

## 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 have begun the 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. The San Onofre plant is the largest single source of generation for a growing region, 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 climate change initiatives. The San Onofre plant also helps diversify SCE’s power portfolio, thereby helping stabilize customer rates when the cost of fuels such as natural gas fluctuates.

### Next Steps

The next step in the San Onofre plant’s license renewal 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

- 59 U.S. commercial nuclear reactor units have received license renewals from the NRC – roughly half 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, 40-year license periods.
- SCE has begun the license-renewal assessment now because managing a power system that serves nearly 14 million Californians requires planning 10 to 20 years in advance to ensure reliability and affordability.

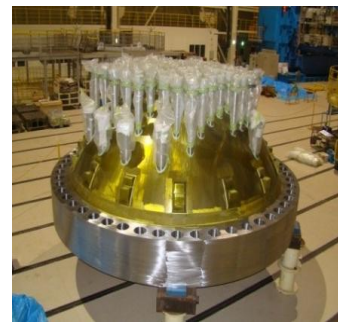
### Meanwhile, SCE’s Improving Safety, Operating Efficiency and Reliability

Plant personnel are midway through three 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 Steam Generators** (see Steam Generator Replacement backgrounder)

### New Reactor Vessel Heads

During 2012, plant personnel will replace 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 even safer, 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.



When these upgrades are completed, the plant will be able to produce 48 million additional watts of electricity with the same amount of fuel. That is enough extra power to meet the needs of 31,000 average Southern California homes.