



# Improving reliability and power capacity in southeast New Mexico

As the summer draws to a close, new electrical infrastructure is beginning to take shape in southeast New Mexico. Xcel Energy will complete more than 250 miles of new transmission and distribution lines and seven new substations this year in Lea and Eddy Counties.

"The new transmission and distribution facilities will improve reliability and capacity in the region to meet the needs of customers, both large and small," said David Hudson, president of Southwestern Public Service Company, an Xcel Energy company. "We're investing hundreds of millions of dollars to expand the grid and support the southeastern New Mexico economy."

Xcel Energy has completed more than 100 miles of new distribution line and 30 miles of new transmission line in the region in 2015. South of Carlsbad, the Hopi-North Loving-China Draw 115 kilovolt (kV) transmission line was energized May 25 and the Quahada Switching Station, located about 40 miles northeast of Carlsbad, was energized July 9.

"One of our biggest challenges in building these projects is being able to expedite construction to meet the immediate demand of industrial customers, such as oil and gas,"

## HOPI-NORTH LOVING-CHINA DRAW PROJECT BY THE NUMBERS

243 structures

**Nearly 2 million pounds of steel** Nearly 450,000 feet of conductor

said Cory Wood, Xcel Energy's Manager of Transmission Project Management. "The process takes a lot of teamwork and planning from beginning to end."

## **Going local**

Several local businesses were utilized for work in southeast New Mexico. Artesia based Southwest Concrete did the foundation work for substations and Pettigrew and Associates out of Hobbs did the surveying. In addition, Constructors Inc. based in Hobbs assisted in substation work at the China Draw and North Loving Substations.



Quahada substation was energized in July 2015.

> Crews work on the China Draw Substation.



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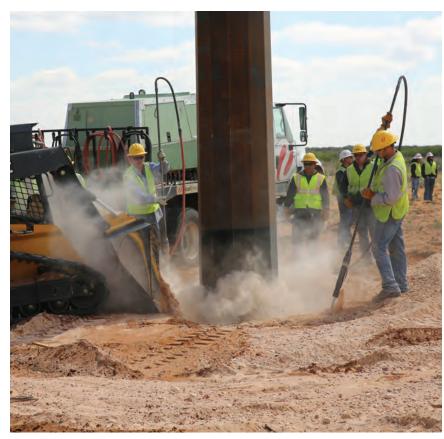


### **Under construction**

Stringing work is taking place on the 43-mile Potash Junction-Roadrunner project. The line will initially be operated at 230 kV, but is being built as 345 kV capable. The line runs between the new Roadrunner Substation, about 42 miles southeast of Carlsbad, and the existing Potash Junction Substation about 15 miles northeast of Carlsbad. Construction on both substations is underway. The project is expected to be energized in December, 2015. The estimated cost is \$59 million.

Work is also wrapping up on the approximately 19-mile Battle Axe-Roadrunner 115 kV project. The new line, scheduled to be energized in December, includes construction of the Battle Axe substation, located about 38 miles southeast of Carlsbad.

The Potash Junction-Roadrunner and Battle-Axe Roadrunner projects will improve reliability and meet growing electricity demand.



Crews tamp down a structure after setting it on the Potash Junction-Roadrunner line.



Click on the photo above to view a video of a structure setting. You can also see the video on PowerforthePlains.com.



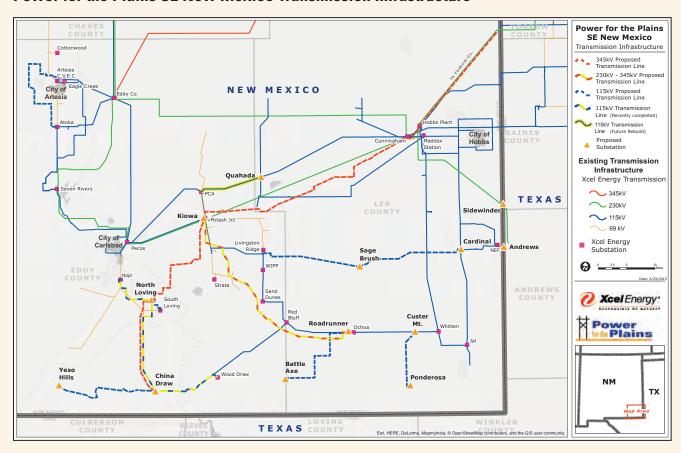
A structure is bolted together before setting west of Jal.

#### In the future

Xcel Energy is currently permitting and planning for nearly a dozen additional transmission projects in Lea and Eddy counties. The proposed TUCO-Yoakum-Hobbs 345 kV transmission line is the largest project planned to be in service by 2020. The estimated \$242 million, 160-mile line will run between the TUCO Substation near Abernathy, Texas and the Hobbs Plant Substation

northwest of Hobbs, New Mexico. The Texas Public Utility Commission and the New Mexico Public Regulation Commission must grant a Certificate of Convenience and Necessity (CCN) in each state before construction. The two state regulatory agencies will determine the final route. The first CCN, Yoakum to the state line was filed in Texas on June 25. View all of the southeast New Mexico transmission projects in the map below.

#### Power for the Plains SE New Mexico Transmission Infrastructure



## Other New Mexico projects

The Bureau of Land Management Permit was approved on July 31, 2015 on the Atoka-Eagle Creek 115 kV transmission project. The new line consists of about 25 miles of new transmission line between the existing Atoka Substation southwest of Atoka and the Eagle Creek Substation northeast of Artesia. Grading is currently underway to expand the Atoka Substation.

Expansion is underway at the Curry Substation east of Clovis. The Curry-Bailey 115 kV transmission line includes approximately 37 miles of new transmission line between Clovis and Muleshoe, Texas.

Foundation work is also taking place at the Andrews County Substation on the Texas border near Eunice, New Mexico. Construction is also underway at the NEF Substation. The Andrews-National Enrichment Facility (NEF) 115 kV transmission project includes two miles of new transmission line between the Andrews and NEF Substations.



A 345 kV substation was completed outside Dora in July, 2015. The Crossroads Substation was built to connect the Roosevelt and Milo wind farms. The transmission line structures shown above were also built to move power into the new Crossroads substation.





Learn more about all of the projects and contact us with questions or comments on Powerfortheplains.com.

## **Distribution update**

The network of lines that move power off Xcel Energy's high-voltage grid is known as the distribution system, and these lines deliver power directly to our customers. Xcel Energy continues to expand the distribution system to meet the additional load growth in southeast New Mexico. In 2014, the company constructed and rebuilt approximately 153 miles of distribution lines in and around Hobbs and Carlsbad. Approximately 200 more miles of line will be completed in 2015.

