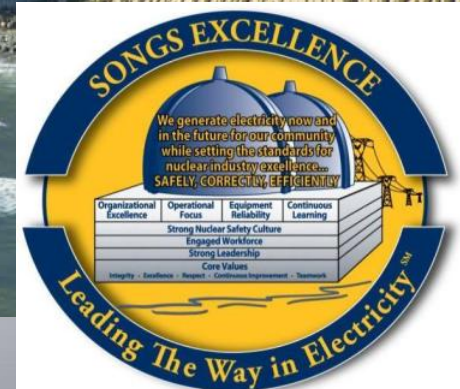


San Onofre Nuclear Generating Station (SONGS) Overview



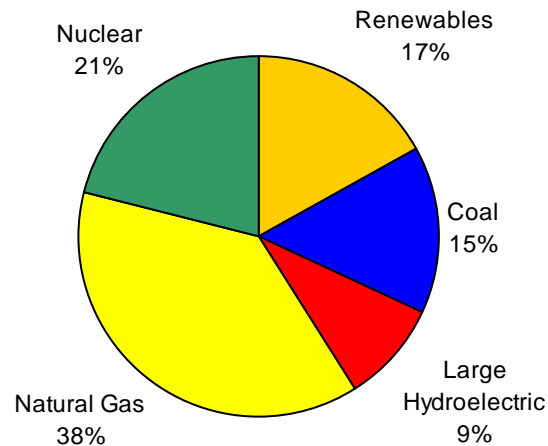
San Onofre Nuclear Generating Station

Leading the Way in Electricity

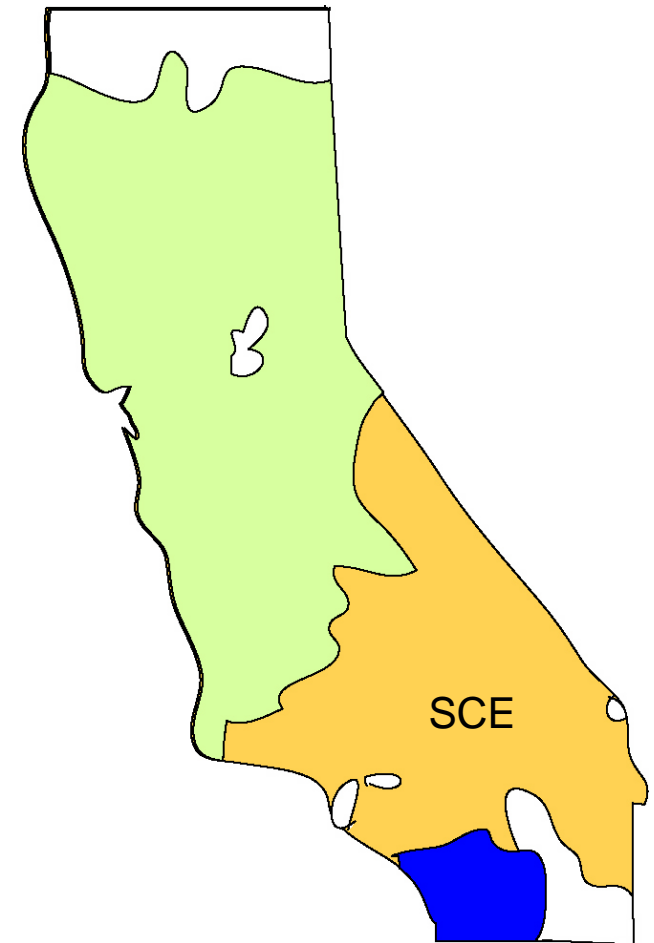


Southern California Edison

- Largest electric utility in CA
- Providing electricity for more than 120 years
- 50,000 square mile service area
- 12,000 miles of transmission circuits
- 100,000 miles of distribution circuits



SCE Generation Mix 2009



SONGS Unit 2 & 3



- Started construction: 1974
- Unit 2 on line: August 1983
- Unit 3 on line: April 1984
- Cost: \$4.5 billion
- Operating Licenses: 2022
- 1,070/1080 megawatts net per unit

Unit 1 was shutdown and dismantled after 25 years of service

Safety is #1 Priority

A Little Fuel Goes A Long Way

Uranium fuel pellets are the size of a fingertip

Contain as much energy as:

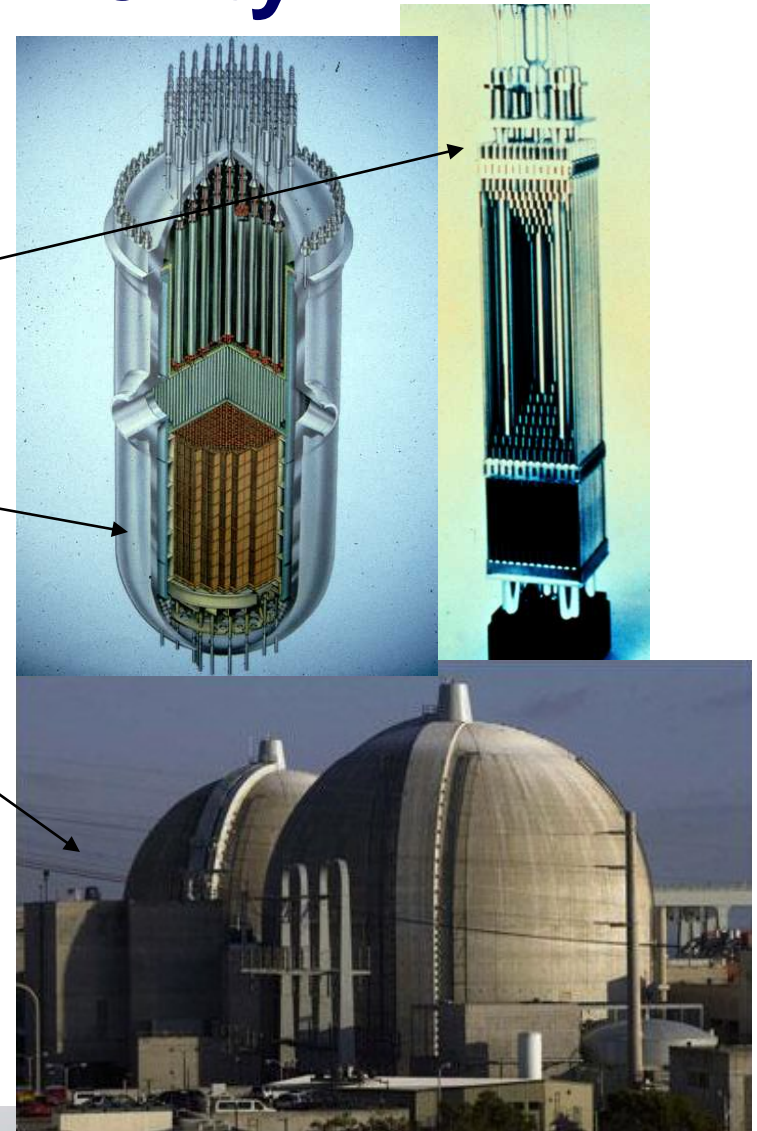
- 17,000 cubic feet of natural gas
- 1,780 pounds of coal
- 149 gallons of oil



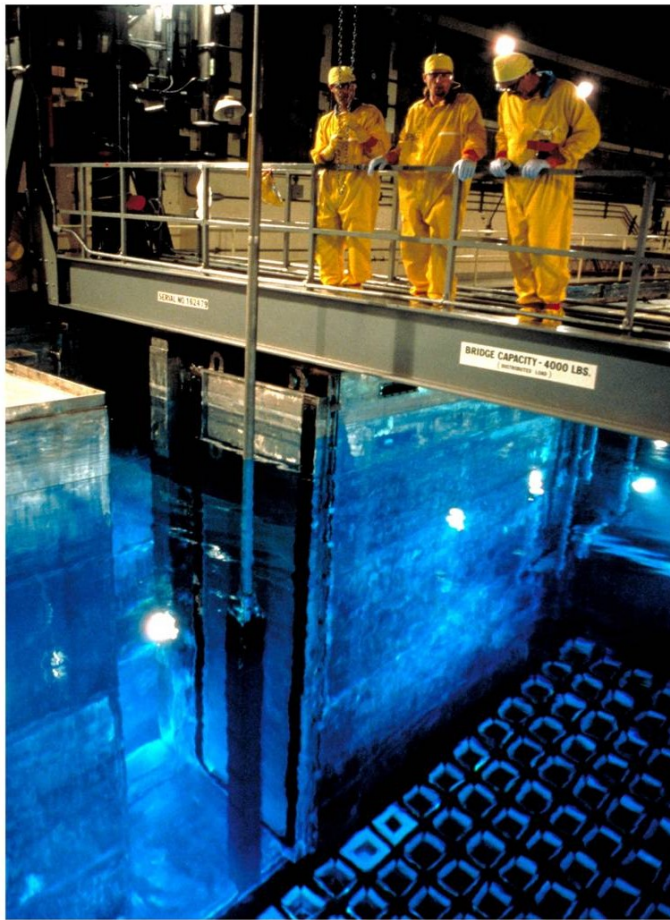
Safety is Our Priority

There are multiple layers of controls and engineered barriers to provide defense in depth

- Fuel pellets sealed in zirconium alloy (3370 °F melting point)
- Fuel bundles contained in a 3 to 9 inch thick reactor coolant vessel
- Reactor coolant vessel is in a 3 to 7 foot thick building of reinforced concrete
- Redundant safety systems minimize offsite consequences

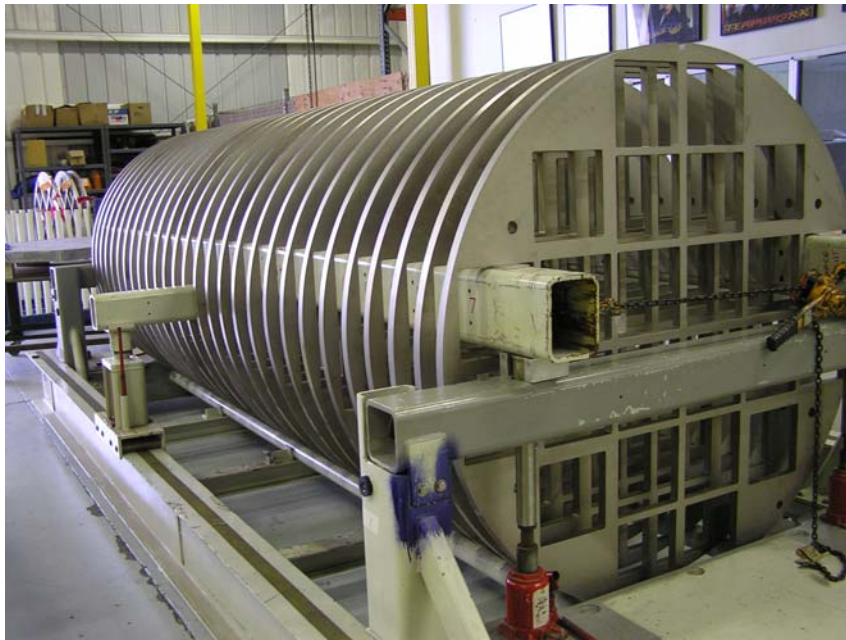


Engineered Pools



- Engineered pools are designed to
 - Remove residual heat
 - Prevent criticality
 - Ensure safe storage
- A dedicated pool for each reactor
- Designed to hold ~25 years of used fuel safely and securely

Used Fuel Canister

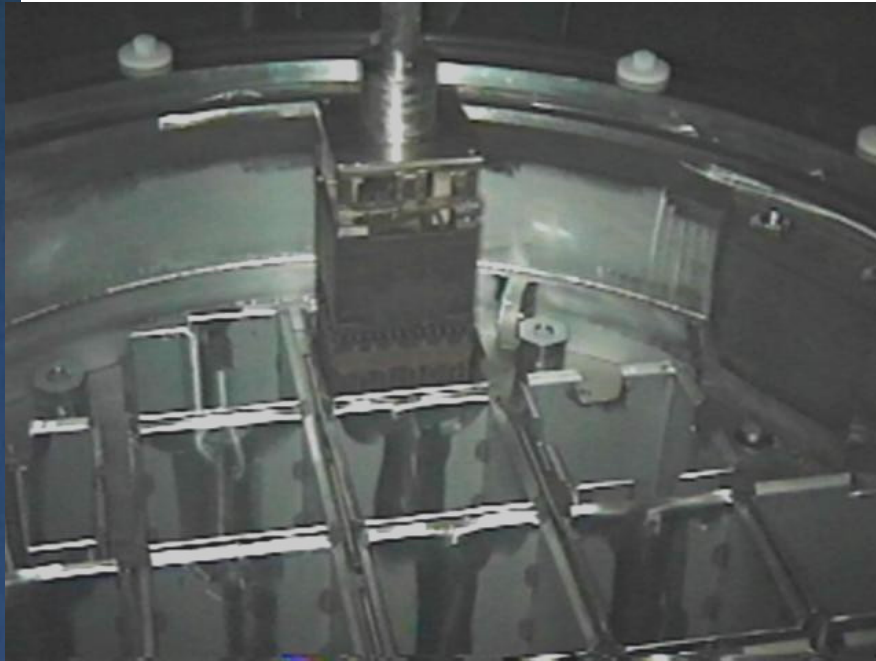


- Canisters are manufactured to national engineering standards:
 - Includes rigid internal support structure
 - provides shielding to reduce dose
- The dry cask storage system is certified by the Nuclear Regulatory Commission



Dry Cask Storage Module

Used Fuel Transfer and Storage



- Used fuel assemblies are transferred to robust steel canisters once they have cooled to acceptable levels in the used fuel pool.
- Canisters are drained and filled with helium before being sealed
- Sealed canisters are transferred to the secure dry cask storage facility for monitoring and management

Byproducts are Carefully Managed



- Used fuel is:
 - strictly regulated by the NRC
 - safely, securely, and economically stored on-site
 - Initially in pool
 - Later, in dry cask storage facility
- On-site dry cask storage is an interim solution that allows informed planning for long term safe disposition of used fuel
- Broad consensus that a geologic repository is the appropriate approach for permanent disposition and isolation of used fuel

Used Fuel is Managed to Protect Public Health

- NRC regulations for used fuel management ensure protection of public health and safety and the environment
- SCE uses fuel pools and dry storage to safely and securely manage used fuel generated during plant operation
- Both technologies have been successfully used at commercial nuclear power plant sites for more than 20 years
- SCE has sufficient room available at SONGS to accommodate used fuel generated by plant operation through the current licensed period and through an additional 20 years of operation