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THINK NEW ATOMIC REACTORS CAN BE BUILT CHEAPLY AND ON-TIME?

THINK AGAIN!

The Bush Administration and nuclear power industry have asserted that new nuclear reactors—unlike the current generation--would be built at competitive prices and on schedule.

The Nuclear Energy Institute, for example, has made repeated claims that new power reactors can be built for about \$1,500-\$2,000/kw.¹ This means a standard 1,000 MW reactor could be built for about \$1.5-\$2.0 billion; a large 1,500 MW reactor would be expected to cost about \$2.25-\$3 billion.

Current real-world experience shows that these claims are just pipedreams.

*On July 11, 2006, the Finnish government reported that the construction schedule for its new EPR (European Pressurized Reactor) already has slipped by a full 12 months—and construction of this reactor began only 15 months ago, in April 2005!² Cost for this 1600 MW reactor is estimated to be three billion Euros, or about \$3.7 Billion dollars, and that is with extremely favorable loan interest rates that wouldn't be available to private US utilities. Several US utilities, such as Constellation Energy, have expressed interest in the EPR design.

*In June 2006, Toshiba purchased the world's largest manufacturer of atomic reactors: Westinghouse. The company heralded the purchase by asserting that Westinghouse could expect 20 or more new reactor orders in the next several years. Industry analysts quoted by Reuters said each reactor order would be worth \$2.6 Billion to Toshiba, a price already above the NEI's stated cost goal.³ Since Toshiba only supplies the reactors and doesn't perform the construction, nor much of the non-nuclear side of the plant, actual prices for a fully-constructed Westinghouse reactor can be expected to reach at least the range of the EPR, and probably even higher. On the other hand, the cost of the EPR can be expected to increase as further construction delays are experienced.

¹ For example, see Nuclear Energy Institute Wall Street Briefing, "A Solid Business Platform for Future Growth," February 2, 2006, http://www.nei.org/documents/Wall_Street_Briefing_2-2-06.pdf "To be conservative, the NEI financial analysis assumes a capital cost of approximately \$2,000 per kilowatt for the first few plants built, declining to approximately \$1,500 per kilowatt for the later plants."

² "Finland's 5th Nuclear Reactor Delayed," Tuesday July 11, 2006, by Matti Huuhtanen, Associated Press

³ "Toshiba sees US nuke plant orders for Westinghouse," Tuesday, June 27, 2006, Reuters


In short, anyone thinking a new generation of atomic power reactors can be built at competitive prices should think again—and think hard.

One more quick news item: in July 2006, it was reported that uranium prices have risen some 600% over the past five years: from \$7.25/pound in January 2001 to \$45.50/pound in June 2006. Continued price rises would threaten nuclear power's traditional operating cost advantage over some other fuel sources (coal, gas), making nuclear's economics outlook even bleaker.

Michael Mariotte
Executive Director
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New fact sheets on NIRS website: View them and use them!

[Are Federal Permissible Standards for Tritium Too Permissive?](#)  New NIRS fact sheet

[Why New Nukes are Risky.](#)  Coalition briefing paper on the economic risks of nuclear power, presented to Wall Street analysts.

[Nuclear Power and Climate: Why Nukes Can't Save the Planet.](#)  NIRS factsheet.

And don't forget to send this link to all of your friends/work colleagues/church groups/college classmates and everyone you meet to encourage them to sign the Petition for A Sustainable Energy Future! <http://www.nirs.org/petition/index.php?r=ft>