

Frequently Asked Questions About Nuclear Power

Q1 – Isn't nuclear energy the most dangerous way to generate electricity?

Actually, there has never been a nuclear accident in the U.S. that has endangered the health or welfare of the public. The most serious U.S. nuclear industry accident occurred in March 1979 at the Three Mile Island nuclear plant in Pennsylvania and resulted in no injuries.

Q2 – Didn't the 1986 accident at the Chernobyl nuclear plant in Ukraine prove the danger of nuclear generation?

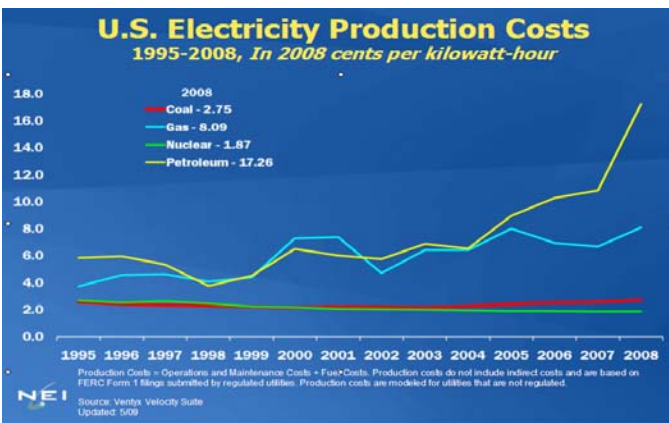
The Chernobyl accident was caused by two circumstances not present in the U.S. nuclear program – a flawed reactor design and inadequate personnel training. U.S. nuclear power engineering and plant operations have proved safe and reliable. In addition, a new generation of reactors now in development will be even safer.

Q3 – Aren't nuclear plants vulnerable to terrorist attack?

Nuclear plants are among the nation's most secure facilities. Southern California Edison (SCE) is continually making San Onofre even more secure, adding new technologies and practices that further safeguard the facility. When it comes to protecting San Onofre from possible security threats, SCE has left nothing to chance and spared no expense.

Q4 – Isn't nuclear power more expensive than other forms of generation because of plant construction cost?

It is true that nuclear power plants typically cost more to construct than their non-nuclear counterparts. However, the cost of producing power at nuclear plants is much lower. Therefore, the total cost utility customers pay over time for nuclear power can be much less than other forms of generation. As the graph below shows, nuclear power is very competitively priced.



Q5 – Nuclear power proponents sometimes claim nuclear plants are emission-free, but some aspects of nuclear-generation create emissions, don't they?

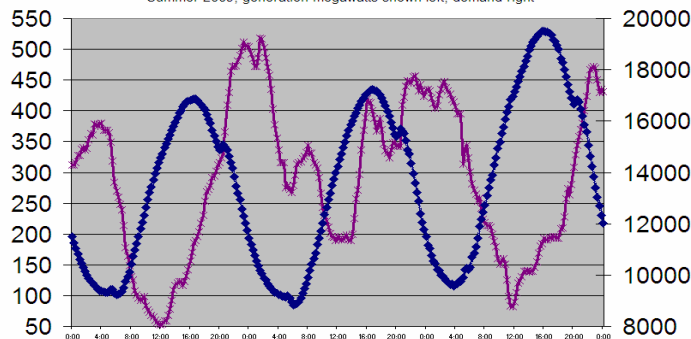
Yes. Mining and refining uranium ore, plant construction, transportation of plant resources and other activities create what are sometimes called "life cycle" emissions. These types of emissions are comparable to those of wind and solar generation facilities.

Q6 – Why do we continue depending on nuclear power when smaller renewable power projects could meet all of our needs?

SCE is committed to the maximum reasonable use of renewable energy, purchasing more wind, solar, biomass and geothermal generation than any U.S. utility. However, renewable generation technologies cannot replace proven, large-scale, reliable power sources such as nuclear because of predictability, costs and availability. For example, the output of California wind projects is strongest when customers need the least power and weakest when customers need the most power.

Total SCE Wind Generation vs. Total SCE Customer Demand

Summer 2009, generation megawatts shown left, demand right



Q7 – If nuclear generation is safe and beneficial, why are so many opposed to its continued use?

Much of the opposition to nuclear power is based on inaccurate information and preconceptions. Public-opinion research reveals changing attitudes about this source of energy. A survey of 1,200 Californians conducted in July 2008 found the following:

- 71 percent of respondents in SCE's service territory approve of nuclear generation.
- 66 percent of respondents in SCE's territory believe the state's two nuclear plants are safe.
- Climate change is a major concern to Californians and one reason for increasing support of the state's nuclear plants.