

## Renewing California's Essential Electricity Infrastructure

Demand for power continues to grow throughout the region served by Edison International's regulated electricity utility, Southern California Edison (SCE). SCE customers have set nine demand records since 2003. To keep pace with growing peak demand, and ensure future service reliability, SCE is executing major infrastructure expansion and replacement projects. The company is investing up to \$20.4 billion over the next five years to expand and renew the region's essential distribution and transmission grids, making the power grid greener and smarter for nearly 14 million Californians.

### Infrastructure Project Goals

- Increasing power delivery capacity and system reliability
- Accessing untapped renewable energy resources
- Accessing lower-cost import power
- Reducing system congestion and related customer costs



### Expanding California's Power Super Highway

The projects that make up SCE's \$6.2 billion transmission expansion program will ensure that Californians have the solid, robust transmission

system essential to a dynamic, growing region. An example includes the historic Tehachapi Renewable Transmission Project, one of the nation's largest grids designed specifically to tap new renewable energy sources. Construction on the first three segments of the project began in 2008. When completed in 2013, the network will be capable of delivering enough power to serve almost 3 million households.

## Enhancing Community Distribution Grids

To expand and strengthen its power delivery system and support the growing number of customers within the region it serves, SCE is spending approximately \$9.7 billion on its local distribution network. In the process, SCE is creating one of the nation's most advanced grids including:

- Upgrading computer systems that dispatch repair crews and restore service more efficiently
- Installing pioneering technology to enable enhanced, automated monitoring of grid conditions, minimizing the number of customers affected by power failures and limiting damage to grid components
- Exploring emerging technologies that promise greater reliability, longer life and reduced customer costs

### Infrastructure Scope

SCE operates approximately 98,100 miles of distribution circuits and more than 850 substations, delivering power to approximately 4.9 million homes and businesses.

As part of its major infrastructure expansion and replacement project, during 2009 SCE expects to:

- Replace thousands of distribution and transmission poles reaching the end of their expected life
- Replace miles of primary underground cables
- Replace a number of substation transformers
- Build additional distribution circuits
- Expand the capacity of several distribution substations
- Continue construction of a large new transmission project linking the wind resources of the Tehachapi area with Southern California.

Proposed and approved transmission projects:

