

Sargent & Lundy Services:

- ❑ Substation Engineering & Design
- ❑ Transmission Line Engineering & Design
- ❑ Communication System Engineering & Design

Since 1997, Sargent & Lundy has been an engineering alliance partner to the Tennessee Valley Authority (TVA), providing engineering and design services for projects throughout their transmission system. This includes physical design, electrical engineering, civil/structural engineering, protection and controls, and communication system engineering for new facilities and a wide range of modifications to existing facilities, at voltages of 69-kV through 500-kV.

Projects have included engineering and design of:

- ❑ New 500-kV switchyards and 230/115-kV and 161/69-kV substations
- ❑ Upgrades of 500-kV switchyards at TVA nuclear power plants
- ❑ New and modified substations for the interconnection of Independent Power Producer generating stations
- ❑ New 161-kV, 115-kV, and 69-kV transmission lines and modifications of existing 500-kV lines
- ❑ Additions of new breakers and disconnect switches and replacement of existing breakers in 500-kV switchyards
- ❑ Upgrading existing 161-kV and 69-kV transmission lines
- ❑ Replacement of oil-filled circuit breakers with SF₆ breakers
- ❑ Upgrades of relay systems
- ❑ Transmission line lightning performance improvement projects
- ❑ Additions of 161-kV capacitor banks at existing substations
- ❑ Substation battery and charger replacements

- ❑ Communication and system control facilities at existing substations, generating facilities, and microwave radio repeater stations, including:
 - microwave radio
 - UHF telemetering
 - cellular telephone terminals
 - powerboard/charger equipment
 - communications battery systems
 - towers for antenna mounting and antenna installations
 - antenna to radio transmission lines
 - transmission line dehydrators
 - fiber optic terminals and associated termination equipment and converters, channel banks and multiplex equipment
 - modular communication building shelters and their ancillary equipment

