

Existing Subsidies and Incentives for New Nuclear Reactors

Research and Development

- Generation IV program to develop new reactor designs
- Research and development of radioactive waste reprocessing and transmutation technologies
- Investment in human resources and infrastructure in the nuclear sciences and engineering fields through fellowships and visiting scientist programs; student training programs; collaborative research with industry, national laboratories, and universities; upgrading and sharing of research reactors; and technical assistance

Licensing

- Nuclear Power 2010, a taxpayer-industry cost-share program to fund Nuclear Regulatory Commission licensing of new reactors, as well as the certification of Generation 3.5 reactor designs
- One-step construction and operation license application process that limits public participation

Construction subsidies ~ \$3.25 billion + \$18.5 billion in loan guarantees

- \$18.5 billion in loan guarantees for new reactors. According to the Congressional Budget Office, the default rate is “very high – well above 50 percent.”
- Authorization of \$2 billion in “risk insurance” to pay the industry for any delays in construction and operation licensing for 6 new reactors, including delays due to the Nuclear Regulatory Commission or litigation. The payments would include interest on loans and the difference between the market price and the contractual price of power.
- Authorization of more than \$1.25 billion for a nuclear reactor in Idaho to generate hydrogen fuel

Operating subsidies ~ \$5.7 billion + Limited Liability

- Reauthorization of the Price-Anderson Act, extending the industry’s liability cap to cover new nuclear power plants built in the next 20 years
- Incentives for “modular” reactor designs (such as the pebble bed reactor, which has never been built anywhere in the world) by allowing a combination of smaller reactors to be considered one unit, thus lowering the amount that the nuclear operator is responsible to pay under Price-Anderson
- Production tax credits of 1.8-cent for each kilowatt-hour up to 6,000 megawatts of nuclear-generated electricity from new reactors during the first 8 years of operation, costing \$5.7 billion in revenue losses to the U.S. Treasury through 2025

Radioactive waste subsidies ~ \$22 billion thus far + guaranteed waste removal

- DOE-utility contracts guaranteeing that the nuclear waste will be removed from the site within 10 year of shutdown or the US taxpayer pays for spent fuel storage costs
- One mil (one-tenth of one cent) per kilowatt-hour paid by ratepayers receiving electricity from nuclear reactors to pay for a geologic repository for the spent fuel; the Nuclear Waste Fund currently has \$22 billion

Shut-down subsidies ~ \$1.3 billion

- Changes the rules for nuclear decommissioning funds that are to be used to clean up closed nuclear plant sites by repealing the cost of service requirement for contributions to a fund and allowing the transfer of pre-1984 decommissioning costs to a qualified fund, costing taxpayers \$1.3 billion