

PGCIL, Vapi, Gujarat 400/220 kV Substation

Substation solution for power evacuation from Tarapur 3 and 4 units (2 x 500 MW Thermal Power Station)

Customer Benefits

- Strengthening of Western grid
- Excellent switchyard aesthetics with quality stringing
- Enhanced personal safety with non-uniform laying of earth mat for equal distribution of potentials

ABB Solution

- Turnkey 400 kV / 220 kV greenfield substation solution with 6 bays at 400 kV and 8 bays at 220 kV with 2 nos. 315 MVA, 400/200 kV Auto Transformers
- Control and relay panels
- Complete civil work including control room building and fire fighting pump house, foundations for 400 kV and 220 kV towers and equipments
- Substation commissioned in 2005



Substation Overview



400/220 kV three phase 315 MVA Auto Transformers

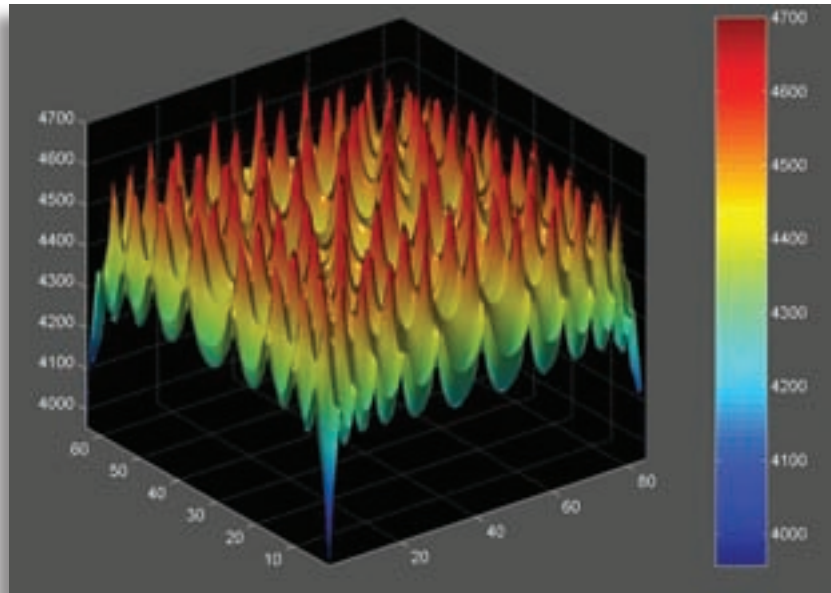


400 kV Circuit Breakers, Current Transformers and Disconnectors



Control and Relay Panels

Equal distribution of potentials for enhanced safety



Non-uniform earth mat spacing using Finite element method implemented in the substation for equal distribution of potentials for enhanced personal safety.

This methodology is based on advanced computer numerical techniques

ABB's Substation Offerings

ABB offers substation solutions for power transmission, distribution and substation automation and protection by:

- Delivery of turnkey AIS and GIS substations for utility and industrial applications
- Service, rehabilitation and upgradation of existing substations
- Substation automation systems; bay control, unit protection, power system monitoring and wide area system solutions



ABB Limited
P.O. Maneja
Vadodara - 391003
India

Phone +91 0265 264 2147

www.abb.com