WITNESS LIST

Committee on Energy and Natural Resources
United States Senate

To receive testimony on proposed amendments to the Price-Anderson Act (Subtitle A of Title IV of S. 388; Subtitle A of Title I of S. 472; Title IX of S. 597) and nuclear energy production and efficiency incentives (Subtitle C of Title IV of S. 388; and Section 124 of S. 472).

Senate Dirksen Office Building, Room 366
Tuesday, June 26, 2001
9:30 a.m.

PANEL ONE

Mr. Eric Fygi
Deputy General Counsel
U.S. Department of Energy
Washington, D.C

Mr. Joseph R. Gray
Associate General Counsel for Licensing and Regulation
U.S. Nuclear Regulatory Commission
Rockville, MD

Mr. John Bradburne
President and Chief Executive Officer
Fluor Fernald
Cincinnati, OH

Mr. Marvin Fertel
Senior Vice President, Business Operations
Nuclear Energy Institute
Washington, D.C.

Mr. John Quattrocchi
Senior Vice President for Underwriting
American Nuclear Insurers
West Hartford, CT

Mr. Erich Pica
Economic Policy Analyst
Friends of the Earth
Washington, D.C.

FRIENDS OF THE earth

1025 Vermont Ave., NW, Third Floor Washington, DC 20005-6303

Testimony of Erich Pica, Economic Policy Analyst
Friends of the Earth
June 26, 2001
Committee on Energy and Natural Resources

On behalf of Friends of the Earth and the U.S. Public Interest Research Group.

Headquarters: ph: (202) 783-7400 • fax: (202) 783-0444
email: foe@foe.org • World Wide Web: http://www.foe.org

Earth Share

Friends of the Earth
Les Amis de la Terre
Amigos de la Tierra

a member of Friends of the Earth International

Printed with soy ink on non-deinked 100% post-consumer recycled paper. No chlorine used.

Chairman Bingaman, Ranking Member Murkowski and distinguished members of the Energy and Natural Resources Committee, my name is Erich Pica and I am an Economic Policy Analyst at Friends of the Earth. Friends of the Earth is a national non-profit environmental advocacy organization and is part of the Friends of the Earth International network which has affiliates in 69 countries around the world. Thank you for the opportunity to speak today.

Friends of the Earth has a long history of working for a clean affordable energy future. Our goal is to shift from polluting and dangerous sources of energy such as nuclear and fossil energy to increased energy efficiency and clean renewable energy sources. As part of this goal, Friends of the Earth along with Taxpayers for Common Sense and the U.S. Public Interest Research Group publish the annual Green Scissors Report (www.greenscissors.org), which highlights environmentally harmful and fiscally wasteful government programs. The Price-Anderson Act, as well as other Department of Energy research and development programs including the Nuclear Energy Research Initiative (NERI) and the Nuclear Energy Plant Optimization (NEPO) program are highlighted in the Green Scissors report.

Nuclear power is unsafe, unreliable, uneconomic and generates long-lived radioactive wastes for which there is no safe solution. We believe it should be phased out as soon as possible and should not be encouraged as a future energy source.

Nuclear power would not exist today if it weren't for massive government subsidies and other unfair policies. In a recent opinion-editorial Jerry Taylor of the Cato Institute agrees.

> In the final analysis, the nuclear industry is purely a creature of government. The administration needs to practice the free-market rhetoric that it preaches and put away its nuclear pompoms. [1]

The Price Anderson Act represents just one of the unwarranted subsidies enjoyed by the industry. Others include: the lion's share, 60% or $66 billion, of federal research and development dollars since 1948[2]; a federal nuclear waste disposal program[3], and more than $100 billion in ratepayer bailouts from state utility deregulation plans.[4]

During reauthorization of the Price-Anderson Act in the 1980's, Environmental Policy Institute (the predecessor to Friends of the Earth), the PIRGs, and other environmental, consumer and taxpayer groups advocated for reforms of the Price Anderson Act. Our policy then, as it is now, is that the American public deserves a sound and responsible nuclear accident policy. Such a policy would accomplish three fundamental goals:

- Assure full compensation of any nuclear accident victims,

---

[1] Taylor, J., "Nuclear Power Play", Washington Post, 5/18/01.
[2] Congressional Research Service
[3] http://www.greenscissors.org/energy/nuclearwastefundfee.htm
[4] http://www.safeenergy.org/ratepayer.htm

- Protect taxpayers from subsidizing nuclear industry negligence, and
- Increase safety incentives and require high standards of industry accountability.

Unfortunately, the Price Anderson Act (as amended in 1988) does not accomplish these goals. Instead, this Act does not guarantee full compensation for victims of a nuclear accident, perpetuates a long history of federal subsidies and policies which reward the nuclear industry at public expense, and exempts contractors from liability for public damages even if they were reckless or willfully negligent.

We also are extremely concerned about the push to create new production incentives for the nuclear power industry. New production incentives proposed in the 107th Congress would continue the nuclear power industry reliance on federal taxpayers. Furthermore, we should not be considering increasing production without a solution for the high-level nuclear waste currently generated by this industry.

BACKGOUND

Enacted in 1957, the Price Anderson Act was intended to be a temporary solution to a temporary problem – the refusal of insurers to underwrite nuclear risks. According to a 1957 Senate report, it was expected that after the Act expired in ten years, "... 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."[5]

Forty-four years later, few of these expectations have been realized. Many of the problems of reactor safety continue to be unsolved. In addition certain reactor components such as reactor pressure vessels and steam generator tubes have exhibited unanticipated aging-related problems. The nuclear industry continues to be unwilling to assume the risks of its activities.

In its current form, the Price-Anderson limits liability for damages to the public in the case of a nuclear accident. The Act expires on August 1, 2002. Existing reactors will continue to operate under the current system if it is not extended.

Price Anderson currently requires owners of licensed commercial reactors to carry $200 million of liability insurance. If claims following an accident exceed that amount, all commercial reactor operators must contribute up to $83.9 million per reactor. With 106 reactors currently covered by Price-Anderson, the total pool of funds is approximately $9.09 billion for public compensation. [6] The public has no legal right to compensation for damages exceeding the limit. Price-Anderson leaves this question to Congress. [7]

---

[5] Berkovitz, Dan "Price-Anderson Act: Model Compensation Legislation? – The Sixty-Three Million Dollar Question, Harvard Environmental Law Review, 1989.
[6] Holt M. and Behrens C., "Nuclear Energy Policy", Congressional Research Service IB88090, 3/22/01, p.14.
[7] 42 U.S.C. 2210(e).

Companies that build, design, and supply parts for nuclear power plants are completely exempt from public liability.[8]

DOE contractors are indemnified up to a total of $9.43 billion. This means taxpayers could pay $9.43 billion in case of an accident cause by a DOE contractor regardless of the contractor's conduct. While the 1988 amendments allow DOE to assess civil fines and penalties against its contractors, it specifically exempts seven non-profit institutions. These institutions plus their for-profit subcontractors are exempt from civil penalties.

The seven institutions listed in the Price Anderson Act are: The University of Chicago for activities at Argonne National Laboratory; The University of California for activities at Los Alamos; Lawrence Livermore, and Lawrence Berkeley National Laboratories; American Telephone and Telegraph and its subsidiaries for activities at Sandia National Laboratory (now operated by Lockheed Martin which is subject to civil penalties); Universities Research Association for activities at FERMI National Laboratory; Princeton University for activities at the Princeton Plasma Physics Laboratory; the Associated Universities Inc for activities at Brookhaven National Laboratory (now operated by Brookhaven Science Associates which is subject to civil penalties) and Battelle Memorial Institute for activities associated with the Pacific Northwest Laboratory.[9]

THE PRICE ANDERSON ACT IS AN UNWARRANTED SUBSIDY TO THE NUCLEAR INDUSTRY

Because reactor operator liability is limited, the Price Anderson Act denies accident victims full compensation and will inevitably result in either taxpayers or victims footing the bill for catastrophic nuclear accidents. Because DOE contractors are not held responsible for any public damages in nuclear accidents they cause, the taxpayer will foot the bill for commercial nuclear waste transport accidents, accidents at research reactors and weapons site cleanups. Taxpayers will foot the bill for DOE contractor accidents even if they resulted from recklessness, gross negligence, or intentional disregard for public health and safety. The companies that design, build and supply parts for nuclear power plants are totally exempt from any liability for damages to the public. These commercial nuclear contractors are not responsible for damages to the public even if they were reckless, grossly negligent, or intentionally disregarded public health and safety.

Estimates of the value of this subsidy to nuclear power plant owners range from $3.45 million[10] to $33 million[11] (2001 dollars) per reactor per year. With 106 reactors covered, is a total annual subsidy to the nuclear industry of $366 million to $3.5 billion.

---

[8] Berkovitz, Dan "Price-Anderson Act: Model Compensation Legislation? – The Sixty-Three Million Dollar Question, Harvard Environmental Law Review, 1989.

[9] U.S. DOE, "Report to Congress on the Price Anderson Act," March 1999, p. 23.

[10] Heyes, A, and Liston-Heyes, C. "Liability Capping and Financial Subsidy in North American Nuclear Power; Some Financial Results based on Insurance Data," Department of Economics, University of London, England.

[11] Dubin, J.A. and Rothwell, G.S. "Subsidy to Nuclear Power Through Price Anderson Liability Limit," Contemporary Policy Issues, Vol III, July, 1990.

The nuclear industry and its cheerleaders keep touting the safety of nuclear power and its cost-effectiveness. Yet, they are here today, asking that they not be held fully responsible for the public consequences of designing, building and operating these "safe" reactors and transporting the lethal waste generated from these activities.

Even the Vice President admits that the industry needs continued subsidies. If the Price Anderson Act is not renewed, Vice President Cheney said, "Nobody's going to invest in nuclear power plants."[12]

The industry cannot have it both ways. If nuclear power is cost-effective and safe, then the nuclear industry should bear full liability for the costs of a nuclear accident. Insurance for these risks should be internalized as a cost of doing business, just as it is for every other industry. The Act should not be re-authorized in its current form. Either Congress should radically reform the Price Anderson Act or it should enact separate legislation, which will provide fair and full compensation to the public in the event of a nuclear accident.

THE PRICE ANDERSON ACT PROTECTS THE NUCLEAR INDUSTRY BUT NOT THE PUBLIC

Under Price Anderson, nuclear reactor operators get a guarantee of limited liability for public damages in the event of a nuclear accident. The designers, builders and suppliers of the reactors are exempt from all liability for damage to the public. DOE contractors are fully indemnified by the government. In contrast, the public gets no guarantee of full compensation.

All players in the last Price Anderson debates, including the Nuclear Regulatory Commission (NRC), the Department of Energy, and the nuclear utilities testified in favor of full compensation for victims. Because liability is limited to a little more than $9 billion, no one is legally obligated to pay damages over the limit and no one has a right to recover for those damages. The current system puts much of the risk of a catastrophic nuclear accident on the shoulders of its victims. Victims would have to plead their case before Congress.[13]

The question of who should pay when damages exceed the limit has never been fully resolved. If there is an accident, the money will have to come from somewhere, and we see only three choices. It will come from the victim's pockets, from the taxpayers' pockets, or the industry's pockets. We believe it should come from the industry. However, under the current law, it seems inevitable that taxpayers would foot the bill or victims would go uncompensated.

---

[12] "Cheney Says Push Needed to Boost Nuclear Power," Reuters News Service, 5/15/01.

[13] Magavern, W., Testimony to the Presidential Commission on Catastrophic Nuclear Accidents, 10/25/89.

The Price Anderson Act calls for Congressional action to "provide full and prompt compensation to the public for all public liability claims resulting from a disaster of such magnitude."[14] On July 29, 1987, during the floor debate on amendments to the house bill (H.R. 1414) that was ultimately enacted into law, Representative Morris Udall described compensation for damages above the limit as the "third level."

> The third layer is the disaster layer. Let us say the Indian Point Nuclear Plant in New York has a meltdown or some very serious matter affecting whole cities and regions. We could not decide whether that ought to be $20 billion or $50 billion or $100 billion or what, so we decided that the third layer will be determined by a commission appointed by the President and given two years to come up and say how we should handle claims above the $7 billion or $8 billion. Obviously, you would have to have a large amount of money, and it should not be the ratepayers of the nuclear utilities who paid for the first two levels. We believe, and so wrote the bill that the third level will come from ratepayers everywhere and taxpayers everywhere and the commission will tell us in advance how we ought to finance this and set it up and distribute the available money.[15]

In 1990, as authorized by the Act, the Presidential Commission on Catastrophic Nuclear Accidents issued a report on "the means of fully compensating victims of catastrophic nuclear accident that exceeds the amount of aggregate public liability."[16] While the report affirmed that victims be fully compensated, it ducked the question of who should pay.[17] It should be no surprise that the Presidential Commission refused to lay the ultimate responsibility for public damages from a catastrophic nuclear accident on the shoulders of the responsible industry. For from being "representative of a broad range of interests" as required by the Price Anderson Act, it consisted entirely of men with ties to the nuclear industry.[18]

We support a mechanism similar to that recommended in a report authored by the NRC in 1983[19]. This would provide a legal guarantee of full compensation for victims. I would also retain the industry's protections against the full liability that it would have if there were no Price-Anderson scheme at all.

Basically, in order to shield both victims and taxpayers from unwarranted risk, the NRC unanimously recommended a system that would subject reactor licensees to annual assessments. Unlike current law which caps total retrospective premiums at $83.9 million, the 1983 NRC reported recommend these premiums be paid until all public liability has been satisfied. The NRC concluded that this approach represents the best

---

[14] 42 U.S.C. 2210(e).
[15] Report to the Congress on Catastrophic Nuclear Accidents, August, 1990, p.15.
[16] U.S.C. 42 Section 2210 (i).
[17] Washington Post, "Nuclear Claims Envisioned: Panel's Calls for Catastrophic Compensation Omits Source of Funds," 9/21/90.
[18] Testimony of Bill Magavern, Staff Attorney, U.S. PIRG to the Energy and Environmental Subcommittee of the House Interior Committee.9/26/90.
[19] NUREG -0957

alternative for minimizing the potential for both uncompensated losses by the victims of an accident and additional contributions by the taxpayers to meet public liability claims.

According to the NRC report, the key to any fair and effective compensation scheme is the assurance that all valid claims will be paid. The current cap on total liability completely undermines that principle. Victims should not have to plead their case before Congress or go uncompensated. Federal taxpayers should not foot the bill, either.

The nuclear industry that profited from the activities creating the risk of an accident should be obligated to pay all damages through these retrospective premiums. If that became overly burdensome, the industry could always go to Congress to get relief. That way, the burden is on the industry, not the victims or taxpayers.

Currently, if there is an accident above $200 million, each nuclear operator contributes up to $10 million per reactor per year in "retrospective premiums" until the current cap of $83.9 million is reached. [20] In contrast, the 1983 NRC report recommended annual payments of $10 million per plant for as many years as necessary to compensate all public damages. Unfortunately, under pressure from the nuclear industry, all but one of the commissioners reversed their stance by the time Representative Markey chaired a hearing on the issue in July 1986. Commissioner James Asseltstine continued to support the original recommendation of no cap on total liability to protect taxpayers.

> Having provided by law that the industry's liability would be fixed at a specific dollar level and with new indemnity contracts in effect which reflect this limited liability, I think it will be difficult for the Congress to obtain additional funding from the industry after an accident has occurred. Thus, it is likely that additional funding to pay liability claims, funding which could run into the billions of dollars, would have to come from the federal Treasury.[21]

Friends of the Earth and others supported lifting the total liability cap and replacing it with an annual cap during the debate over the 1988 amendments. We believe that this would be a fair way to ensure that victims were compensated and the industry would have an affordable and predictable way to assure this.

NRC recently recommended raising the retrospective premium to $20 million per reactor per year (still capped at $83.9 million). NRC justified this increase that would "...substantially increase the amount of funds available shortly after a nuclear accident to pay public liability claims but should not jeopardize the financial viability of the participating utilities."[22] Provisions to increase this premium are also contained in several bills introduced by members of this committee. Strangely, the NRC has now reversed its earlier recommendation.[23]

---

[20] Holt M. and Behrens C., "Nuclear Energy Policy", Congressional Research Service IB88090, 3/22/01,
[21] Testimony of James K. Asselstine, before the House Committee on Energy and Commerce, 7/17/86.
[22] NUREG/CR-6617 p. 131.
[23] "NRC Drops Recommendation to Double Some Coverage in Price-Anderson," Platt's Inside NRC, Vol 23, No 11, 5/21/01.

As part of a more equitable nuclear accident compensation package, Congress should consider mechanisms to fully compensate victims of a catastrophic accident. One way would be to lift the total liability cap and implement the original 1983 NRC concept of an annual retrospective premium for as many years as necessary to compensate all public damages. Since NRC has more recently stated that the industry could afford a $20 million annual premium and that a higher premium would help victims get compensated faster, Congress should ensure that annual premiums be no lower than $20 million per reactor per year.

THE INDUSTRY CAN AFFORD TO PAY THE FULL COSTS OF AN ACCIDENT:

The nuclear industry opposes paying its own way. Yet this industry has benefited greatly from unjustified federal and state subsidies. With deregulation of many state's electricity industry came billions in bailouts for the industry (and blackouts for hapless Californians!). These bailouts (also known as "stranded costs") have increased the profitability of nuclear power plants according to Lehman Brothers Managing Director and former NRC Commissioner James Asselstine.[24]

According to a report released in 1998 with the Safe Energy Communication Council entitled "Ratepayer Robbery" we estimated these bailouts could total more than $132 billion for just eleven states. Surely an industry that is receiving billions of dollars in public bailouts could afford $20 million per year per reactor to compensate the public in case of an accident. Along with unjustified bailouts, state deregulation bills have left consumers at the mercy of large, unregulated power generators. Several large nuclear operators are enjoying the high prices for electricity generated.

For example, Southern Company, which operates six reactors reported net income for 2000 of $1.313 billion – a record profit for that company. In case of an accident, the $20 million retrospective premium represents less than 9% of their profits.

Entergy, which touts itself as "the fastest growing nuclear operator in the nation." [25]is proposing to build new reactors and currently operates eight reactors, reported $160.9 million in net income for the first quarter of 2001, a nearly 50% increase from the same time last year. A $20 million retrospective premium for all its reactors is less than the profits for one quarter. This is a company that should be embarrassed to ask for a penny of taxpayer assistance.

Exelon Corporation touts itself as the "largest nuclear generation operator in the country with approximately 20% of the nation's nuclear generation capacity." [26]which is proposing to build a risky new reactor that would cut costs by not including conventional

[24] Testimony of James K. Asselstine, Managing Director, Lehmann Brother, Inc. Before the Senate Energy and Natural Resources Committee, 5/3/01.
[25] Testimony of C. Randy Hutchinson, Senior Vice President, Entergy, before the Energy and Air Quality Subcommittee of the House Energy and Commerce Committee, 3/27/01.
[26] Testimony of Edward F. Sproat III, Vice President, Exelon Generation Company, before the Energy and Air Quality Subcommittee of the House Energy and Commerce Committee, 3/27/01.

containment, reported $586 million in net income last year. This company has testified that the public should fund the work of the government agencies responsible for certifying the safety of these new designs.

Duke Energy reported $1.776 billion in net income last year. Duke Power operates 7 reactors. A $20 million retrospective premium represents less than 8% of their profits.

CONCLUSION

The Price Anderson Act was supposed to be a temporary measure for a fledgling industry. Today that industry has grown enormously and has reaped substantial benefit from this and other taxpayer subsidies. Meanwhile, victims of a major nuclear accident would be left to plead their case before Congress. This is not good government. The Price Anderson Act should not be renewed and should be either radically reformed or replaced by legislation that truly protects the public.

BIOGRAPHY – Erich Pica

Erich Pica is an Economic Policy Analyst at Friends of the Earth. He is responsible for policy development, research and advocacy on energy issues including fossil fuel and nuclear subsidies. Mr. Pica also Directs the Green Scissors Campaign, which is a coalition of taxpayer, environmental and consumer groups working to eliminate anti-environmental subsidies including those to the oil, coal, nuclear, mining, ranching, and timber industries. Mr. Pica is a member of the Board of Directors of the Safe Energy Communication Council.