SAFE ENERGY COMMUNICATION COUNCIL FACTSHEET

IS THE PRICE-ANDERSON ACT A SUBSIDY?
GOVERNMENT STUDIES DETERMINED IT IS

Industry Claims Unsupported

The nuclear power industry strongly asserts that the limited liability protection afforded to nuclear power plant operators under the Price-Anderson Act is not a subsidy. According to Senate testimony by Marvin Fertel, Senior Vice President of Business Operations for the Nuclear Energy Institute, "The cost of Price-Anderson coverage is included in the cost of electricity; it is not a federal subsidy."[1]

Despite the clever wording of this statement (the *reduced* cost of insurance due to Price-Anderson *is* passed through in the cost of electricity) several government studies of energy subsidies explicitly conclude that the limited liability protection provided by Price-Anderson constitutes a subsidy.

> Without Price-Anderson, the utilities would have to purchase [full] liability insurance. They would also have to estimate a cost for the uncertainty that a potential loss might exceed the liability limits available on the private market. These costs would be passed on to the consumer in higher electricity prices. The price of nuclear power would therefore increase and the utilities would have to decide whether nuclear power could be competitive and profitable in relation to other energy sources.
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> Pacific Northwest National Laboratory, ***An Analysis of Federal Incentives Used to Stimulate Energy Production*** (Washington, DC: U.S. Department of Energy, 1978), p. 116.

A 1992 analysis of energy subsidies by the U.S. Department of Energy, *Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets*, describes Price-Anderson as, "A Federal regulation that continues to have a cost-reducing effect on the nuclear power industry."[2] According to the DOE analysis, conducted by the Energy Information Administration (EIA):

> These [liability] limits provide a subsidy to the nuclear industry to the degree private insurance premiums paid by operators of individual plants are reduced. In a 1983 study, the NRC concluded that the liability limits were sufficiently significant to constitute a subsidy. However, a quantification of the amount of the subsidy was not attempted. At issue are the probability distributions for various kinds of accidents and valuations of the consequences of accidents, all done on a plant-by-plant basis. The amount of the subsidy would then be found by calculating the differential effect on the insurance premium of imposing the liability limits.[3]

EIA determined that the subsidy to the nuclear power industry as a whole was valued at $3.05 billion annually ($1991).[4] Prior to this analysis, the Nuclear Regulatory Commission determined that the Price-Anderson Act constituted a subsidy in its congressionally mandated report on the Act in 1983, concluding, "the subsidy is real."[5]

In a 1975 report, the General Accounting Office (GAO) calculated the value of the subsidy provided by Price-Anderson based on the estimated additional cost of insurance absent the Price-Anderson limit on liability and current insurance premiums at the time.[6] GAO determined that the value of the annual subsidy was between $403,000 and $317,000 and per reactor ($2001), depending upon whether one or more reactors were located at each site. This estimate assumed that two-thirds of the insurance premiums paid were refunded to licensees after 10 years of accident-free operation. This subsidy value obviously does not reflect current premiums or the increase in premiums as a result of the September, 2001 terrorist attacks. American Nuclear Insurers recently announced that it has raised premiums for the $200 million in primary insurance it provides for nuclear reactors by 30% as a result of the increased risk due to the attacks.[7]

Another study concluded that the subsidy provided is of much greater value. Economists from Stanford and the California Institute of Technology estimated in a 1990 analysis, published in the journal *Contemporary Policy Issues*, that Price-Anderson provided an annual subsidy of $32 million per reactor ($2001).[8] The Energy Information Administration relied on the results from this analysis when determining the value of the Price-Anderson subsidy in its 1992 study.[9]

The Price-Anderson Act and Electricity Restructuring

The regulatory landscape of the electric power industry has dramatically shifted in recent years, challenging the assumptions under which the Price-Anderson Act was designed. When Price-Anderson was originally enacted electricity was provided to consumers by regulated monopoly utilities subject to federal and state oversight. By contrast, any proposed new nuclear power plants are likely to be developed as merchant plants by unregulated independent power producers. These unregulated generators (technically referred to as Exempt Wholesale Generators) are also purchasing existing nuclear plants . Unregulated generators do not have an obligation to serve the public and are not subject to oversight by state public utility commissions. Many unregulated generators are owned by limited liability corporations that utilize limited recourse project financing to finance construction and/or refurbishment. These project companies, which are legally structured to avoid exposing their corporate parents to liability in the event of financial default, are likely to be thinly capitalized, highly leveraged entities.

In deregulated wholesale electricity markets, independent power producers should be required to incorporate the cost of retaining insurance into the economics of electricity generated by nuclear power. The extension of Price-Anderson liability protection to these unregulated generators allows them to avoid fully internalizing the risk of accident into the cost of generation, thereby extending a competitive advantage to nuclear generators compared to other generators competing in wholesale power markets. This serves to further distort nascent electricity markets, already subject to potential market power abuses, by conveying a competitive advantage to a single class of electricity generators.

While it did not envision electricity restructuring, a Pacific Northwest National Laboratory analysis of federal energy subsidies did acknowledge that the limit on liability

provided by Price-Anderson altered the comparative economics of nuclear power relative to other sources of electricity. This finding is important today, in light of industry claims that existing nuclear power plants are cost competitive in deregulated wholesale power markets:

Since its enactment in 1957, there has been much discussion about whether, and to what extent, Price-Anderson indemnification has been a subsidy for nuclear energy. In analyzing this question, two items to consider are 1. the Price-Anderson Act removed a stumbling block to the development of nuclear power and 2. the cost of potential liability was not borne by the nuclear industry, so the apparent economic competitiveness of nuclear power with other energy sources may be misleading.[10]

Notes:

1. Testimony of Marvin Fertel, Senior Vice President of Business Operations, Nuclear Energy Institute, before the Senate Environment and Public Works Committee, Subcommittee on Transportation, Infrastructure and Nuclear Safety, United States Senate, January 23, 2002.
2. Energy Information Administration, *Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets* (SR/EMEU/92-02) (Washington, DC: U.S. Department of Energy, 1992), p. 77.
3. Energy Information Administration, *Federal Energy Subsidies*, p. 77-78.
4. Energy Information Administration, *Federal Energy Subsidies*, p. 72.
5. U.S. Nuclear Regulatory Commission, *The Price-Anderson Act: The Third Decade* (NUREG-0957) (Washington, DC: U.S. Nuclear Regulatory Commission, 1983). Quoted in Jeffrey Dubin and Geoffrey Rothwell, "Subsidy to Nuclear Power through Price-Anderson Liability Limit," *Contemporary Policy Issues*, 8, July 1990, p. 73-79.
6. U.S. General Accounting Office, *Selected Aspects of Nuclear Powerplant Reliability and Economics* (RED-76-7) (Washington, DC: U.S. General Accounting Office, 1975). Cited in U.S. General Accounting Office, *Nuclear Power Costs and Subsidies* (EMD-79-52) (Washington, DC: U.S. General Accounting Office, 1979), p. 20; and Pacific Northwest National Laboratory, *An Analysis of Federal Incentives Used to Stimulate Energy Production* (Washington, DC: U.S. Department of Energy, 1978), p. 117.
7. Testimony of John Quattrocchi, Senior Vice President, Underwriting, American Nuclear Insurers, before the Senate Environment and Public Works Committee, Subcommittee on Transportation, Infrastructure and Nuclear Safety, United States Senate, January 23, 2002.
8. Jeffrey Dubin and Geoffrey Rothwell, "Subsidy to Nuclear Power Through Price-Anderson Liability Limit," *Contemporary Policy Issues*, 8, July 1990, p. 73-79.
9. Energy Information Administration, *Federal Energy Subsidies*, p. 72.
10. Pacific Northwest National Laboratory, *An Analysis of Federal Incentives Used to Stimulate Energy Production* (PNL-2410 REV.) (Washington, DC: U.S. Department of Energy, 1978), p. 116.

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