

PNM

Customer Success Story

AutoCAD®

Autodesk® 3ds Max® Design

Being able to customize AutoCAD software has opened a world of possibilities for us. If we can think of a configuration that will save time or improve quality, we can make it happen. Using software that matches the way we work helps us get more done every day.

—Gathen Garcia
CAD and GIS Manager
PNM

Substations in a flash.

PNM accelerates its substation and switching station design and permitting processes with AutoCAD and Autodesk 3ds Max Design software.

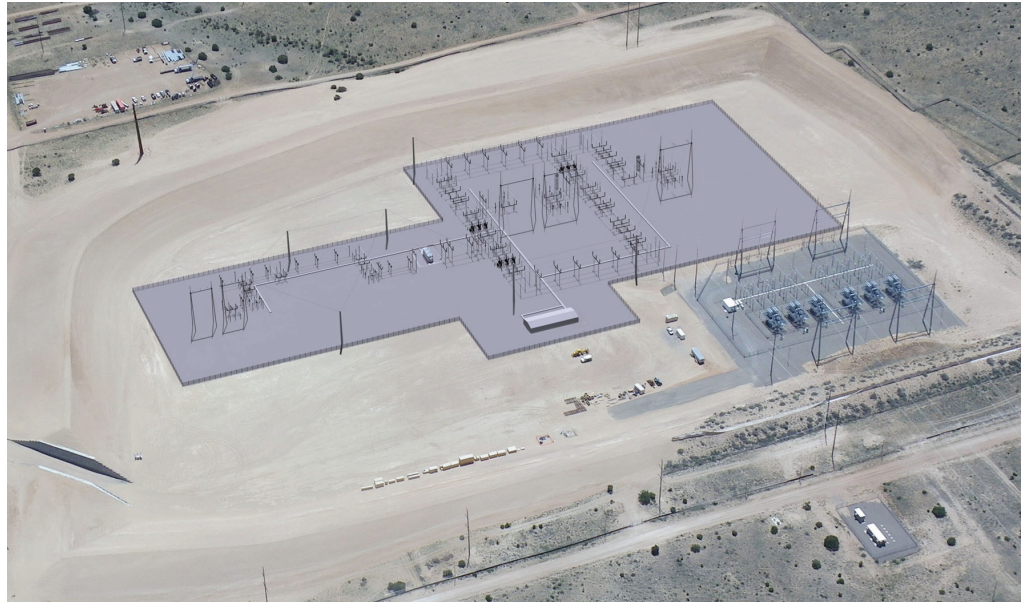


Image courtesy of PNM.

Project Summary

Based in Albuquerque, PNM provides electricity to more than 503,000 customers in New Mexico. The company strives to deliver cost-effective power and great service by operating as efficiently as possible. That goal is evident in the company's GIS and CAD department, where technology specialists have written an application in VLISP to work with the company's primary design tool—AutoCAD® software—to streamline key engineering processes. Whether they are designing transmission lines, switching stations, or substations, the engineers and designers at PNM use their VLISP application and AutoCAD to support tasks and promote consistency. The core 3D capabilities of AutoCAD software play a crucial role throughout and beyond the design process by helping PNM visualize 3D designs and reduce the risk of errors.

The substation and switching station design process provides an excellent example of how 3D capabilities benefit PNM. To design a substation, a PNM engineer typically starts by selecting a standard substation layout. The engineer then navigates through a series of menus that facilitate equipment selection. Throughout the process, the engineer sees the design coming together as a 3D model in AutoCAD. Visualizing the design in 3D accelerates the design process and makes it easier to avoid clashes. When the design is complete, PNM

moves the design from AutoCAD into Autodesk® 3ds Max® Design software. In 3ds Max Design, PNM creates a near photorealistic rendering of the substation for use in the permitting process. Configured options along with the 3D capabilities of AutoCAD and 3ds Max Design help PNM to:

- Design substations in as little as eight hours
- Streamline the permitting process by communicating design intent more clearly
- Enforce design consistency with embedded standards
- Reduce the risk of clashes while accelerating the design process

About PNM

Based in Albuquerque, PNM serves Albuquerque, the Middle Rio Grande corridor, and Northern and Southern New Mexico. PNM is the largest subsidiary of PNM Resources. PNM has been delivering power to businesses and residents in New Mexico for more than 90 years. PNM Resources operates eight power plants and maintains more than 17,000 miles of power lines.

Learn More

Power your 3D design process with AutoCAD software. Visit www.autodesk.com/autocad to learn more.