

The Electric System



The Electric Transmission System

The electric power delivery system consists of two components: transmission and distribution.

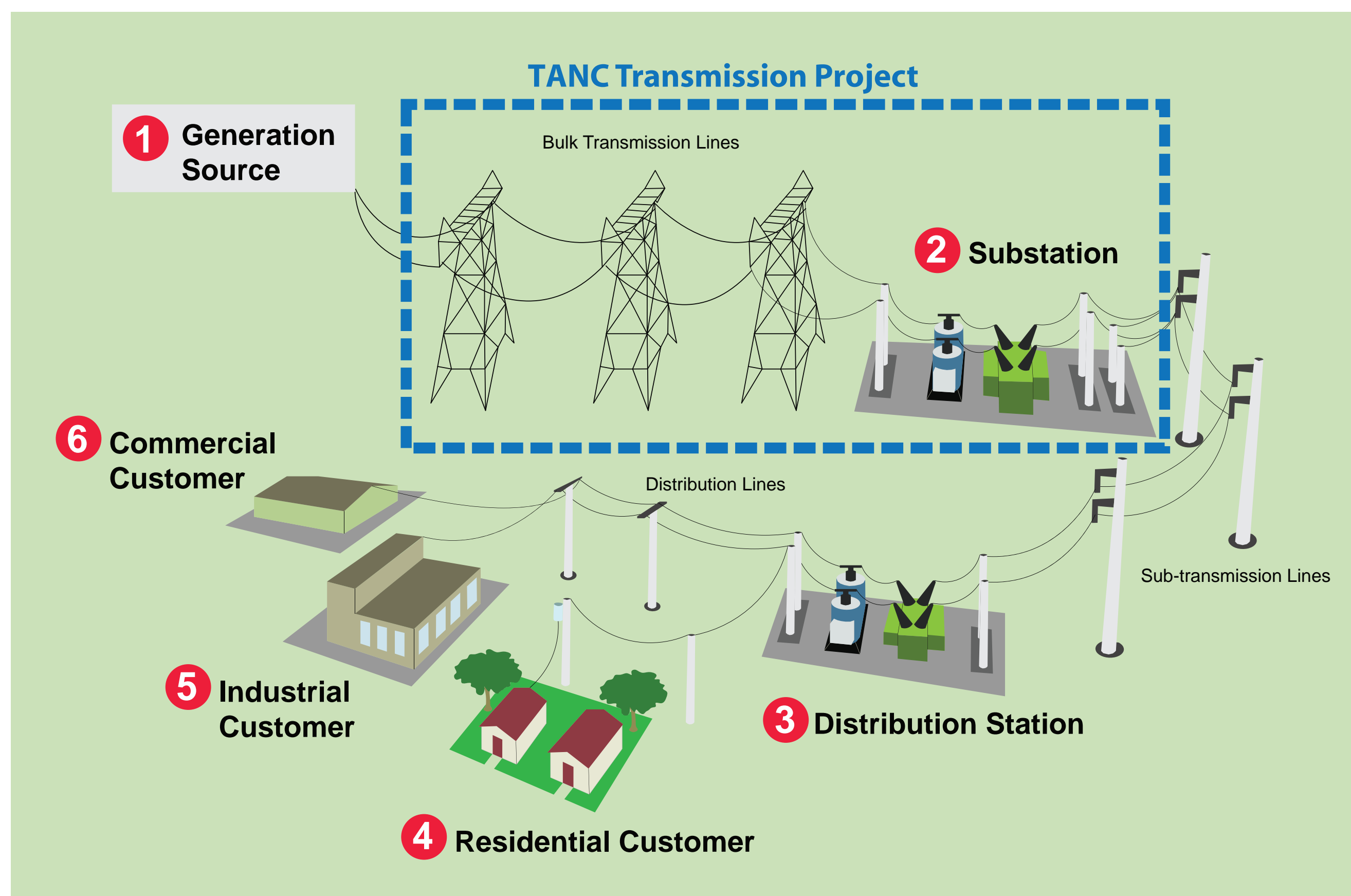
- The transmission system delivers electricity from place to place at high voltages. Typically, power transmission is between a power generator and a substation near a power user.
- The distribution system delivers lower voltage electricity from a substation to consumers.

The TANC Transmission Project is a transmission system designed to move large amounts of power long distance at high voltages.

The TTP is needed to ensure that Western Area Power Administration and TANC can continue to provide reliable electric service to their customers and member systems to accommodate increasing demand.



Example Substation



Project Components

The TTP would consist of about 600 miles of new and upgraded 230-kV and 500-kV transmission lines and related facilities.

Typical Design Characteristics

	500-kV	230-kV
Structure Height (feet)	100-150	100-150
Structure Base (square feet)	1225-2000	400
Span Length (feet)	1200-1400	700-900
Structures per Mile	4-5	7-10
Conductors per Phase	3	2
Conductor Ground Clearance	Will meet or exceed NESC and G.O. 95 minimums ¹	

¹ National Electrical Safety Code (NESC) and California General Order 95 (G.O. 95)

