

**Sargent & Lundy Services:**

- ❑ Surveying and Land Acquisition Services
- ❑ Permitting Support
- ❑ Substation Engineering & Design
- ❑ Overhead Transmission Design
- ❑ Underground Transmission Design
- ❑ Distribution Design

To keep up with the growth of the Las Vegas Resort Corridor and to meet future projected electrical demands, the new 138/12-kV Collman Substation is planned to be installed by NV Energy just west of the "The Strip" resort corridor in Las Vegas, NV. The substation and the associated 230/138-kV transmission line are essential to the bulk power supply and system reliability in the Las Vegas Valley.



Rendering of Collman Substation Enclosed by a Decorative Wall (Echelon Place Main Plant in Rear)

The Collman Substation, which is to be located at the northeast corner of Stardust and Industrial Roads, will be constructed in conjunction with the development a new casino resort, Echelon Place. A decorative wall will enclose the 138-kV gas-insulated substation, coordinated with the architectural design of the resort.

The transmission line will originate at NPC's existing Highland Substation, loop into the new Collman Substation and then terminate at the existing Decatur Substation. Total length of the line is approximately 5 miles. The segment of the line from Highland Substation to Flamingo Boulevard was designed to accommodate a future, overbuilt 230-kV circuit and the 138-kV circuit and

future 230-kV circuit along the Echelon property will be installed underground. Where the transmission line is constructed along easements that contain overhead 12-kV distribution circuits, those circuits will be transferred to the new transmission structures.

S&L's scope of work included support for the Special Use Permit application with Clark County, participation in a neighborhood open house regarding the proposed project, land acquisition support, overhead and underground transmission line design, distribution design, and substation engineering.

Engineering was initiated on August 1, 2007 and completed in early 2009. Construction of the project is currently on hold pending restart of the Echelon Place project.

S&L assembled a team that included Arcadis for permitting, Finley Engineering for surveying and land acquisition and USi/GAI for underground transmission design.



Rendering of 230/138-kV Transmission Line