CCPG and its subcommittees is open, and a party may join by completing an application. The CCPG provides the technical forum to complete reliability assessments, develop joint business opportunities, and accomplish coordinated planning, under the single-system planning concept in the Rocky Mountain Region of WECC, the coordinating council for the entire Western Interconnection.

CCPG is one of three Subregional Planning Groups included in the WestConnect Planning Group and the efforts of CCPG roll up into the WestConnect subregional planning process. WestConnect is composed of utility companies providing the transmission of electricity in the western United States.⁴ The members of WestConnect collaboratively work to assess stakeholder and market needs and to develop cost-effective enhancements to the western wholesale electricity market. WestConnect is committed to coordinating its work with other regional efforts to achieve as much consistency as possible in the Western Interconnection. The WestConnect footprint covers Colorado, Arizona, andNevada, as well as parts of New Mexico, Texas, Wyoming, and California. WestConnect's transmission planning process complies with the nine principles for transmission planning mandated by FERC in Order No. 890. In addition to conducting meetings to address SB 07-100 planning as described above, Public Service conducts biannual meetings pursuant to Order No. 890, which FERC requires be open and transparent. These meetings inform the SB 07-100 process and include a discussion of FERC Order

⁴ Members of WestConnect are Arizona Public Service, El Paso Electric, Imperial Irrigation District, NV Energy, Xcel Energy/Public Service, Public Service Company of New Mexico, Sacramento Municipal Utility District, Salt River Project, Southwest Transmission Cooperative, Transmission Agency of Northern California, Tri-State Generation and Transmission, Tucson Electric, Los Angeles Division of Water and Power, and Western Area Power Administration.

1000 and Commission Rule 3627. Normally these stakeholder meetings are held in early March and December of each year. The information distributed at those meetings is posted at:

http://www.oatioasis.com/psco/index.html

D. Program Accomplishments to Date

We began filing SB 07-100 reports in October 2007. We filed an informational report in 2008, and we filed subsequent reports in 2009, 2011, and 2013. During that time, we developed plans for nine transmission projects to expand transmission capability for the delivery of beneficial energy resources from ERZs. These projects are listed in Table 1 (projects that have either been completed, or are to start within the next five years) and Table 2 (projects planned on a conceptual basis).

We have successfully completed the first four SB 07-100 projects listed in Table 1. Completion of these projects has enabled us to interconnect 650 MW of wind at the two Missile Site substations, and will accommodate an additional 200 MW of wind which was approved in the Company's 2011 Electric Resource Plan, which has been approved by the Commission. The tables below list the name of the project, the ERZ that the project would serve, and a tentative schedule for implementation. The status of these projects is described in more detail in Section IV.

 Table 1
 Implemented or Planned Transmission Projects

	Project	Zone	Status	
1	Missile Site 230 kV Switching Station	2	No CPCN was required ⁵ . Project placed in service November 2010.	
2	Midway-Waterton 345 kV Transmission Project	3,4,5	CPCN granted on 7/16/2009. Project placed in service May 2011.	
3	Pawnee-Smoky Hill 345 kV Transmission Project	1,2	CPCN granted on 2/29/2009. Project placed in service June 2013.	
4	Missile Site 345 kV Substation	2	CPCN granted on June 8, 2010. Project placed in service December 2012.	
5	Pawnee – Daniels Park 345 kV	1,2	CPCN granted on April 9, 2015.	

 Table 2
 Conceptual Transmission Projects

	Project	Zone		Approximate Status
				Claude
6	Lamar – Front Range 345 kV	2,3	TBD	Studies complete. No plans for full build out at this time. Certain segments may be implemented in a phased approach.
7	Lamar – Vilas 230 kV	3	TBD	(See Lamar – Front Range)
8	Weld County Expansion (formerly TOT 7 Expansion Plan)	1	TBD	Technical studies ongoing
9	San Luis Valley Transmission Plan	4	TBD	Technical studies ongoing

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⁵ Commission Rule dated July 8, 2008, Decision No. C08-0676.

III. ENERGY RESOURCE ZONES

Section 40-2-126 (1), C.R.S., defines an ERZ as "a geographic area in which transmission constraints hinder the delivery of electricity to Colorado consumers, the development of new electric generation facilities to serve Colorado consumers, or both." In creating and defining ERZs for the 2007 and 2009 Reports, Public Service used multiple sources of information and public feedback. The end result of this effort was the adoption of five ERZs. Our 2009 Report modified the Zones as identified in our 2007 Report. The five Zones are as follows, and are unchanged since our 2009 Report.

Zone 1: In Northeast Colorado, Zone 1 includes all or parts of Sedgwick, Phillips, Yuma, Washington, Logan, Morgan, Weld, and Larimer Counties.

Zone 2: Zone 2 is in East Central Colorado, and includes all or parts of Yuma, Washington, Adams, Arapahoe, Elbert, El Paso, Lincoln, Kit Carson, Kiowa, and Cheyenne Counties.

Zone 3: Zone 3 is in Southeast Colorado, and includes all of parts of Baca, Prowers, Kiowa, Crowley, Otero, Bent, and Las Animas Counties.

Zone 4: Zone 4 is in the San Luis Valley, and includes all or parts of Costilla, Conejos, Rio Grande, Alamosa, and Saguache Counties.

Zone 5: Zone 5 is in South-Central Colorado, and includes all or parts of Huerfano, Pueblo, Otero, Crowley, Custer, and Las Animas Counties.

The following map, labeled Figure 2, illustrates the five Zones overlaid upon the wind and solar Generation Development Areas ("GDAs") that were identified in the SB 07-091 Task Force Report.

Zone 1 Zone 2 Zone 5 Zone 3 Zone 4

Figure 2 Energy Resource Zones with GDAs

IV. 2015 TRANSMISSION PROJECT STATUS

A. Overview

Through coordinated planning studies, and in consultation with stakeholders, Public Service identified transmission expansion plans that will increase transfer capability in or around all five of the ERZs. The SB 07-100 transmission plans to date have been focused first on upgrading the primary delivery system (core, or backbone) of our transmission network, rather than building individual lines into each of the GDAs.

The Company is presenting plans for each of the Zones. However, a great deal of judgment must still be exercised to determine how, when, and whether to implement a particular plan. A number of factors enter into the decision to go forward with a transmission project, including:

- Load forecasts;
- Generation resource availability;
- Our resource plans;
- Community and local government concerns;
- Cost and capital funding requirements;
- Comparison with alternative resources;
- Regulatory approvals;
- Neighboring utility participation;
- Current and emerging FERC requirements.

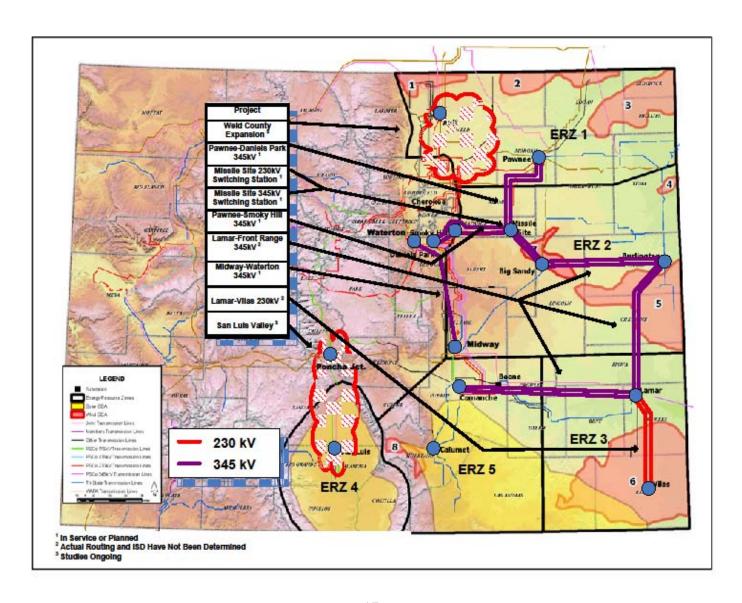
Larger projects also tend to have longer development timelines and greater community impacts. Accordingly, the time necessary for studying and evaluating the merits of larger projects, including the solicitation and consideration of stakeholder

outreach, will typically be longer. As with many major transmission projects, planning studies play a large role in scoping a project. In order to assess the viability of a transmission plan, numerous studies must be conducted concerning the feasibility, impact, and reliability of that plan. Once studies are complete the Company assesses the plan from economic, strategic, and policy perspectives to determine whether to pursue a CPCN for a specific project.

As a result of increased joint coordinated planning, opportunities have arisen for us to partner with other utilities in pursuing some transmission plans. There can be advantages to jointly participating in large transmission projects, including enhanced planning and design, avoidance of duplicative facilities and reduced costs to customers. We believe that realizing these advantages through joint projects is consistent with an underlying intent of the Commission in adopting Rule 3627. However, project schedules for implementation of joint projects also tend to increase due to the extra coordination that is required.

The remainder of this section is divided into two parts. In the first section, we will describe the status of "planned" projects as listed in Table 1. In the second section, we discuss potential or "conceptual" projects that are still under development and will require CPCN approvals, as listed in Table 2. Figure 3 provides a map and locations of the projects listed in Tables 1 and 2 and both the planned and conceptual projects are described in Sections B and C.

Figure 3 Senate Bill 07-100 Transmission Project Map



B. Projects That Have Been Completed or Planned

Missile Site 230 kV Switching Station (Zone 2)

Description: The Missile Site 230 kV Switching Station Project consisted of a new switching station near Deer Trail, Colorado that connects the existing Pawnee – Daniels Park 230 kV transmission line into and out of the Missile Site 230 kV Switching Station. The project has allowed interconnection of new generation in Zone 2.

Status: The Missile Site 230 kV Switching Station was placed in service in November 2010. Public Service has also interconnected 252 MW of wind from Cedar Point LLC in 2011 at the Missile Site Switching 230 kV Station.

Missile Site 345 kV Switching Station (Zone 2)

Description: The Missile Site 345 kV Substation expanded the Missile Site 230 kV Switching Station to allow additional generation and transmission interconnections at the 345 kV voltage level. The Substation bisects the Pawnee – Smoky Hill 345 kV Transmission Project. The Missile Site 345 kV Substation allows additional generation from Zone 2. In addition to connecting the Pawnee – Smoky Hill 345 kV line, the Substation also allows for future 345 kV transmission connections. These will include connections to a Pawnee – Daniels Park 345 kV Project and may include connections to high voltage transmission plans to the south, such as to the Lamar – Front Range Project.

Status: A petition for a declaratory order was submitted to the Commission on April 16, 2010 (Proceeding No. 10A-240E) in which we requested a CPCN. On June 8,

2010, the Commission issued Decision No. C10-0552 granting a CPCN for this project. The Missile Site 345 kV Substation was placed in service in December 2012.

Generation Interconnected: In 2012, we interconnected 400 MW of wind with a 45 mile 345 kV at Missile Site (Limon I and II). In 2014, an additional 200 MW of wind generation was interconnected.

Midway - Waterton 345 kV Transmission Project (Zones 3, 4, and 5)

Description: The project consisted of 82 miles of 345 kV transmission line from the Midway Substation, near Colorado Springs, to the Waterton Substation, southwest of Denver. Seventy-two miles of the existing line consisted of converting an existing 230 kV line between Midway and Daniels Park to 345 kV. The remaining 10 miles between Daniels Park and Waterton consisted of rebuilding an existing single-circuit line to double-circuit transmission. The Midway – Waterton 345 kV project accommodates additional generation resources in Zones 3, 4, and 5.

Status: We filed an application for a CPCN for this project on May 1, 2007. The Commission granted the CPCN in Decision No. C07-0750, issued on September 4, 2007. We filed a petition for a declaratory ruling that the project was still needed in 2009. On July 16, 2009, in Decision No. C09-0775, the Commission reaffirmed its grant of a CPCN in Decision No. C09-0775, issued on July 16, 2009. The Midway – Waterton 345 kV Transmission Project was placed in service in May 2011.

Pawnee – Smoky Hill 345 kV Transmission Project (Zones 1 and 2)

Description: This project consisted of developing approximately 95 miles of 345 kV transmission line between the Pawnee Substation near Brush, Colorado, and the Smoky Hill Substation, east of Denver. The project allows additional resources in Zones 1 and 2, interconnected at or near the Pawnee and Missile Site Substations. The Missile Site 345 kV Substation bisects the Pawnee – Smoky Hill 345 kV Project. The project has been designed to be easily expanded to facilitate construction of the planned Pawnee – Daniels Park 345 kV Project. Over half of the project is being built using double-circuit 345 KV construction to allow for stringing the conductors that would be used for the Pawnee – Daniels Park project in the future.

Status: An application for a CPCN was presented to the Commission for this project in October 2007. On February 26, 2009, in Decision No. C09-0048, the Commission granted the CPCN. This project was placed in service in June 2013. On August 29, 2011, in Decision No. C11-0928, the Commission agreed that it would be prudent for Public Service to string the 50 miles of the second circuit of the double-circuit transmission between Pawnee and Missile Site. This is the first section of the Pawnee – Daniels Park 345 kV Project.

Pawnee - Daniels Park 345 kV (Zones 1 and 2)

Description: The Pawnee – Daniels Park 345 kV Transmission Project consists of building 345 kV transmission lines from the Pawnee Substation in northeastern Colorado to the Daniels Park Substation, south of the Denver-metro area. The project will also result in a new Smoky Hill – Daniels Park 345 kV line. The project will also

interconnect with the Missile Site 345 kV Substation. This project will accommodate additional generation in Zones 1 and 2. The project consists of approximately 115 miles of 345 kV transmission line between Pawnee Station and the Daniels Park Substation south of Denver. The first 95 miles of the project would expand the planned Pawnee – Smoky Hill 345 kV Transmission Project, so that between Pawnee and Smoky Hill Substations, there would be double-circuit 345kV transmission. One of the circuits would be the Pawnee – Smoky Hill 345 kV line, and the second would be one section of the Pawnee – Daniels Park 345 kV line. For the remaining 29 miles between Smoky Hill and Daniels Park Substations, new double-circuit 345 kV transmission line would be constructed. Of the two circuits, one would be the second portion of the Pawnee – Daniels Park 345 kV line. The second circuit would be a new 345 kV transmission line between Smoky Hill Substation and Daniels Park Substations. The Project also consists of a new Harvest Mile Substation, which expands the existing Smoky Hill Substation.

Status: An application for a CPCN was presented to the Commission for this project in May 2014. On April 9, 2015, in Decision No. C15-0316, the Commission granted the CPCN. In its CPCN application, Public Service proposed an in-service date of 2019. However, a condition of Decision No. C15-0316 was that construction on the Project not begin until May 1, 2020. As a result, the anticipated in-service date is 2023.

⁶ On August 29, 2011 in Decision No. C11-0928, the Commission approved a Rule 3206 project to construct a 345 kV capable single-circuit transmission line between Pawnee and Missile Site Substations. The line will be constructed on an open position of the transmission structures that were approved by the Commission for construction in the Pawnee - Smoky Hill Transmission Project in Proceeding No. 07A-421E in Decision C09-0048.

C. Conceptual Projects

The projected in-service dates of these conceptual projects identified in Table 2 above can be affected by CPCN approval, revisions to load forecasts, resource plans, siting and land permitting, coordination of construction outages, and material delivery times. Because all of these projects are presently in the conceptual stage, assessments will continue on whether the stated factors will cause any modifications to these projects, in terms of configuration, timing, or otherwise.

<u>Lamar – Front Range 345 kV (Zones 2 and 3)</u>

Description: The Lamar – Front Range Study Group of the CCPG, which was formed in 2010, has considered additional transmission capability in southeastern Colorado, and has developed a new transmission plan for a general project area for at least fourteen Colorado counties including Adams, Arapahoe, Baca, Bent, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Otero, Prowers, Pueblo, and Washington. The LFR study group evaluated numerous transmission alternatives, and determined that approximately 400 miles of new 345 kV, double-circuit transmission could deliver an estimated 2000 MW of new generation from energy resources near Lamar and Burlington to load centers along the Front Range. The current plan includes the following transmission components:

- Two 345 kV transmission circuits between Lamar and Avondale;
- Two 345 kV transmission circuits between Lamar and Burlington;
- Two 345 kV transmission circuits between Burlington and Big Sandy;
- One 345 kV transmission line between Big Sandy and Missile Site;

- One 345 kV transmission line between Big Sandy and Story;
- One 345 kV transmission line between Story and Pawnee;
- A new Avondale Substation; and
- Two 230 kV transmission circuits between Lamar and Vilas.

The proposed transmission interconnection and termination points were selected based on their proximity to the location of potential generation resource development, including renewable resources, or their ability to deliver such resources to serve some of the state's largest load centers. The Lamar-Front Range project, as presently envisioned, is estimated to cost approximately \$900 million.

Status: The planning studies have been completed and project study reports are available. However, no decisions have been made with respect to implementation. Both Tri-State and Public Service continue to evaluate what strategies are most appropriate for moving forward.

<u>Lamar – Vilas 230/345 kV (Zone 3)</u>

Description: The Lamar – Vilas project was evaluated as part of the Lamar – Front Range Plan. The Lamar – Vilas portion was planned to consist of approximately 60 miles of high-voltage transmission from the existing Lamar Substation to the existing Vilas Substation. The project would provide access to additional resources in Zone 3, and could provide an opportunity for development of renewable energy facilities in Baca County. The project could not accommodate any new generation unless the Lamar – Front Range Transmission Project was also in place.

Status: This project is dependent upon the Lamar – Front Range project, the Lamar – Vilas has the same status as that project.

Weld County Expansion (formerly TOT 7 Expansion) (Zone 1)

Background: Early SB 07-100 reports described an Ault – Cherokee Project to accommodate additional generation resources in Zone 1 for delivery to customers along the Front Range. However, plans for that project changed based on several factors. Public Service recognized the potential for the project to help meet reliability and load growth north of the Denver-metro area, particularly in the Weld County area. Other transmission entities have expressed interest in participating in the project to explore the potential to meet their own reliability and resource needs. Also, since the project could impact a critical transmission path known as TOT 7, or WECC Path 40, the parties recognized the potential for any transmission plans to have a regional impact. The 2013 SB 07-100 Report described this planning effort as the TOT 7 Transmission Expansion.

Status: Since the last SB 07-100 filing, there has been a significant increase in the demand for electricity in northeast Colorado due to the oil and gas development. Tri-State is implementing the Southwest Weld Expansion Project ("SWEP"), which initiates transmission development in the region. Both 115 kV and 230 kV transmission are planned to begin near Ft. Lupton, Colorado, travel east towards Hudson, then head north, and ultimately connect to existing transmission a few miles south of Kersey. Tri-State received a CPCN for the project from the Commission in 2014. Much of the

SWEP transmission is planned to be constructed as double-circuit with 230 kV capability with one circuit initially energized at 115 kV.

Public Service desires to participate in SWEP to serve its own identified and forecasted load growth. The Company views participation in SWEP as the first phase of a long-term transmission plan for northeast Colorado that will not only enable new customer load interconnections, but will also facilitate local reliability improvements in the Greeley area.

Recently, the CCPG formed a Northeast Colorado ("NECO") Subcommittee to evaluate the northeast region of the state and develop a comprehensive transmission plan. As with all CCPG groups, the NECO Subcommittee is open to stakeholder participation. Studies are ongoing. Participants and stakeholders will have the opportunity to provide input into the NECO transmission plan with the goal of recommending a discreet transmission project that can serve a variety of needs. Once a project has been recommended, Public Service will inform the Commission and develop a plan for implementation.

San Luis Valley (Zones 4 and 5)

Background: The Company previously proposed the San Luis Valley – Calumet – Comanche Transmission Project, which was designed to accommodate potential generation from Zones 4 and 5 for delivery to customers along the Front Range, in addition to improving the transmission system in the San Luis Valley area of Colorado. The project consisted of implementing high voltage transmission between the San Luis Valley Substation in south-central Colorado to a new Calumet Substation near

Walsenburg, and continuing on to the existing Comanche Station, outside of Pueblo.

The Commission granted a CPCN in Decision No. C11-0288 in consolidated Docket

Nos. 09A-324E and 09A-325E. However, as explained in the 2013 Public Service Rule

3206 Report, the Company is no longer pursuing the construction of this project.

Status: In the summer of 2014, the CCPG formed the San Luis Valley

Subcommittee ("SLV Subcommittee") to evaluate transmission options for the San Luis

Valley. The SLV Subcommittee is co-chaired by representatives from Public Service

and Tri-State. The objective of the SLV Subcommittee is to develop a transmission plan

for the region that will address system reliability, export capability, and aging

infrastructure. Several alternatives have been studied, including replacing existing

transmission with higher voltage lines, and adding new transmission. The studies are

ongoing, and have been divided into two phases. The first phase is focused on system

reliability, and the second phase will focus on export capability. The first phase of

studies is planned to be completed by the end of 2015 and the second phase will begin

shortly thereafter. Participants and stakeholders will have the opportunity to provide

input into the SLV transmission plan, with the goal of recommending a discreet

transmission project that can serve a variety of needs. Once a project has been

recommended, Public Service will inform the Commission and develop a plan for

implementation.

Dated this 30th day of October, 2015.

Respectfully submitted,

By: /s/Scott Brockett_

Scott B. Brockett, Director

Regulatory Administration

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