

Buyers Up • Congress Watch • Critical Mass • Global Trade Watch • Health Research Group • Litigation Group Joan Claybrook, President

Nuclear Giveaways in the Energy Policy Act of 2005

The Energy Policy Act of 2005 (H.R. 6) signed into law by President Bush in August 2005 contains more than **\$13 billion in cradle-to-grave subsidies and tax breaks**, as well as unlimited taxpayer-backed loan guarantees, limited liability in the case of an accident, and other incentives to the mature nuclear industry to build new nuclear reactors.

Given the latest revelations about data falsification in analyses of the proposed Yucca Mountain repository site – in addition to other numerous unresolved problems at the site – and the reports by the National Academy of Sciences and the Government Accountability Office pointing out security vulnerabilities of the highly radioactive waste stored at reactor sites, the government should not be promoting the construction of new reactors, which will only add to the nuclear waste problem. More taxpayer handouts to the nuclear industry are not part of a sensible and responsible energy plan.

Nuclear subsidies in the Energy Policy Act of 2005:

R&D subsidies = \$2.9 billion

- Authorization of more than **\$432 million** over 3 years for nuclear energy research and development, including the Department of Energy's (DOE) *Nuclear Power 2010* program to construct new nuclear plants, and its *Generation IV* program to develop new reactor designs [Sec. 951 and 952]
- Authorization of **\$580 million** over 3 years for DOE's program for research and development of nuclear reprocessing and transmutation technologies, which reverses the long-standing U.S. policy against it and needlessly augments security and environmental threats [Sec. 951 and 953]
- Authorization of **\$420 million** over 3 years for DOE to develop a plan to improve infrastructure at national laboratories for nuclear energy R&D, including a plan for the facilities at the Idaho National Laboratory [Sec. 951 and 955]
- Authorization of **\$149.7 million** over 3 years for DOE to invest 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. This program would further subsidize the nuclear industry and entrench nuclear power research within the university system. [Sec. 941 and 944]
- Authorization of **\$1.1 billion** over 3 years for the Fusion Energy Sciences program for fusion energy R&D. Authorization for DOE to negotiate an agreement for the United States to participate in the ITER (International Fusion Energy Project). Requirement of DOE to submit a plan for a domestic burning plasma experiment if ITER becomes "unlikely or infeasible." The fusion process requires deuterium and tritium, and would produce low-level radioactive waste [Sec. 961 and 962]
- Authorization of **\$100 million** for DOE to establish two demonstration projects for the commercial production of hydrogen at existing reactors [Sec. 634]

- Authorization of **\$18 million** over 3 years for DOE to survey industrial applications of radioactive sources and develop a R&D plan for developing small particle accelerators [Sec. 951 and 957]
- Requirement of DOE to use 0.9 % of its applied energy R&D budget for matching funds with private partners to promote "promising technologies" for commercial use, which could include nuclear power technologies [Sec. 1001]
- Authorization of **\$60 million** over 3 years for DOE to give grants to train technical personnel in fields in which a shortage is identified, including the nuclear power industry, which has been very vocal about its shortage of skilled workers [Sec. 1101]
- Authorization of **\$250,000** for research and development to use radiation to refine oil [Sec. 1406]

Construction subsidies = \$3.25 billion +

- 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 [Sec. 638]
- Authorization of more than **\$1.25 billion** from FY2006 to FY2015 and "such sums as are necessary" from FY2016 to FY2021 for a nuclear plant in Idaho to generate hydrogen fuel, a boondoggle that would make a mockery of clean energy goals [Sec. 641-645]
- Exemption of construction and operation license applications for new nuclear reactors from an NRC antitrust review [Sec. 625]
- Unlimited taxpayer-backed loan guarantees for up to 80% of the cost of a project, including building new nuclear power plants. Authorizes "such sums as are necessary," but if Congress were to appropriate funding for loan guarantees covering six nuclear reactors, this subsidy could potentially cost taxpayers **approximately \$6 billion** (assuming a 50% default rate and construction cost per plant of \$2.5 billion, as Congressional Budget Office has estimated) [Title XVII]

Operating subsidies = \$5.7 billion +

- Reauthorization of the Price-Anderson Act, extending the industry's liability cap to cover new nuclear power plants built in the next 20 years [Sec. 602]
- 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 [Sec. 608]
- Weakens constraints on U.S. exports of bomb-grade uranium [Sec. 630]
- Production tax credits of 1.8-cent for each kilowatt-hour of nuclear-generated electricity from new reactors during the first 8 years of operation for the nuclear industry, costing **\$5.7 billion** in revenue losses to the U.S. Treasury through 2025. Considered one of the most important subsidies by the nuclear industry [Sec.1306]

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** [Sec. 1310]