



TRANSMISSION LINE DESIGN & CONSTRUCTION

Transmission lines are a critical component of utility systems, moving electricity through service territories and between utilities in large quantities. Growing demand and requirements for increased reliability can overwhelm aging infrastructure, requiring new lines and upgrades to existing lines.

Since our founding in 1947, Patterson & Dewar Engineers, Inc. (P&D) has designed thousands of miles of overhead transmission lines throughout the United States. With projects ranging from 34.5kV to 345kV, P&D utilizes in-house expertise and cutting-edge technology to assist our clients from concept through energization.

SERVICES

- NERC compliance assessment
- Line design utilizing PLS-CADD and SAG10
- Forensic analysis and expert witness
- Material breakdown and procurement assistance
- Structural design using PLS-POLE and PLS-TOWER
- Foundation design utilizing MFAD, PLS-Caisson, and L-PILE
- Construction contract preparation, solicitation, and evaluation
- Line design surveying, UAS inspections, and construction staking
- Line routing, permitting, and right-of-way acquisition assistance
- Construction monitoring, project management, and inspections
- Construction specifications, standards, and drawings development



THE P&D DIFFERENCE

P&D understands what it takes to make a project successful. We cultivate valuable partnerships with clients, applying our skill set, expertise, and decades of experience constructing transmission lines. Our clients trust us to use innovative, cost-effective methods to find efficient solutions for complex design projects. We have experience designing transmission lines across a variety of challenging terrains and in areas with various environmental concerns.

Our engineers are experienced in designing monopole and multi-pole wood, concrete, steel structures, and steel lattice towers, using direct embedment, vibratory caissons, and concrete pier foundations. Whether the project requires single or double circuit transmission with multi circuit distribution underbuild, OPGW, one, two, or three-way switches, radio antenna, or solar panel attachments, P&D designs always meet the specific needs of our clients.

For more information, please contact transmission@pdengineers.com



**patterson
& dewar**
ENGINEERS

OUR LOCATIONS

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