

## The Future of the San Onofre Nuclear Generating Station



Southern California Edison (SCE) has begun the rigorous review process required prior to applying to the Nuclear Regulatory Commission (NRC) for the renewal of the operating licenses of the two reactors at the San Onofre Nuclear Generating Station near San Clemente, Calif. Plant personnel are conducting engineering assessments and evaluations to demonstrate that the San Onofre plant's systems and components can continue to operate safely for an additional 20 years beyond the current operating licenses' expiration date of 2022.

SCE is considering license renewal because of the growing importance of nuclear power to its customers and to California. Nineteen percent of the power used by SCE customers comes from nuclear generation. Nuclear power is one of the safest, most reliable, most affordable sources of electricity available. It is the region's largest single source of generation, and is a "baseload" facility, meaning its power is available 24/7. In addition, the plant's generating process does not directly emit greenhouse gases, providing much-needed support for California's ambitious air quality and climate change initiatives.

### Next Steps

If the SONGS co-owners decide to pursue license renewal, the next step in the process will be a request to the California Public Utilities Commission (CPUC) for funding to process a license renewal application at the NRC. The CPUC filing will include a cost-effectiveness analysis that will allow the commission to determine if the plant's continued operation would be beneficial for utility customers and the state.

### License Renewal Facts

- 71 U.S. commercial nuclear reactor units have received renewed licenses from the NRC – just under 70 percent of the nation's fleet.
- The NRC and the industry have not identified any generic technical limitations that would preclude U.S. commercial nuclear plants from operating safely beyond their original license periods.
- SCE has begun the license-renewal assessment now because managing a power system that serves nearly 14 million Californians requires planning well in advance to ensure reliability and affordability.

### Meanwhile, SCE is Improving Safety, Operating Efficiency and Reliability

Plant personnel are midway through several significant technology upgrades to better serve customers during the remaining decade of the plant's current license. These improvements will enhance power reliability and output, increase operating efficiencies and further reduce the already low radiological exposure levels of plant outage workers.

### New Reactor Vessel Heads

Plant personnel replaced the plant's original reactor vessel heads with components that reflect the design and metallurgy advances made during the past 25 years. The result will be reactors that are more reliable and more efficient.

### New High-Pressure Turbines

During the same 2012 outages, the plant's high-pressure turbines will be retrofitted with new components that increase reliability and power output.