

TENNESSEE VALLEY AUTHORITY ENGINEERING ALLIANCE CONTRACT



TVA
Chattanooga, TN

Sargent & Lundy Services:

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

Sargent & Lundy was selected in 1997 as a TVA engineering alliance partner to provide engineering and design services for the TVA transmission system. Since that date, Sargent & Lundy has been performing engineering for a continuing series of transmission line and substation projects. 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
- ❑ 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

