



## **Electricity Transmission and Distribution Geography, Taos and Vicinity, New Mexico**

**By William M. Brown for Renewable Taos, Inc.  
December 8, 2015**

The following descriptions and maps describe the geography of our local and regional electrical transmission and distribution systems for Taos and vicinity, New Mexico. These descriptions are based on a statewide map of New Mexico transmission lines and electrical stations, a map of the Kit Carson Electric Cooperative (KCEC) Service Area electricity distribution system, detailed examinations of Google Earth images, and field observations by Renewable Taos members.

The map below is a segment of a detailed New Mexico statewide map of electricity transmission facilities, entitled “New Mexico Major Transmission Systems 2005.”

View the statewide transmission map online at:

[http://www.newmexicocare.org/images/maps/nm\\_transmission\\_sys.jpg](http://www.newmexicocare.org/images/maps/nm_transmission_sys.jpg)

Run your cursor over the map on your computer screen to locations where you want to see more detail, then click to zoom in.

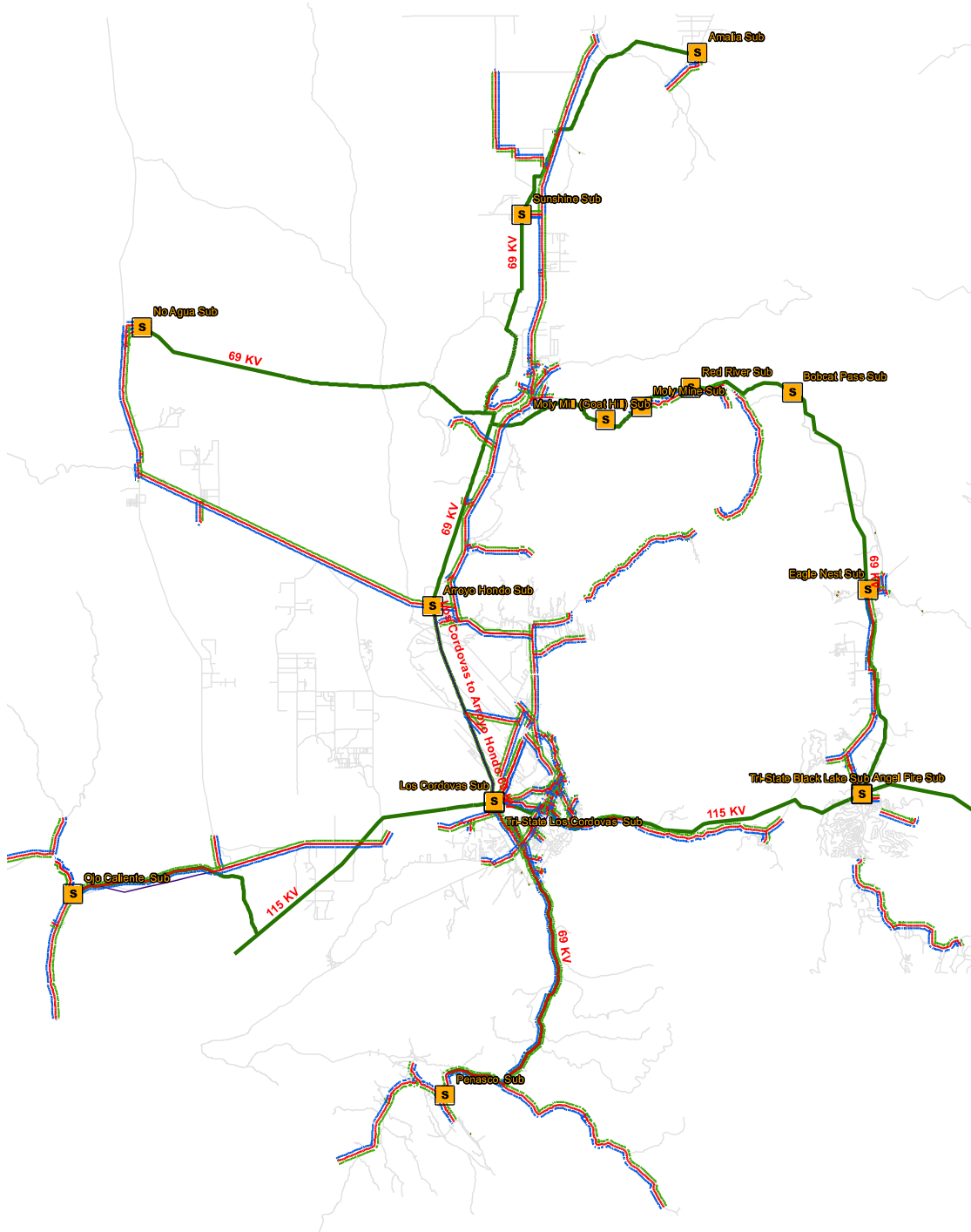


**Electricity Transmission Map for Taos and Vicinity, New Mexico.**

- TSGT = Tri-State Generation and Transmission Association, Inc.
- KCEC = Kit Carson Electric Cooperative, Inc.
- JMEC = Jemez Mountains Electric Cooperative, Inc.
- LACU = Los Alamos County Utility
- USDOE = U.S. Department of Energy
- ETA = USDOE Electrical Substation, Los Alamos, NM
- NRAC = NORA = Northern Rio Arriba Electric Cooperative, Inc.

Kit Carson Electric Cooperative's (KCEC's) system map below shows its 69kV distribution lines, Tri-State's 115 kV lines (Hernandez to Gladstone NM), and KCEC electrical substations.

**Kit Carson Electric Service Territory -  
Transmission Lines, 3-Phase & Substations**



The NM map shows two transmission lines running parallel to each other and heading southwest from Taos. The NM map shows these as dashed red and blue lines emanating from a site labeled “Taos (TSGT).” Solid lines on the map are mostly owned by PNM, with the exception of some 69 KV and 115 KV lines owned by Texas New Mexico Power in the southern part of the state. See the NM map legend at the link above (p. 1) for details.

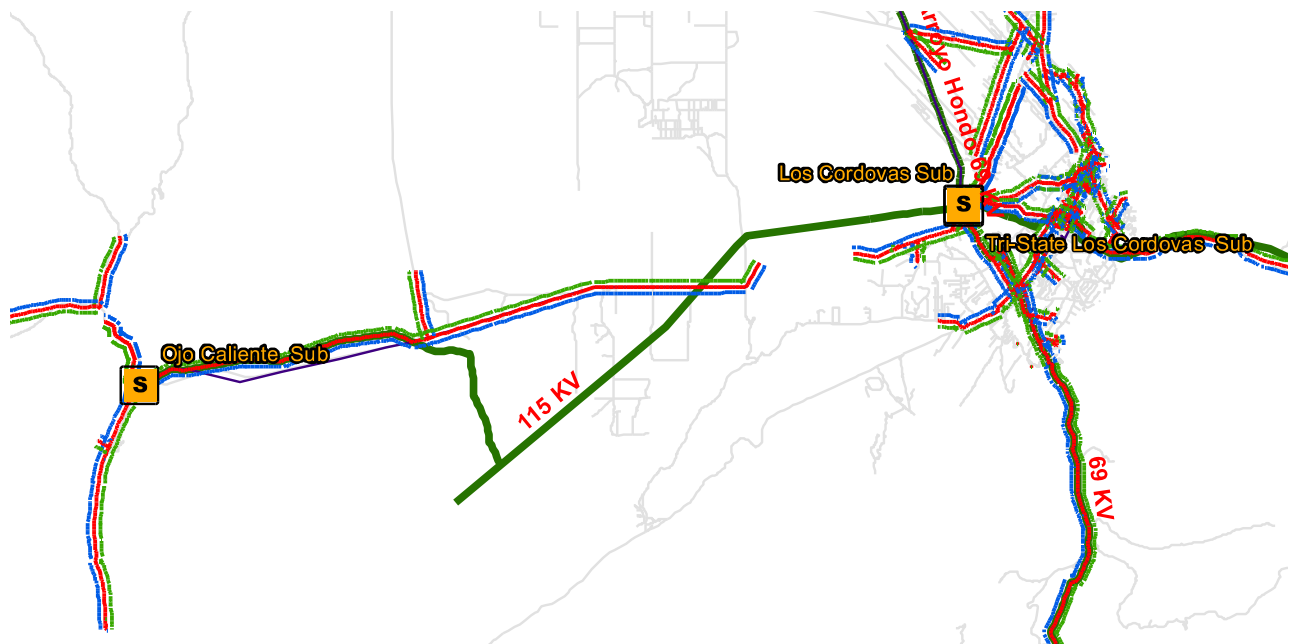
TSGT stands for Tri-State Generation and Transmission Association, the owner of these lines.

The dashed red line represents the 345 kilovolt (KV) line connecting Taos (TSGT) with the Ojo Electrical Station (see below p. 4).

The dashed blue line represents the 115 KV line connecting Taos (TSGT) with the Hernandez (TSGT) electrical substation (see below, p. 4).

The two transmission lines run together in the same corridor, and can be easily seen together where they cross West Rim Road and NM Hwy 567 a few miles east of the Carson, NM Post Office.

***The KCEC map calls the Taos (TSGT) Substation on the NM statewide map “Los Cordovas Sub” and “Tri State Los Cordovas Sub.”*** There are actually two substations at this site, one belonging to KCEC and a much larger one belonging to TSGT. The following statements reference the segment of the KCEC map below for the area including Taos, Carson and Ojo Caliente.



The Los Cordovas Substation & Tri-State Los Cordovas Substation are located on Camino de la Culebra just west of the intersection of Blueberry Hill Road and Ranchitos Road (NM Hwy 240).

The KCEC map shows the 115 KV transmission line (green line) beginning at the Los Cordovas Sub and heading westerly, thence southwest. The sharp southwest bend in the green line is where the transmission corridor crosses West Rim Road.

***The KCEC map does not show the 345 KV line connecting the Tri-State Los Cordovas Substation with the Ojo Electrical Station in Chili, NM.***

About 4 miles southwest of Carson, NM, another green line branches off to the north, then continues west along US Hwy 285 to the Ojo Caliente Electrical Substation. This green line is not labeled, but from other KCEC information it is 69 KV. The Ojo Caliente Electrical Substation is located just west of US Hwy 285 near the intersection of Hwy 285 and NM Hwy 111, and about 2 miles north of the spa resort community of Ojo Caliente.

***Note that the Ojo Caliente Substation is a small electrical station that is part of KCEC's distribution system. It should not be confused with the much larger Ojo Electrical Station that is about 20 miles farther south in Chili, NM on US Highway 84 near the confluence of the Rio Chama and the Rio Ojo Caliente.***

The 345 KV and 115 KV transmission lines corridor runs in a straight line from the West Rim Road to a point on a high mesa just above the intersection of US Highways 285 and 84 just northwest of Hernandez, NM.

The 345 KV line from Taos drops off the west side of the high mesa about 2 miles north of the intersection of US Highways 285 and 84. The 345 KV line crosses over Hwy 285, then heads southwest to the large Ojo Electrical Station located in the community of Chili, NM. The Ojo Station is on the west side of US Hwy 84, about two miles north of the US Hwy 285/84 intersection.

Chili, NM is about 9 miles northwest of Española, NM.

The 115 KV line drops off the south end of the high mesa and crosses Highways 285/84 before continuing southeast to the grounds of the main office of Jemez Mountains Electric Cooperative, Inc. (JMEC) in Hernandez, NM. The Hernandez Electrical Substation is on the grounds of JMEC just southwest of the main buildings, and easily visible from US Highways 285/84.

JMEC is located in Hernandez, NM which is about 4 miles Northwest of Española, NM, and about 20 miles south of Ojo Caliente, NM.

The NM state transmission map shows that the TSGT 345 and 115 KV lines from Taos terminate at PNM-owned lines at the Ojo and Hernandez Electrical Stations. The PNM 345 KV line to the west is labeled "OJ," and continues all the way to the coal-fired San Juan Generation Station in Waterflow, NM. The connection between the Ojo and Hernandez stations is labeled "HO." The 115 KV line heading south from the Hernandez Station is labeled "NH." The "NH" line connects to other lines leading to many other parts of NM including Los Alamos, Santa Fe, Albuquerque, and even Las Vegas.

The NM statewide map legend does not indicate the meaning of "OJ," "HO," "NH," and many other two-letter designations. Renewable Taos will update this brief with definitions at a later date.

Note: The resolution of Google Earth images is so good that we can easily see individual transmission towers and their shadows on the ground, and also see transmission wires that reflect sunlight. Electrical stations are also easily located, and can be identified at lower resolution as square or rectangular grey areas in the satellite images.

Prepared by William M. Brown 12/08/2015 Email: [swctaos@gmail.com](mailto:swctaos@gmail.com)  
Comments and questions are always welcome.

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