

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

Docket No. 09A-324E

IN THE MATTER OF THE APPLICATION OF TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC. (A) FOR A CERTIFICATE OF) PUBLIC CONVENIENCE AND NECESSITY FOR THE SAN LUIS VALLEY-CALUMET-COMANCHE TRANSMISSION PROJECT, (B) FOR SPECIFIC FINDINGS WITH RESPECT TO EMF AND NOISE, AND (C) FOR APPROVAL OF OWNERSHIP INTEREST TRANSFER AS NEEDED WHEN PROJECT IS COMPLETED.

AND

Docket No. 09A-325E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO (A) FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE SAN LUIS VALLEY-CALUMET-COMANCHE TRANSMISSION PROJECT; (B) FOR SPECIFIC FINDINGS WITH RESPECT TO EMF AND NOISE, AND (C) FOR APPROVAL OF OWNERSHIP INTEREST TRANSFER AS NEEDED WHEN PROJECT IS COMPLETED.

**RESPONSE OF TRI-STATE GENERATION AND TRANSMISSION
ASSOCIATION, INC. TO SECOND SET OF INTERROGATORIES OF
BLANCA RANCH HOLDINGS, LLC AND TRINCHERA RANCH HOLDINGS, LLC**

Tri-State Generation and Transmission Association, Inc. ("Tri-State"), pursuant to Rule 1405 of the Rules of Practice and Procedure of the Colorado Public Utilities Commission, hereby responds to the Second Set of Interrogatories of Blanca Ranch Holdings, LLC and Trinchera Ranch Holdings, LLC (collectively "Trinchera Ranch" or "TR") to Tri-State Generation and Transmission Association, Inc. as follows¹:

TRINCHERA RANCH 4-1. Please identify the total MW of transmission capacity, if any, Tri-State currently has right to on Western Area Power Administration's ("WAPA") Canyon West to Midway transmission path.

RESPONSE TO TRINCHERA RANCH 4-1: Tri-State has 0 MW firm transmission capacity rights on the WAPA Canyon West to Midway transmission path.

Sponsor: Andrew R. Leoni

¹ Trinchera Ranch's Second Set of Interrogatories to Tri-State are, in fact, the fourth set of discovery requests submitted to Trinchera Ranch to Tri-State. Accordingly, for purposes of differentiating Tri-State's answers to these interrogatories from its answers to such earlier discovery requests, Tri-State's present answers will refer to, for example, "Trinchera Ranch 4-1" and "Answer to Trinchera Ranch 4-1."

TRINCHERA RANCH 4-5. Regarding Exhibit No. TWG-1 at page 19 to the direct testimony of Thomas Green, please describe and identify any new developments related to the resolution of the Black Hills 115 kV issues associated with injecting power at Calumet.

RESPONSE TO TRINCHERA RANCH 4-5: Although the question is related to the testimony of Public Service Company Thomas Green, Tri-State participated in the joint study that is attached to Mr. Green's testimony as TWG-1. To Tri-State's knowledge, there are no new developments with respect to the Black Hills issues referred to in the question. Tri-State and Public Service Company will continue to work with Black Hills and other regional electric utilities to mitigate any potential adverse impacts of the Project.

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TRINCHERA RANCH 4-6. Regarding the direct testimony of Joseph Taylor at page 6, please identify the MW level of active wind generation interconnection requests for Wind GDA8.

RESPONSE TO TRINCHERA RANCH 4-6: Tri-State refers Trinchera Ranch to the answer of Public Service Company witness Joseph Taylor. In addition, active generation interconnection requests can be accessed through the web site identified by Tri-State in response to TR 1-4: <http://www.oatioasis.com/tsgt/index.html>

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TRINCHERA RANCH 4-7. Regarding the direct testimony of Joel Bladow at page 9 and the July 17, 2009 deposition of Joel Bladow, and specifically referring to page 35 of the deposition transcript:

- (a) Has there ever been a failure of a load shedding operation in the San Luis Valley? If so, identify each such failure in detail and provide a complete copy of all analysis, correspondence or other documents associated with such failures.
- (b) Please identify whether the existing load shedding program in the San Luis Valley that is used to minimize the likelihood of voltage collapse trips load:
 - i. When the loss of the San Luis Valley-Poncha 230 kV circuit is detected?
 - ii. When specific monitored voltages below present threshold?
 - iii. When load in the San Luis Valley area less any electric energy production in the San Luis Valley exceeds a specific level of MW?
 - iv. When some combination of i through iii occurs? If so, please detail those combinations.
 - v. When an event or condition different than those in i through iii occurs? If so, please detail those events and/or conditions.

RESPONSE TO TRINCHERA RANCH 4-7:

- (a) There has never been a failure of the load shedding operation equipment. However, the settings of the load shedding equipment were changed following the outage in 2003 to coordinate with voltage regulating equipment in operation in the San Luis Valley.
- (b)
 - i. No
 - ii. Yes, load is shed at 10, 20 and 30 seconds when specific monitored voltages drop below a threshold.
 - iii. No
 - iv. No
 - v. There are no events or conditions other than those previously described.

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TRINCHERA RANCH 4-8: With reference to the previously provided June 1997 Tri-State "San Luis Valley High Voltage System Study Report" at TSGT 00032 through TSGT 00038 and the previously provided January 2004 Tri-State "PV Study Report-San Luis Valley Substation Second 230 kV Source" at TSGT 000794-000798:

- (a) Please identify whether Tri-State ever adopted its working criterion that "[t]he system will be designed to operate so that the single contingency point-of-collapse is at least 5 percent higher, measured in MW or MVA, with the single most critical VAr source unavailable" (TSGT 00033). If so, please identify whether this is still Tri-State's voltage collapse/stability criterion.
- (b) Please identify whether the aforementioned January 2004 PV Study Report utilized the working voltage collapse/stability criterion mentioned above in a. If not, please explain in detail why the June 1997 study working voltage collapse/stability criterion was not utilized in the January 2004 PV Study.
- (c) Please confirm the voltage collapse limits presented in Table 1 of the January 2004 PV Study Report (TSGT 000798) were based on the point-of-collapse on the PV curves and not based on a MW level 5% lower than the MW level at the point-of-collapse on the PV curves.
- (d) Please identify the specific load model (see TSGT 00034-00035) used for active (i.e., real power) and reactive power loads in the San Luis Valley in the January 2004 PV Study.
- (e) Please identify whether San Luis Valley loads were modeled on the low-side of 115 kV and 69 kV transformers (see TSGT 00034) in the January 2004 PV Study. If so, please identify whether load tap changers on these transformers were allowed to automatically adjust during the calculation of the PV curves for the January 2004 PV Study.