



IN THE MATTER OF THE  
APPLICATION OF PUBLIC SERVICE  
COMPANY OF COLORADO FOR A  
CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY  
FOR THE SAN LUIS VALLEY –  
CALUMET – COMANCHE  
TRANSMISSION PROJECT

DOCKET NO: 09A-325E

DIRECT TESTIMONY AND  
EXHIBITS

May 14, 2009

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO**

**IN THE MATTER OF THE APPLICATION OF     )  
PUBLIC SERVICE COMPANY OF                )  
COLORADO FOR A CERTIFICATE OF            )  
PUBLIC CONVENIENCE AND NECESSITY        ) DOCKET NO. 09A-\_\_\_\_E  
FOR THE SAN LUIS VALLEY TO CALUMET     )  
TO COMANCHE TRANSMISSION PROJECT     )**

**VERIFIED APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO  
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
WITH SPECIFIC FINDINGS WITH RESPECT TO ELECTROMAGNETIC  
FIELDS AND NOISE, AND FOR APPROVAL OF OWNERSHIP INTEREST  
TRANSFER AS NEEDED WHEN PROJECT IS COMPLETED**

Pursuant to §§ 40-2-126, 40-5-101 and 40-5-105, C.R.S., and Rules 3002(a)(III) and (V) and 3102 and 3104 of the Commission’s Rules Regulating Electric Utilities, 4 CCR 723-3, Public Service Company of Colorado (“Public Service” or the “Company”), hereby respectfully requests a certificate of public convenience and necessity (“CPCN”) authorizing it to construct the San Luis Valley to Calumet to Comanche Transmission Project (“San Luis Valley – Calumet – Comanche Transmission Project” or the “Project”).

The Company seeks authority to establish the Project in order to meet Colorado’s Renewable Energy Standard (§ 40-2-124, C.R.S.), to alleviate a transmission constraint, and accommodate expected new generation that will interconnect with the Company’s transmission system near the Comanche Substation. The Project meets the Senate Bill 07-100 (“SB07-100”) criteria to alleviate transmission constraints to Energy Resource Zones (“ERZs”) 4 and 5, and it will allow generation resource additions to meet Public Service’s resource needs.

This is the second CPCN application made pursuant to SB07-100, codified at § 40-2-126, C.R.S. As such, the Company is requesting that the Commission follow the procedures set forth in SB07-100.

Additional transmission capacity is required to import significant levels of solar and wind generation from south-central and southeastern Colorado to the Front Range load centers. ERZ 4 is located in the San Luis Valley, and ERZ 5 is in South-Central Colorado. Public Service has described these ERZs in its most recent SB07-100 report, which it filed with the Commission on November 24, 2008 in Docket No. 08M-821E. Public Service has identified ERZ 4 as having significant solar development potential. Developers also have expressed interest in the Wind Generation Development Area 8 (located between ERZs 4 and 5), and additional quality wind and solar prospects exist throughout the new Zone 5.

There are four major components of the San Luis Valley to Calumet to Comanche Transmission Project: (1) the San Luis – Calumet Transmission Segment; (2) the Calumet – Comanche Transmission Segment; (3) the Calumet Substation; and (4) the Calumet – Walsenburg Transmission Segment. In general, the Project involves construction of three new transmission line Segments, each from an existing substation to a new Calumet Substation, which is located north of the Walsenburg Substation.

The first transmission line Segment will be a new double-circuit 230 kV line extending approximately 95 miles from the San Luis Valley Substation to the new Calumet Substation, and using a single 1272 MCM ACSR conductor per phase.

This is the San Luis – Calumet Transmission Segment. Each transmission circuit in this Segment will have a thermal capability of carrying at least 600 MVA.

The second transmission line Segment will be a double-circuit 345 kV line extending approximately 45 miles from the new Calumet Substation to Public Service's Comanche Substation, and using two 1272 MCM ACSR conductors per phase. This is the Calumet – Comanche Transmission Segment. Each line or circuit in this Segment will have a thermal capability of carrying at least 1700 MVA.

A third major component of the project is the new Calumet Substation, which is planned to be located approximately six miles north of Walsenburg, Colorado and the existing Walsenburg Substation. Original transmission plans contemplated building new transmission from the existing San Luis Valley Substation to the existing Walsenburg Substation. However, due to space limitations at Walsenburg Substation, a new substation will be required. The Calumet Substation will be located approximately six miles north of the Walsenburg Substation. It will be located adjacent to, and also interconnect with the existing Walsenburg – Comanche 230 kV line. The substation will allow for 230 kV and 345 kV operation by including two 230/345 kV autotransformers, and transmission line termination equipment. The substation will be constructed so that it can accommodate potential generation interconnections.

The fourth transmission line Segment will be a new single-circuit 230 kV line installed on double-circuit structures between the new Calumet Substation and the existing Walsenburg Substation. This is the Calumet – Walsenburg Transmission Segment. As with the 230 kV San Luis Valley - Calumet Transmission Segment,

this Segment will use a single 1272 MCM ACSR conductor per phase. This also matches the conductor size of the existing Tri-State 230 kV Comanche - Walsenburg line that will be sectionalized at Calumet Substation as part of this project. Since the new Calumet Substation will interconnect the existing Walsenburg – Comanche 230 kV line, it will create a Walsenburg – Calumet 230 kV line and a Calumet – Comanche 230 kV line. There is an existing 115 kV line that runs parallel to the Walsenburg – Calumet 230 kV line (the Walsenburg – West Station 115 kV line). Between Calumet and Walsenburg, that line will be rebuilt to a double-circuit 230 kV capable transmission line. One of the circuits will consist of the existing 115 kV line. The other circuit will create a second 230 kV circuit from Calumet to Walsenburg.

The Project is a joint effort between Public Service and Tri-State Generation and Transmission Association, Inc. (“Tri-State”), and each will have individual ownership rights in and responsibilities for the four different components of the Project. Pursuant to a Memorandum of Understanding (“MOU”) between the two parties, Public Service will have 60% of the capacity rights in the new San Luis Valley to Calumet line, and Tri-State will have 40% of the capacity rights. Therefore, Public Service will pay 60% of the costs and have 60% ownership of this Segment while Tri-State will pay 40% of the costs and have 40% of the ownership. However, because Tri-State has done considerable siting and environmental work it will take the lead in developing the San Luis Valley – Calumet Transmission Segment of the overall Project, Tri-State will be responsible for the design and engineering work, will supervise construction, will take the lead in acquiring permits and land rights as well as siting the line, and it will ultimately operate and maintain this Segment. Public

Service and Tri-State will have the same 60/40 capacity and cost split in the Calumet to Comanche portion of the Project; however, Public Service will take the lead with respect to engineering and design, land rights, and ongoing maintenance costs. Likewise, Public Service and Tri-State will have a 60/40 capacity and cost split in the new Calumet Substation, including two 230/345 kV autotransformers. Public Service will be responsible for 345 kV substation operations related to the 345 kV Calumet to Comanche line, whereas Tri-State will operate the 230 kV part of the substation including the San Luis to Calumet line. As the new Calumet Substation will be sited on property already owned by Tri-State, Tri-State will be principally responsible for the design and engineering, construction, and maintenance of the Substation. Finally, Tri-State will have an 80% share of the capacity in the Calumet – Walsenburg Transmission Segment of the Project while Public Service will have 20%. With this larger share, Tri-State will accordingly be principally responsible for the design and engineering, construction, and maintenance of this Segment of the Project.

The ownership rights and responsibilities will be set forth in definitive project agreements that have yet to be negotiated. Public Service and Tri-State believed it premature to expend the considerable effort and associated expense to negotiate those agreements prior to obtaining the necessary CPCNs for the Project.

Although the San Luis Valley - Calumet - Comanche Transmission Project is a joint project, Public Service and Tri-State have agreed to file separate CPCN applications for approval to construct, own, and operate the Project, primarily because the San Luis – Calumet Transmission Segment is at a further stage of

development due to Tri-State's prior efforts. While Public Service and Tri-State are not filing a joint CPCN application, the companies do anticipate exploring with the Commission the merits of consolidating the two applications in the event the Commission deems an evidentiary hearing necessary. Further, while each entity's ownership and operation interests vary by Segment of the Project, each company requests CPCN rights for the entire undivided Project. To the extent necessary or convenient to the Commission, Public Service and Tri-State have both assented to Commission consideration of the applications (and hearings, if necessary) simultaneously in a joint manner to provide for coordinated and common rulings regarding the CPCN filings.

As part of the Commission's order determining CPCN rights, pursuant to § 40-5-105, C.R.S., and Commission Rule 3104 of the Rules Regulating Electric Utilities, Public Service also requests that the Commission authorize transfer of ownership interests in components of the Project as necessary to achieve the ownership shares of the different components of the Project contemplated by the MOU. Because Tri-State and the Company have not worked out the definitive agreements, the mechanisms for achieving the joint ownership of facilities have not yet been established. It is possible that it may be necessary for Public Service to transfer an ownership interest in facilities that are part of the Project to achieve the contemplated ownership arrangements. It is not in the public interest to require a later filing for approval of ownership interests in components of the Project, as this would require the expenditure of additional time and resources for parties and the Commission for no beneficial reason. For these reasons, Public Service requests

that the Commission approve in its order any future transfer of ownership or other interests in the Project from Public Service to Tri-State (and vice-versa) to achieve the ownership structure contemplated in the MOU.

For the reasons expressed in this Application and attached testimonies, Public Service further requests that in granting the CPCN, the Commission make specific findings with respect to the reasonableness of the projected Electromagnetic Fields (“EMF”) and the reasonableness of the projected noise levels that the Company estimates will result from operation of the San Luis Valley – Calumet – Comanche Transmission Project.

#### **DIRECT TESTIMONY AND EXHIBITS**

Public Service is submitting, with this Application, testimony and exhibits from the following witnesses:

- Gerry Stellern, Manager of Transmission Asset Management for Public Service, describes the San Luis Valley to Calumet to Comanche Transmission Project in detail, explains the need for the Project, and explains why the Company is seeking specific findings regarding projected EMF and noise.
- Joe Taylor, Manager, Transmission Access for Xcel Energy Services Inc., discusses the San Luis Valley – Calumet – Comanche Transmission Project as it relates to SB07-100, which encourages utilities to invest in transmission facilities to serve expected electric generation resources. Mr. Taylor describes the affected Energy Resource Zones that the Company has designated as part of the

transmission plan it previously filed under C.R.S. § 40-2-126. He also presents testimony addressing how the Project aligns with Public Service's 2007 Resource Plan.

- Thomas Green, Transmission Planning Engineer of Transmission Asset Management for Public Service, describes the San Luis Valley - Calumet - Comanche Transmission Project in detail, explains the need for the Project, discusses the criteria used to evaluate system alternatives, and presents the analyses and evaluation of the system alternatives considered.
- Danny Pearson, Principal Transmission Design Engineer with Xcel Energy Services Inc., describes the construction techniques that will be used for the 45 mile double-circuit 345 kV line described above. Mr. Pearson also discusses the prudent avoidance measures that the Company proposes to mitigate projected EMF and presents analysis of the projected noise impacts of the 45 mile Calumet – Comanche Transmission Segment and the prudent measures the Company proposes to minimize noise levels. In addition, Mr. Pearson explains the proposed configuration of the 45 mile Segment.
- Rick Thompson, Supervisor, Siting and Permitting with Public Service, describes the processes that the Company will employ to obtain the land rights and local permits necessary to construct the 45 mile Calumet – Comanche Transmission Segment described above.

In addition, Public Service is also relying on the testimony and exhibits of Tri-State's witnesses, which has been submitted concurrently by Tri-State in support of its request for a CPCN relating to the Project:

- Joel Bladow, Tri-State's Senior Vice President for Transmission describes Tri-State and its operations, the purpose of and need for the Project, Tri-State's cooperation with Public Service in connection with the Project, Project timing, and Tri-State's estimated costs.
- Stephen Mundorff, Tri-State's Senior Manager for Transmission Engineering, describes in detail the technical aspects of the Project, including the general design of the San Luis Valley – Calumet 230 kV and the Calumet – Walsenburg 115/230 kV Segments of the Project, the materials and techniques that Tri-State will use in construction, and the Project schedule and estimated costs.
- Mark Murray, Tri-State's Permitting and Land Rights Manager, describes the siting, permitting, and land rights status for the San Luis Valley – Calumet and Calumet – Walsenburg 230 kV Segments of the Project.
- Dr. Robert Pearson, a consultant retained by Tri-State to provide analysis concerning EMF and noise issues, addresses the prudent avoidance techniques that will be employed to minimize EMF levels associated with the Project's San Luis Valley – Calumet and Calumet – Walsenburg Transmission line Segments and the techniques that will be used to mitigate audible noise from these Segments.

- Andrew Leoni, Tri-State's Senior Manager, Power System Planning, discusses the purpose and need for the Project. He also describes the components of the Project and how the Project addresses two of Tri-State's previously planned reliability and load serving projects. Mr. Leoni also describes the system studies that have been performed and the evaluation of system alternatives.

**INFORMATION REQUIRED BY RULE 3002(b) AND (c)**

1. **Name and Address of Applicant.** The Applicant is Public Service Company of Colorado. Public Service's principal office is located at 1225 Seventeenth Street, Suite 1000, Denver, Colorado 80202. Public Service is a Colorado corporation.

2. **Name Under Which Applicant will Provide Service in Colorado.** All operations conducted by Public Service under the CPCN sought by this Application shall be conducted under the name of Public Service Company of Colorado.

3. **Representatives to Whom Inquiries Concerning the Application Should be Made.** Copies of all notices, other correspondence, and all inquiries concerning this Application should be sent to:

Karen Hyde  
Vice President, Rates & Regulatory Affairs  
Xcel Energy Services Inc.  
1225 Seventeenth Street  
Suite 1000  
Denver, Colorado 80202  
Telephone: (303) 294-2180  
[Karen.t.hyde@xcelenergy.com](mailto:Karen.t.hyde@xcelenergy.com)

William M. Dudley  
Assistant General Counsel  
Xcel Energy Services Inc.

1225 17<sup>th</sup> Street, Suite 900  
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Gregory E. Sopkin, #20997  
Squire, Sanders & Dempsey L.L.P.  
1600 Stout Street, Suite 1550  
Denver, Colorado 80202-3160  
Telephone: (303) 623-1263  
E-mail: [gsopkin@ssd.com](mailto:gsopkin@ssd.com)

4. **Agreement to Comply with 4 CCR 723-3002(b)(IV)-(VI).** Public Service has read, and agrees to abide by, the provisions of 4 CCR 723-3002(b)(IV)-(VI), 4002(b)(IV-VI), 8002(b)(IV)-(VI).

5. **Description of Existing Operations and General Colorado Service Area.** Public Service provides electric and gas public utility service in numerous areas throughout the State of Colorado. The Company also provides steam utility service within the downtown area of Denver. A full listing of Public Service's existing operations and service area is set forth in Public Service's tariffs on file with the Commission.

6. **Location of Hearing.** If a hearing is held on this Application, Public Service prefers that the hearing be held at the Commission's offices in Denver, Colorado.

7. **Acknowledgment.** Public Service has read and agrees to abide by the provisions of 4 CCR 723-3002(b)(XI)(A)-(C), 4002(b)(XI)(A)-(C), and 8002(b)(XI)(A)-(C).

8. **Statement Under Oath.** An affidavit signed by an agent of the Company verifying that the contents of the Application are true, accurate, and

correct is attached hereto as Exhibit 1. Exhibit 1 contains the name, title, and the complete address of the affiant, as required by Commission rules.

9. **Information Required by Rule 3002(b)(IX) and (c).** Public Service hereby incorporates by reference the following information, which is on file with the Commission in Docket No. 06M-525EG:

a. A copy of Public Service's Amended Articles of Incorporation, which was last filed on October 3, 2006;

b. The name, business address and title of each of Public Service's officers and directors, which was last filed on September 9, 2008;

c. The names and addresses of affiliated companies that conduct business with Public Service, which was last filed on September 4, 2008;

d. The name and address of Public Service's agent for service of process, which was last filed on October 3, 2006;

e. A copy of Public Service's most recent audited balance sheet, income statement, and statement of retained earnings was last filed on June 20, 2008.

**INFORMATION REQUIRED BY RULES 3102 and 3104**

1. **Facts Relied Upon to Show the Public Convenience and Necessity Require Granting this Application.**

The San Luis Valley – Calumet – Comanche Transmission Project is being proposed under the recently enacted SB07-100, codified at § 40-2-126, C.R.S. The Project is a critical component of a comprehensive long-term transmission plan for

relieving transmission constraints that hinder the development of new generation resources in ERZs 4 and 5 in Colorado, particularly renewable resources.

Colorado Revised Statutes § 40-2-126(3) sets forth a new standard for approval of a CPCN 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 designated Energy Resource Zones. The Commission shall approve a CPCN filed pursuant to C.R.S. § 40-2-126(2)(b) if it finds that:

- (a) The construction or expansion is required to ensure the reliable delivery of electricity to Colorado consumers or to enable the utility to meet the renewable energy standards set forth in Section 40-2-124; and
- (b) That the present or future public convenience and necessity require such construction or expansion.

Public Service views these provisions as the Colorado legislature's recognition of the need for transmission planning to move out in front of the development of generation resources in order to ensure successful development of new renewable generation in Colorado. The new legislation affords the Company greater flexibility to seek CPCN approval for transmission projects that must be commenced now to serve expected generation capacity in the future. The San Luis Valley – Calumet – Comanche Transmission Project addresses both Public Service's need to satisfy Section 40-2-124, C.R.S. (the Renewable Energy Standard (RES)) and to reliably deliver electricity associated with existing and additional generation resources in southern Colorado.

Transmission Planning studies demonstrate that the San Luis Valley region is a constraint transmission area. Under N-1 conditions, the Project is critical to maintaining reliable service to the loads in the San Luis Valley. Currently, only two radial transmission lines, a 230 kV line and a 115 kV line, feed the San Luis Valley customer loads. When the 230 kV line is out of service, Public Service and Tri-State cannot serve all the customers in the area. When the 230 kV line is lost, Tri-State will immediately drop service to their customers. With such an event Public Service customers are also at risk, since voltage in the region would drop to unacceptable levels. Electric service can be restored once the line comes back into service or Public Service starts up its gas turbine generation at Alamosa. However, such local generation is very costly and only used in emergency situations such as this.

Compounding the problem, Transmission Asset Management has received numerous generator interconnection requests in the area around San Luis Valley. Many of these requests are for resources that can be built in a short period of time (within 2-3 years), such as solar and wind generation resources. Indeed, as part of meeting the RES obligation, Public Service will be proposing to add solar and wind generation resources to the resource mix over the next few years. However, major transmission projects, such as the one being proposed, can take up to 5 to 6 years to implement. Therefore, it is prudent to recommend proceeding with the San Luis Valley – Calumet – Comanche Transmission Project now, to enable the accommodation of future potential resources.

The project also aligns well with the requirements set forth in SB07-100, and would allow for the development of approximately 1500 MW of new generation

resources, including renewable resources, in ERZs 4 and 5 and Wind Development Area 8 on or after 2013, that will enable Public Service and Colorado regional utilities to meet the RES set forth in § 40-2-124, C.R.S. As noted above, ERZs 4 and 5 are particularly important for solar generation development in Colorado, and Wind Development Area 8 and ERZ 5 also offer significant wind development potential.

Because Tri-State had already been looking to develop a transmission project in the San Luis Valley area, Public Service teamed up with Tri-State in order to realize cost efficiencies for the benefit of its customers. These efficiencies helped make the proposed Project one of high priority, as the timing of Tri-State's needs for the Project coincide nicely with those of Public Service.

Significant transmission projects currently underway make this proposed Project crucial, and upon its completion, it will enhance the reliability of the transmission system while delivering generation resources to Denver-metro area loads.

2. **Description of the Proposed Facilities to Be Constructed.** As noted above, the San Luis Valley - Calumet - Comanche Transmission Project is comprised of four primary components:

1. **The San Luis – Calumet Transmission Segment:** The first transmission component consists of approximately 95 miles of new double-circuit 230 kV transmission between the San Luis Valley Substation and the new Calumet Substation.
2. **The Calumet – Comanche Transmission Segment:** The second transmission component consists of approximately 45 miles of new double-circuit 345 kV transmission between the Calumet Substation and the existing Comanche Substation, near Pueblo Colorado.

3. The Calumet Substation: Another major component of the Project is the new Calumet Substation, which is planned to be located near Walsenburg, Colorado and the existing Walsenburg Substation. The Calumet Substation will be located approximately six miles north of Walsenburg Substation. It will be located adjacent to, and also interconnect with the existing Walsenburg – Comanche 230 kV line.
4. The Calumet – Walsenburg Transmission Segment: The final component consists of a new six-mile 230 kV transmission line that will be added between Calumet Substation and the Walsenburg Substation. Since the new Calumet Substation will interconnect the existing Walsenburg – Comanche 230 kV line, it will create a Walsenburg – Calumet 230 kV line and a Calumet – Comanche 230 kV line.

More details regarding the proposed Project are set forth in the Company's testimony and exhibits that are being filed contemporaneously with this Application.

3. **Project Cost.** The Project is currently estimated to cost approximately \$180 million. Public Service's share of this cost will be approximately \$105 million. The Company's estimate is expressed in 2008 dollars and is a high-level scoping estimate; the Company anticipates that final costs will be within +/- 30% of this estimate. A breakdown of this cost estimate is set forth in the Direct Testimony of Gerry Stellern.

4. **Schedule for Construction.** Public Service has developed a time schedule to construct the Project to have it in-service by May 31, 2013. The detailed time schedule is set forth in the Direct Testimony of Gerry Stellern.

5. **Maps and Electric One-Line Diagrams.** A map showing the location where the facilities will be constructed, including the study area and preliminary alternative corridors, is attached to the Direct Testimony of Rick Thompson as Exhibit No. RLT-1. An electric one-line diagram is part of the Direct Testimony of Gerry Stellern.

6. **Alternatives Studied.** The Transmission Study Report submitted as Exhibit No. TWG-1 to the Direct Testimony of Thomas Green describes Public Service's evaluation of the system alternatives for accommodating the generation in southern Colorado.

7. **Prudent Avoidance of EMF and Mitigation of Audible Noise.** Public Service respectfully requests that in granting the CPCN the Commission make specific findings as to the reasonableness of the noise and EMF levels that the Company projects will result from the operation of the San Luis Valley – Calumet – Comanche Transmission Project. In his Direct Testimony and Exhibits, Public Service witness Mr. Danny Pearson projects the noise and EMF levels for the Calumet – Comanche Transmission Segment that can be expected from the proposed Project design as well as other design alternatives. He discusses the cost-effective techniques the Company proposes to mitigate noise and the prudent avoidance techniques to minimize the levels of EMF associated with this Project. (Dr. Robert L. Pearson, a consultant for Tri-State, provides similar testimony for the San Luis Valley – Calumet and Calumet – Walsenburg Segments of the Project.)

For Public Service's preferred design for the Calumet – Comanche Transmission Segment, Mr. Pearson shows in his Exhibit Nos. DJP–Case 1 and DJP–Case 2 that, when the lines are not wet, the predicted audible noise levels are well below the most stringent limits set for residential zone use. When the lines are saturated with moisture, they will still be below the (50 dB(A)) set for residential zone use, and the audible noise will diminish as the lines dry.

The general character of the Calumet – Comanche Transmission Segment, i.e., the region between Walsenburg and Pueblo, consists primarily of undeveloped open semi-arid prairie rangeland interspersed with small canyons and ravines containing pinyon pine and juniper forested areas. Public Service believes this Segment can be sited to avoid “residentially zoned” areas. Since any residences near these Segments are likely to be located at least 100 feet or more from the edge of the existing right-of-way, and the audible noise level for wet conductors is for relatively short periods of time, Public Service’s preference is for the design with lower magnetic fields. The Company seeks a finding consistent with the Commission’s ruling in Docket No. 05A-072E and Docket No. 07A-156E establishing a reasonableness level of 150 mG EMF for the Project.

Public Service makes this request for specific findings because of two relatively recent legal developments. The first development is a law enacted in 2004 and codified as C.R.S. § 25-12-103(12). This law allows the Commission to determine, when reviewing utility applications for certificates of public convenience and necessity, whether projected noise levels for electric transmission lines are reasonable, notwithstanding the maximum permissible noise levels otherwise established under Colorado law for various “zones.” The General Assembly authorized the Commission to make this determination because, as set forth in the legislative declaration of the statute, “electric transmission facilities are linear and may pass through several local jurisdictions and zoning districts including residential, commercial, light industrial and industrial.” The General Assembly expressed concern that there was “considerable uncertainty” as to how the noise abatement

levels would apply to such a linear facility, and expressed concern that there was a need to “have an adequate, reliable, and cost-effective electricity infrastructure to serve the needs of the people of Colorado for their homes, businesses, and industries.” Further, to avoid inconsistent local laws addressing noise, the General Assembly found that “statewide noise standards need to be determined and applied to electric transmission facilities” by this Commission. Commission determinations under this statute preempt more restrictive local laws and civil actions based upon transmission line noise.

In other words, the General Assembly has charged this Commission, and not local governments or the courts, with making the public interest determination as to how transmission lines should be designed and how much money should be spent to mitigate projected noise levels. Public Service needs the certainty of a Commission determination of reasonable noise levels before finalizing the design and undertaking the construction of the Project.

In order for the Commission to have before it the evidence it requires to make the determination of reasonable noise levels, Public Service is presenting testimony and exhibits of Mr. Pearson providing all of the information regarding noise levels and actions and techniques employed to mitigate noise that is required by Rule 3102(c) of the Commission’s Rules Regulating Electric Utilities. Mr. Pearson presents alternative design cases for the Project. He explains why the Company’s preferred design is the most cost effective solution and why the noise levels should be determined by the Commission to be reasonable.

The second legal development that led to Public Service's request for specific findings with respect to the reasonableness of both the projected EMF and the projected noise levels from the San Luis Valley – Calumet – Comanche Transmission Project is the ruling by the Colorado Supreme Court in the case of *Public Service Company of Colorado v. Van Wyk*, 27 P.3d 377, 393 (Colo. 2001). In that case, the Court ruled that the plaintiffs could maintain a claim against Public Service for intentional nuisance as a result of EMF and noise from the continued operation of a 230kV transmission line that is adjacent to their property, despite the fact that the Commission had granted Public Service a CPCN for the construction and operation of the transmission line. The Court found that the intentional nuisance action could be maintained because there had been no finding of fact by the Commission, in granting the CPCN, quantifying the reasonable level of EMF and noise expected in connection with operation of the transmission line.

Public Service does not wish to intentionally create a nuisance in constructing or operating its transmission facilities. Nor does the Company want to construct a transmission line that will subject the Company to future lawsuits that complain of nuisance. In order to create an intentional nuisance, the Company must take an act that is unreasonable in relation to the property owner's use and enjoyment of the land. The Colorado Supreme Court ruled in the Van Wyk case that the Commission could determine the reasonableness of the Company's actions, if the Commission would quantify the level of EMF and noise that the Commission considers to be reasonable in connection with the proposed transmission line.

In sum, the Company requests that the Commission review the evidence presented by Mr. Pearson and find that the EMF and noise levels quantified in his testimony and exhibits are reasonable. Public Service requests that the Commission specifically find that the public convenience and necessity require the construction and operation of the San Luis Valley – Calumet – Comanche Transmission Project as proposed by the Company with these EMF and noise levels.

The Commission has made findings that the projected EMF and noise levels were reasonable for Public Service transmission facilities in the following dockets: Denver Terminal-Dakota-Arapahoe 230kV Transmission Line, Docket No. 03A-265E; the Chambers 230/115kV Transmission Intertie Project, Docket No. 03A-329E; Pawnee-Daniels Park Transmission Rebuild Project, Docket No. 03A-276E; Comanche – Daniels Park Transmission Project, Docket No. 05A-072E; and Midway – Waterton 345kV Transmission Project, Docket No. 07A-156E.

**8. Information Required By Rule 3104(b).** As a measure of caution, Public Service is requesting that the Commission approve the transfer of facilities to the extent necessary to achieve the contemplated allocation of ownership interests, as set forth in the MOU, between Tri-State and Public Service in the Project. Because Public Service and Tri-State will take the lead in constructing different portions of the Project, it may be necessary at some point for each of them to transfer ownership interests in the facilities they are constructing to the other party. On the other hand, it is also possible that the facilities that are subject of this application are constructed and developed in such a way that no such transfer of

ownership occurs, in which case this request for transfer authority may be unnecessary. However, to the extent such a transfer is necessary, and as a prophylactic measure to avoid a second proceeding on the same Project, the Commission should grant the request as part of the instant Application, pursuant to Rule 4 CCR 723-3-3104.

In compliance with Rule 3104(b)(1), Public Service has included above the information required by Rules 3002(b) and 3002(c). Public Service cannot provide accounting entries for any future interest transfers (Rule 3104(b)(II)) because the assets in question are not in existence at this time. If any accounting entries prove necessary, Public Service can provide them to the Commission at a later date as part of compliance filing. Likewise, copies of any agreements reached between Tri-State and Public Service concerning ownership interests (Rule 3104(b)(III)) will be provided to the Commission upon execution. For the reasons stated above, granting approval of future transfers of ownership interests in the Project is within the public interest (Rule 3104(b)(IV) in order to avoid the waste of resources associated with a second application concerning the same Project, and because no stakeholder will be adversely affected by such transfer. Finally, no evaluation of benefits, detriments, and costs of service (Rules 3104(b)(V) and (VI)) associated with the transfer of ownership interests is necessary as the Project is not yet in existence. To the extent a waiver of part(s) of Rule 3104 is necessary because of the unusual nature of the transfer request, Public Service hereby requests such a waiver. Public Service believes that § 40-5-105, C.R.S. provides the Commission with discretion to grant

the request for future transfer of ownership interests in the Project, as such a grant is within the public interest.

## **CONCLUSION**

As demonstrated by the Company's direct testimony and exhibits, the Company's proposed Project is the lowest cost transmission system alternative that meets all of the Company's objectives, including fully accommodating existing and new generation in the southern Colorado system; not interfering with existing electric systems of other utilities; making practical use of existing transmission facilities and corridors, thereby minimizing environmental impacts; emitting reasonable levels of EMF and noise; and providing for additional solar, wind, and other resource capacity and flexibility in southern Colorado that will accommodate longer range planning needs. For all these reasons, the Company's proposed Project is the most cost-effective transmission alternative available to the Company.

### **Request That Application Be Granted Without Hearing if Not Contested**

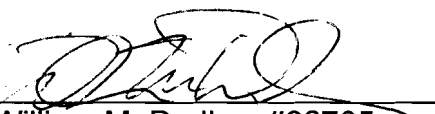
Public Service respectfully requests, if this Application is not contested, that it be granted without hearing, under the Commission's modified procedure under Rule 1403, 4 CCR 723-1-1403. Whether the Application is granted with or without hearing, Public Service requests that the specific findings with respect to EMF and noise, as well as the grant of future necessary ownership interest transfers, be included in the Commission's order granting the CPCN.

WHEREFORE, Public Service Company of Colorado respectfully requests that the Commission grant it a certificate of public convenience and necessity for the San Luis Valley – Calumet – Comanche Transmission Project, that the Commission

make specific findings with respect to the reasonableness of the projected noise and EMF levels for this Project, and that the Commission authorize any future allocation of ownership interests in the Project between Tri-State and Public Service.

Dated this 14th day of May, 2009.

Respectfully submitted,

By:   
William M. Dudley, #26735  
Assistant General Counsel  
Xcel Energy Services Inc.  
1225 17<sup>th</sup> Street, Suite 900  
Denver, Colorado 80202  
Telephone: 303-294-2842  
Facsimile: 303-294-2852  
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And

Gregory E. Sopkin, #20997  
Squire, Sanders & Dempsey L.L.P.  
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ATTORNEYS FOR PUBLIC SERVICE COMPANY  
OF COLORADO

VERIFICATION

STATE OF COLORADO )  
 ) ss.  
CITY AND COUNTY OF DENVER )

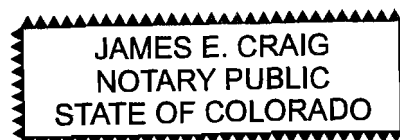
The undersigned, being under oath, says that he is Manager, Transmission Asset Management for Public Service Company of Colorado. The undersigned further says that he has reviewed the Application and the supporting documentation and has knowledge of the factual matters set forth therein. Under penalty of perjury the undersigned declares that all statements made in the Application and supporting documents are true and complete to the best of his knowledge. The undersigned understands that any statement made in violation of this oath shall constitute grounds for dismissal of the Application or revocation of any authority granted.

Gerry Stellern  
Gerry Stellern, Manager  
Transmission Asset Management

Subscribed and sworn to before me this  
13<sup>th</sup> day of May 2009

James Craig  
Notary Public

My Commission expires: 3-29-2011



My Commission Expires

**CERTIFICATE OF SERVICE**

I hereby certify that the original and ten copies of the foregoing “**VERIFIED APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY WITH SPECIFIC FINDINGS WITH RESPECT TO ELECTROMAGNETIC FIELDS AND NOISE, AND FOR APPROVAL OF OWNERSHIP INTEREST TRANSFER AS NEEDED WHEN PROJECT IS COMPLETED**” was hand-delivered this 14<sup>th</sup> day of May, 2009, to:

Doug Dean, Executive Director  
Public Utilities Commission  
1560 Broadway, Suite 250  
Denver, CO 80202


And a copy was hand delivered to:

William Levis  
Director, Office of Consumer Counsel  
1560 Broadway, Suite 200  
Denver, CO 80202  
[bill.levis@dora.state.co.us](mailto:bill.levis@dora.state.co.us)

And a copy was delivered via U.S. Mail to:

Bill Vidal  
Manager of Public Works  
201 W. Colfax, Dept. 608  
Denver, CO 80202  
[bill.vidal@denvergov.org](mailto:bill.vidal@denvergov.org)

Morey Wolfson  
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1580 Logan Street, OL-1, Suite 100  
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[morey.wolfson@state.co.us](mailto:morey.wolfson@state.co.us)

  
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