

Sargent & Lundy Services:

- Program Manager – Siting, Public Outreach, Environmental Assessment, Licensing Support
- Transmission Line Engineering & Design
- Preliminary Substation Engineering
- Constructability Reviews and Planning



After extensive studies to evaluate additional transmission and other alternatives, San Diego Gas & Electric Company (SDG&E) proposed a major, new transmission interconnection from the east side of their service territory - the *Sunrise Powerlink*. Sargent & Lundy led a team that provided a wide range of services to support SDG&E on this important project. The team included primary subcontractors Arcadis (Phoenix, AZ), Finley Engineering (Portland, OR) and URS (San Diego, CA).

The Sunrise Powerlink will ensure reliable and economical power to SDG&E's customers, as well as playing a significant role in meeting renewable energy goals established by the state.



Providing Access to Renewable Energy

The project is proposed to include approximately 100 miles of 500-kV transmission line, approximately 30 miles of double-circuit 230-kV line, a new 500/230-kV substation, and upgrades to a number of existing lines and substations.

Engineering studies were conducted to evaluate conductors, structures, insulators and other line components, as well as to compare alternative corridors and optimize line design. A primary objective in all aspects of route selection and design was to minimize disruption of current land uses and environmental impacts of the project.

An extensive public outreach program was conducted that included community working groups and public open houses in all of the corridors that were considered for the project.

The application and environmental assessment for the project was filed with the California Public Utility Commission in August 2006, the final EIS/EIR for the project was published in October 2008 and the project was approved by the CPUC in December 2008. This was followed by approval by the Bureau of Land Management in January 2009.

Detailed engineering for the transmission line was finalized for the approved route during 2009. This involved many engineering challenges due to extreme terrain, large variations in elevation, extensive environmental constraints and compliance with numerous land owner requests.

Specifications were prepared to procure the materials for the project, including structures, conductors and insulator assemblies. S&L worked closely with the tower fabricator to develop 500-kV and 230-kV tower designs that comply with the Sunrise Powerlink design criteria.



230-kV & 500-kV Structures

Technical specifications were developed for construction, which were issued for bids in late 2009. Construction is expected to begin in 2010 and the project is scheduled to be completed in 2012.

SDG&E serves 1.4 million customers in a 4,100 square mile service territory in southern California.