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Price-Anderson Act: The Billion Dollar Bailout for Nuclear Power Mishaps

The Price-Anderson Act bestows a twofold subsidy on the nuclear industry. First, the Act artificially limits the amount of primary insurance that nuclear operators must carry – an uncalculated indirect subsidy in terms of insurance premiums that they don't have to pay. This distorts electricity markets by masking nuclear power's unique safety and security risks, granting nuclear power an unfair and undesirable competitive advantage over safer energy alternatives. Second, Price-Anderson caps the liability of nuclear operators in the event of a serious accident or attack, leaving taxpayers on the hook for most of the damages. This makes capital investment in the nuclear industry more attractive to investors because their risk is minimized and fixed.

Consequently, the Act is a dual-edge sword for the public that it purportedly protects. The legislation was intended first of all to bolster investor confidence, whereas victim compensation is secondary. Price-Anderson establishes only phantom insurance for the public, then provides a real bailout mechanism for the nuclear energy industry by reducing its need to pay for insurance, subsidizing the industry at the taxpayers' expense.

If proposed new reactors are as safe and economical as the nuclear industry claims, the industry should be able to privately insure these ventures without an extension of the Price-Anderson crutch. When Congress first enacted Price-Anderson in 1957, it was designed to be a temporary measure to prop up an infant industry. After nearly five decades and billions in hand-outs, it is impossible to justify extending subsidies like the Price-Anderson Act.

Price-Anderson expired for new reactors in December 2003, but was reauthorized for another 20 years in the energy bill that was signed into law on August 2005.

Understanding how the Price-Anderson Act provides a crutch for nuclear energy is important for all citizens concerned about the United States' continued reliance on nuclear power and the vulnerability of nuclear plants to terrorist threats.

What is the Price-Anderson Act?

The Price-Anderson Act became law in 1957 as part of amendments to the Atomic Energy Act of 1954. The Act sets a limit on the monetary liability of companies for a nuclear accident, and defines the procedural mechanisms for the industry's insurance coverage.

Under the Nuclear Regulatory Commission's (NRC's) corresponding regulations, nuclear reactor owners must obtain \$300 million in insurance liability coverage from a private insurer, referred to as *primary financial protection*. One company – Connecticut-based American Nuclear Insurers – provides 100 percent of this primary financial protection. In the event of an accident that exceeds \$300 million in damages, the operators of the 103 operating nuclear reactors covered under the Act must pay up to \$95.8 million¹ per reactor to cover costs in retrospective annual premiums capped at \$10 million per year. This means that the potential total insurance pool financed by private interests is about \$10.2 billion (\$300 million primary financial protection + \$95.8 million from each of the 103 reactors).

What are the Problems with Price-Anderson?

- Nuclear operators are not liable for the entire costs of their own nuclear accidents, and the financial burden for this risk is inappropriately transferred to taxpayers. Since corporations under Price-Anderson are only responsible for around two percent of the estimated cost of a serious accident, nuclear power corporations can largely ignore (from a financial perspective) the dangers that reactors impose on American communities.

In the wake of the 1979 Three Mile Island accident, the federally-funded Sandia National Laboratory prepared a report on behalf of the NRC known as "CRAC-2." This 1982 study estimated that damages from a severe nuclear accident could run as high as \$314 billion – or more than \$560 billion in 2000 dollars. Since that study, the NRC has developed "more realistic" modeling improvements to the agency's *probabilistic risk assessment*. A review of their 1982 study "found that property damages would be twice as much as those calculated in 1982, solely on the basis of the modeling improvements made."² In addition, the Chernobyl catastrophe has cost the nations of Russia, Ukraine and Belarus \$358 billion.³ This Chernobyl total, however, is vastly understated, since it does not attempt to estimate the costs to other nations, which also experienced health costs from the far-reaching nuclear fallout.

The \$10.5 billion provided by private insurance and nuclear reactor operators represents less than two percent of the \$560 billion in potential costs of a major nuclear accident. Since nuclear reactor operators have their liability capped through Price-Anderson, that means taxpayers could be responsible and/or the public inadequately compensated for hundreds of billions of dollars in costs from an operator foul-up or a terrorist attack.

- A second major problem is that Price-Anderson is blind to comparative differences in and arbitrarily treats the whole industry uniformly. Higher-risk reactors - including older, relicensed reactors with aging parts - are not required to carry correspondingly higher levels of insurance coverage. Moreover, the Price-Anderson Act does not stipulate security requirements to protect against terrorism at insured reactors. In light of the tragic events of September 11, there should be a thorough and independent

¹ The NRC revised its Price-Anderson regulations on August 4, 2003, slightly increasing the industry's liability.

² Keith O. Fultz, "A Perspective on Liability Protection for a Nuclear Plant Accident," Government Accounting Office, GAO/RCED87-124, June 1987, page 40.

³ Mark Zepezauer and Arthur Naiman, "Take the Rich Off Welfare," (Tucson, AZ: Odonian Press, 1996), p. 86.

assessment of the security needs at U.S. nuclear power facilities before reauthorization of Price-Anderson is even considered.

- A third major problem with Price-Anderson is that it distorts the economic viability of the nuclear power industry since taxpayers cover the industry's insurance costs. Not surprisingly, the nuclear industry has fought hard to keep the Price-Anderson liability limit. In sworn testimony before Congress in May 2001, John L. Quattrocchi, senior vice-president of the company that provides most of the private insurance for the nuclear industry (American Nuclear Insurers) stated, "[k]nowing the extent of one's liability provides economic stability and incentives that would not exist without a limit." Translation: taxpayers, not the nuclear industry, should bear the brunt of the potential risks of a severe nuclear accident, in order to make their company a stable investment for shareholders.
- A fourth problem is that Price-Anderson was originally intended by Congress to be a temporary solution to what they thought was a temporary problem – the refusal of private insurers to underwrite the risks of nuclear power. In a 1957 report, the U.S. Senate wrote that Price-Anderson would only be needed for ten years because "...the problem of reactor safety will be to a great extent solved and the insurance people will have had an experience on which to base a sound program of their own." But the historical record debunks this initial optimism. Nuclear reactors continue to experience significant safety problems. These safety concerns have increased substantially in the wake of the September 11 terrorist attacks. The mature nuclear industry has failed to prove its safety record – which should be reason enough for skepticism about the proposed new reactors that backers of Price-Anderson reauthorization seek to promote.
- Fifth, while \$10.5 billion is not enough, there is scant assurance that even those funds would be available if required. The bulk of that amount would be paid in so-called "retrospective" premiums, wherein reactor operators don't have to pay the premiums until after the accident, with very little in the way of up-front guarantees. With electricity deregulation, many nuclear power plants have been purchased by or transferred to unregulated merchant operators that do not have a guaranteed rate base. Their Price-Anderson obligations - and public's financial protection in the case of a nuclear mishap - is backed by nothing more than the continued stability of energy conglomerates. And from Pacific Gas & Electric's bankruptcy to the shattered retirement savings of Enron employees, energy conglomerates have shown themselves to be anything but stable. The Price-Anderson Act is vague on what the government's financial obligations are in the event funds are unavailable from the nuclear industry, but this scenario would likely increase the burden on taxpayers.
- The total effect of Price-Anderson is large opportunity to evade responsibility if there is an accident and victims require payment of damages. Thus, the Act has *no fault liability* for reactor operators, and injured victims are precluded from directly suing vendors or manufacturers responsible for the accident.

The execution of the law after a major accident poses legal hurdles to a victim seeking compensation. The Act states that jurisdiction over an accident falls to the federal district court. Thus, the Act restricts plaintiffs' ability to utilize any state laws which go above and beyond federal protections. Furthermore, no fault liability limits reactor operator accountability even if they are reckless or criminally negligent. Moreover, Price-Anderson protects nuclear operators from punitive damages that are not covered under their private insurance coverage.

- Similarly, Price-Anderson Act indemnifies Department of Energy nuclear contractors even in cases of gross negligence and willful misconduct, which seems to discourage contractor accountability and a safety culture. No other government agency provides this level of taxpayer indemnification to non-government personnel.

Why the Act is important now?

The President and leaders in Congress, touting the viability of nuclear power to meet America's energy needs, are calling for the construction of a new generation of nuclear reactors. Since the nuclear industry has admitted that they would be unable to compete with alternative energy sources without this billion-dollar subsidy, Congress is now debating Price-Anderson renewal. If the nuclear power industry is willing to propose building new reactors in America's communities, the least they could do is stand behind their own technology and accept 100 percent liability for any nuclear accident that occurs. Safety might become a serious concern for the industry if they knew that they actually would have to pay for anything that goes wrong. In light of the September 11 attacks, security limitations at nuclear power plants are all the more serious. Continuing to hide behind Price-Anderson's taxpayer bailout is dangerous for America's communities and pocketbook.