What's Wrong with Nuclear Power ?

Eight nuclear reactors are currently proposed for Texas, six of which are moving forward in the licensing process now. At a time when cleaner, safer and cheaper alternatives are available, pursuing nuclear power makes no sense.

Cost

- **Nuclear power is expensive.** Costing up to 17 cents per kilowatt-hour, nuclear power is more expensive than both wind and solar power. Proposed reactors at Comanche Peak are expected to cost $22 billion.
- **Cost overruns are the norm**. The South Texas Project was eight years late coming online and almost six times over budget!
- **Nuclear power would not exist without taxpayer-funded subsidies,** like loan guarantees, because Wall Street is unwilling to take the huge risks of investing in nuclear power.

Water

- **Nuclear power is the most water intensive energy source and Texas is in a DROUGHT!** The additional units proposed for Comanche Peak would withdraw 63,230 gallons per minute or 103,717 acre-feet per year from Lake Granbury with roughly two-thirds lost to evaporation!

Safety

- **Accidents Happen!** "Near misses" and a partial meltdown have taken place in the U.S. recently. Human error, insufficient maintenance, and poor oversight increase the likelihood of accidents.
- **Health impacts and cancer risks from routine releases of radiation at nuclear plant sites!**
- **Profit over safety.** Cost cutting measures and profit margins are prioritized over safety; government oversight is inadequate.

Cooling tower collapse at the Vermont Yankee Nuclear Power Plant. August, 2007.

Davis-Besse, Ohio 2002
Severe degradation of the nuclear reactor vessel head that went unnoticed for years. In 2002, it was discovered that a 3/8"metal cladding was all that contained the essential coolant pressure boundary of the reactor vessel.

The South Texas Project, 2003
Radioactive leakage found in inspection at South Texas Project.

Security

- **Terrorism Risks!** Original Al-Qaeda plans for 9-11 included flying 2 airplanes into nuclear power plants.
- **Sleeping Security Guards!** (www.ucsusa.org/assets/documents/nuclear_power/20071009-pch-ucs-nrc-sleeping-security-guards.pdf)
- **Oversight by Nuclear Regulatory Commission (NRC) is wholly inadequate.** Security violations are minimized. Preventing, identifying and/or resolving security issues are not a priority. (www.gao.gov/new.items/d03752.pdf)

Radioactive Waste

- **Waste from nuclear power plants is dangerous now and stays radioactive for millions of years!**

- **No solution exists, after 50 years!** The Yucca Mountain site was determined to be inadequate by the Obama administration and abandoned. Even if it were still an option, existing plant wastes would fill up Yucca Mountain by 2010.
- **Spent fuel stored on site at nuclear power plants is a huge security risk.**
- **Reprocessing is not the solution.** Total volume of waste goes up and it isolates easily transportable weapons grade plutonium.

Proliferation

- **Nuclear power fosters weapons proliferation.** There is no proliferation-free nuclear technology.
- **Building new nuclear power plants would bring uncalculated proliferation risks**. Currently, there is enough enriched uranium and separated plutonium in the world to make more than 100,000 nuclear weapons!

Nuclear Power is NOT the Solution to Climate Change !

- **Climate change is happening faster than scientists expected!** We need to act now and the long lead-time of at least 10 years for nuclear power plants to be licensed, built and come online makes it impossible for nuclear power to impact climate change.
- **It's not possible!** New reactors would have to come online every two weeks from now until 2050 to make a 20% reduction in carbon emissions, YET there's only one place in the world capable of building reactors and it can only build 4 to 12 per year!
- **Nuclear power is unreliable,** and seriously affected by changing climate conditions. Elevated water temperatures have caused nuclear power reactors to be taken off-line.
- **Pursuing nuclear power would divert precious resources from truly addressing climate change.** We need to pursue sustainable solutions, which are available and can be implemented now! It's both technically and economically feasible for the U.S. to go carbon-free and nuclear-free by 2050 with a strong commitment to energy efficiency, renewable energy sources, and a smart grid. (www.carbonfreenuclearfree.org)

This factsheet was produced by Sustainable Energy and Economic Development (SEED) Coalition. Learn more at www.NukeFreeTexas.org