



► The nuclear power industry is lobbying Congress to establish a “Permanent Financing Platform” using federal tax dollars to award unlimited loan guarantees for new reactors, a move grassroots activists are working to stop.

► Taxpayers would also carry much of the cost burden of a major reactor accident. The 2005 re-authorization of the Price-Anderson Act caps the nuclear industry’s collective liability for an accident (until 2025) at \$10 billion. The 1986 Chernobyl accident has already cost governments hundreds of billions of dollars.

► More than \$30 billion in ratepayer funds have gone into the Nuclear Waste Fund even though no viable solution for the radioactive waste problem has yet been found. More than \$10 billion of the Fund have already been wasted on the halted Yucca Mountain project.

WHAT YOU CAN DO

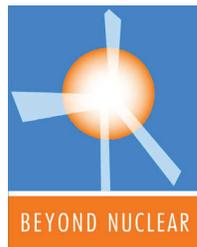
► Contact your Senators and Representative, and the White House. Urge them to oppose federal subsidies and loan guarantees for the 50-year old commercial nuclear power industry. Join our **ActNow!** campaign and sign the petition our website under **ActNow!**

► Work to make certain your state does not include nuclear power in its Renewable Portfolio Standard. Oppose *Construction Work in Progress* at the state level, which would force ratepayers to pay for reactor construction in advance of electricity generation.

TAXPAYERS TO FILL FINANCIAL VOID

► Nuclear power industry executives admit that new reactors cannot be built without federal loan guarantees. However, such loans clearly would shift known financial risks to federal taxpayers, stranding them with massive debt in the billions of dollars if utilities default — a risk the Congressional Budget Office considers “to be very high — well above 50 percent.”

► A total of \$18.5 billion has been Congressionally approved in loan guarantees for potential new reactors. However, President Obama has requested a total of \$54.5 billion in loan guarantees for new plants and has already awarded the first \$8 billion for two new reactors in Georgia. The Department of Energy has also now awarded \$2 billion in federal loan guarantees to French corporation, Areva, for a uranium enrichment facility in Idaho.



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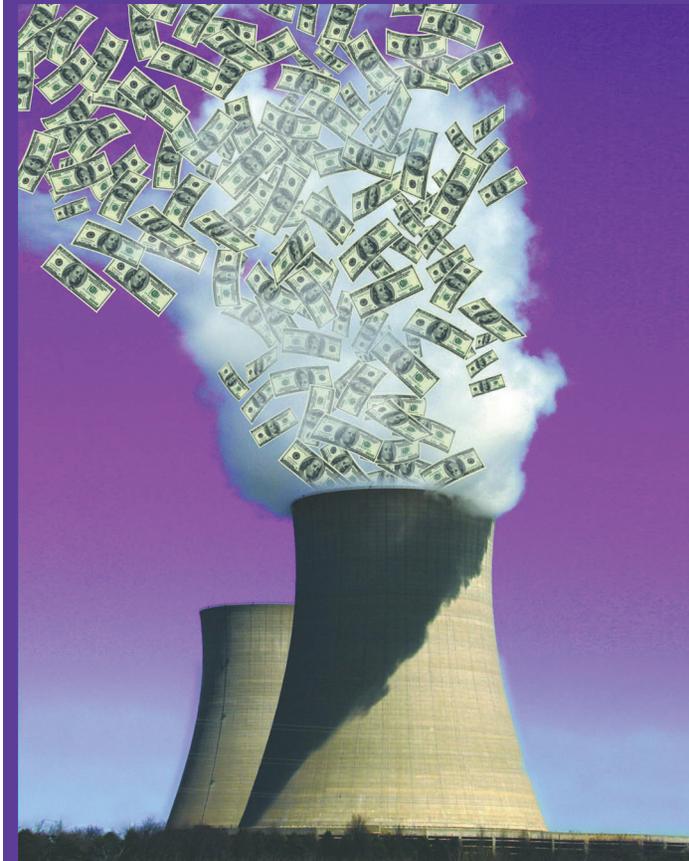
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Updated September 2010



The Extreme Costs of Nuclear Power



www.beyondnuclear.org

**“The U.S. may never need to build new nuclear or coal-fired power plants . . . they’re too expensive.”
Jon Wellinghoff, chairman, Federal Energy Regulatory Commission, April 2009.**

INTRODUCTION

The nuclear power industry has reaped the lion’s share of public support since its inception more than 50 years ago, garnering an estimated \$500 billion in taxpayer and ratepayer subsidies and other financial support. Despite federal backing, the industry was a financial catastrophe due to design changes, cost overruns and construction delays even before the Three Mile Island and Chernobyl nuclear accidents. While the industry and its political champions continue to trumpet a revival in new reactor construction, a repetition of the industry’s financial failure is now only amplified in what is expertly described as “a first class train wreck.”

SOARING COSTS AND RISKS

- ▶ In 2006, Standard & Poor’s analysis of nuclear power development found “nuclear generation generally to have the highest overall business risk compared with other types of generation.”
- ▶ By 2007, Moody’s Investment Services acknowledged that this growing risk was due to the “size and complexity of the project, the long-term nature of the construction cycle and the uncertainties associated with all-in [total] costs, regulatory oversight” and many other unknowns.
- ▶ In 2008, Fitch Ratings’ “Know Your Risks” predicted the “high end” construction costs at \$9,000 per kilowatt — escalating the cost of a 1600 megawatt reactor to \$14.4 billion per unit.



- ▶ By 2009, Pennsylvania Power and Light acknowledged its cost to build a French-designed 1600 megawatt Evolutionary Power Reactor (EPR) had risen to between \$13 billion and \$15 billion for one single unit.
- ▶ A 2009 study by Dr. Mark Cooper of the Institute for Energy and the Environment at Vermont Law School, projected that 100 new reactors would cost between \$1.9 to \$4.4 trillion more than meeting the equivalent electricity demand with efficiency and renewable energy sources.
- ▶ Another 2009 report by Citigroup GlobalMarkets Inc. entitled “New Nuclear – The Economics Say No,” identified that construction costs, power price and operational costs for new reactors are large and variable enough so as to be dubbed “The Three Corporate Killers.”
- ▶ By 2010, France’s flag ship construction project in Finland for its worldwide marketing of the EPR design had fallen four years behind schedule and its projected final cost escalated by 90%. Elsewhere in Europe, new reactor cost estimates had more than doubled.

HISTORY REPEATS ITSELF

- ▶ All U.S. nuclear reactors, of the current operating generation, ordered after 1973 were canceled, largely due to excessively high costs and financial risks.
- ▶ During the 1970s and ‘80s, the nuclear industry abandoned 121 reactors either before or during construction (with sunk costs in the tens of billions of dollars passed onto shareholders and electricity consumers) and those that were completed led to still larger increases in electricity rates.
- ▶ The nuclear industry deservedly earned a notorious track record for inaccurate cost estimates. The actual costs of 75 of the current generation of U.S. nuclear reactors exceeded initial estimates by more than triple their projected costs. As a result, investment banks are no longer willing to finance new nuclear plant projects.
- ▶ The exorbitant, unpredictable construction costs plus the global recession caused a Wall Street analyst to predict, in late 2008, that “many utility companies will be ‘pressing the pause button’ on new nuclear plants.”
- ▶ In 2009, Moody’s viewed the nuclear industry’s “bet the farm” adventure as such a gamble that the financial service would take a “more negative view” of companies seeking to build new reactors. Moody’s added that federal loan guarantees “will only modestly mitigate increasing business and operating risk profiles”.
- ▶ By 2010, nine of the 26 new reactor units applied for by U.S. nuclear power companies since 2007, have been cancelled or indefinitely suspended including new construction applications submitted by Missouri-based utility Ameren and Chicago-based Exelon Nuclear.