Testimony of
John L. Quattrocchi
Senior Vice President, Underwriting
American Nuclear Insurers

Before the United States Senate
Energy and Natural Resources Committee

May 24, 2001

Mr. Chairman and distinguished members of the Committee, I am John Quattrocchi, Senior Vice President, Underwriting at the American Nuclear Insurers - or ANI. Joining me today is Mr. Edward Boehner, Vice President and General Counsel at ANI and Mr. Tim Peckinpaugh, Washington, D.C. Counsel to ANI. We appear today on behalf of the member insurance companies of ANI. The National Association of Independent Insurers also joins in our statement. We appreciate your invitation to present our views on the nuclear risk with a special focus on the financial protection requirements of the Price-Anderson Act.

ANI is a joint underwriting association that acts as managing agent for its member insurance companies. We are, in effect, a "pool" of insurance companies formed for the purpose of insuring a unique risk. Together with our reinsurance partners from around the world, we represent the worldwide insurance community.

We will not dwell on the advantages of nuclear power. We are not advocates for any particular energy source. However, as professional insurers and long-term observers of the energy scene, we believe nuclear power represents a safe, reliable and environmentally friendly part of our nation's energy mix. The nuclear industry has achieved an impressive safety record and, as insurers, we are proud of the role we've played in supporting their efforts.

ANI and its predecessor organizations were created in 1956 in response to Congress' urging that insurers find a way to insure what was then a fledgling technology. We worked closely with Congress and with the industry to develop the Price-Anderson law. The law is essentially an insurance program that had several purposes in mind.

- The first was to encourage the private development of nuclear power.
- The second was to establish a legal framework for handling potential liability claims.
- And the third was to provide a ready source of funds to compensate injured victims of a nuclear accident.

The Act represents a careful balancing of the interests of the public as private citizens and as participants in and beneficiaries of private business enterprise. We also believe the Act has been critical in enabling us to provide stable, high quality insurance capacity for nuclear risks in the face of normally overwhelming obstacles for insurers – those obstacles being catastrophic loss potential, the absence of credible predictability, a very small spread of risk and limited premium volume. This has been accomplished for more than four decades without interruption and without the "ups and downs" (or market cycles) that have affected nearly all other lines of insurance.

KEY PROVISIONS OF THE PRICE-ANDERSON ACT

- ***Financial Protection[1] . . . In Two Layers***

  To assure a source of funding to compensate accident victims, the law requires reactor operators to maintain primary financial protection equal to the maximum amount of liability insurance available from private insurance sources at reasonable terms.[2] This provision has enabled insurers to develop and sustain secure, high quality insurance capacity from worldwide sources. Evidence of this lies in the stability of limits, price and coverage that insurers have provided in what is a very special line of business. Indeed, primary insurance limits actually increased after the Three Mile Island (TMI) accident in 1979 from $140 million to $160 million, and prices rose only modestly. The primary limit was last increased to $200 million in 1988 coincident with the last renewal of the Act. This limit is written by ANI at each operating power reactor site in the U.S., which satisfies the requirement for primary financial protection.

  The Act also requires reactor operators to participate in an industry-wide retrospective rating program for loss that exceeds the primary insurance limit.[2] ANI writes a Secondary Financial Protection (SFP) Master Policy through which we administer the SFP program. Under this policy, each insured is retrospectively assessable for loss that exceeds the primary insurance limit up to a maximum retrospective assessment currently set at $88.095 million (adjusted every five years for inflation) per reactor, per incident. In other words, the second layer of protection is drawn from reactor operators' own funds. Insurers have a contingent liability to cover potential defaults of up to $30 million for one incident or up to $60 million for more than one incident. Under the terms of the contract, however, ANI would expect to be reimbursed with interest for any funds it advances under this program. With 106 reactors in the program, the total level of primary and secondary financial protection is just over $9.5 billion ($200 million in the primary layer + $88.095 million in the secondary layer X 106 reactor units participating).

---

[1] Defined in Section 11.k. of the Atomic Energy Act of 1954, as amended.
[2] The Atomic Energy Act of 1954, as amended, Section 170.b.

- ***Limitation on Aggregate Public Liability*** [3]

  The Act limits the liability of reactor operators or others who might be liable for a nuclear accident to the combined total of primary and secondary financial protection, though Congress is committed to providing additional funds if financial protection is insufficient.[4] Knowing the extent of one's liability provides economic stability and incentives that would not exist without a limit.

- ***Legal Costs Within the Limit*** [5]

  The expenses of investigating and defending claims or suits are part of and not in addition to the limit of liability. The inclusion of these costs within the limit enables insurers to offer their maximum capacity commitments without fear of exceeding those commitments. This provision is absolutely essential if insurers are to maintain and hopefully increase the assets they place at risk.

- ***Economic Channeling of Liability*** [6]

  The Act channels the financial responsibility and insurance obligation for public liability claims to the nuclear plant operator. This helps assure that injured parties will be able to establish with certainty liability for a nuclear accident that will be backed by solid financial resources to respond to those liabilities.

- ***Waiver of Defenses*** [7]

  In the event of what is called an Extraordinary Nuclear Occurrence (ENO),[8] insurers and insureds waive most standard legal defenses available to them under state law.[9] The effect of this provision is to create strict liability for a severe nuclear accident. Claimants in these circumstances need only show that the injury or damage sustained was caused by the release of nuclear material from the insured facility. Fault on the part of a particular defendant does not have to be established.

---

[3] The Atomic Energy Act of 1954, as amended, Section 170.e. (1) (A) and Section 170.o. (1) (E).
[4] The Atomic Energy Act of 1954, as amended, Section 170.e. (2).
[5] The Atomic Energy Act of 1954, as amended, Section 170.e. (1) (A).
[6] The Atomic Energy Act of 1954, as amended, Section 11.t. and 170.c.
[7] The Atomic Energy Act of 1954, as amended, Section 170.n. (1).
[8] Defined in Section 11.j. of the Atomic Energy Act of 1954, as amended. Without citing all the specifics, the term refers to a significant nuclear incident that results in severe offsite consequences.
[9] The legal defenses waived in the policy include (i) any issue or defense as to the conduct of the claimant or the fault of the insured, (ii) any issue or defense as to charitable or governmental immunity and (iii) any issue or defense based on any statute of limitations if suit is instituted within three years from the date on which the claimant first knew, or reasonably could have known, of his bodily injury or property damage and the cause thereof.

- ***Federal Court Jurisdiction in Public Liability Actions*** [10]

  Historically, state tort law principles have governed nuclear liability determinations. The Price-Anderson Act provides for a federal overlay to the application of state law. The Act confers jurisdiction over public liability actions on the Federal District Court in which the accident occurs. This removes the confusion and uncertainties of applicable law that would otherwise result when multiple claims and lawsuits are filed in multiple courts. The provision also reduces legal costs and speeds the compensation process.

- ***Precautionary Evacuations*** [11]

  The system anticipates that insurers will provide immediate financial assistance to people who are forced to evacuate their homes because of a nuclear accident or because of imminent danger of such an event.

The Act, and these provisions in particular, have stood the test of time and served the public well as demonstrated by the response at Three Mile Island.

THE ACCIDENT AT THREE MILE ISLAND

The accident at Three Mile Island occurred on March 28, 1979. Within twenty-four hours of the Pennsylvania Governor's advisory for pregnant women and pre-school age children to evacuate a five-mile area around the site, we had people in the area making emergency assistance payments. Two days later, a fully functioning claims office staffed with some 30 people was open to the public. The claims staff grew to over 50 people within the next two weeks. All of the claims staff came from member insurance companies from around the country. I spent about 10 days at the claims office shortly after it opened to lend whatever support I could.

As the office was being set up, we placed ads on the radio, television and in the press informing the public of our operations and the location of the claims office. Those people affected by the evacuation advisory were advanced funds for their immediate out-of pocket living expenses, that is to say, expenses for food, clothing, shelter, transportation and emergency medical care. Approximately $1.3 million in emergency assistance payments were made to some 3,100 families without requiring a liability waiver of any kind.

We responded as quickly as we did because we had prepared for emergencies in advance. Emergency drills were conducted periodically, and an emergency claim response manual helped guide our response. Checks and other claim forms that had been pre-printed and stored for emergencies were immediately available to us. The insurance industry received high praise for its quick response at TMI. In responding as we did, we helped to alleviate some of the fear and dislocation of those affected by the accident.

---

[10] The Atomic Energy Act of 1954, as amended, Section 170.n. (2).

[11] Defined in Section 11.gg. of the Atomic Energy Act of 1954, as amended.

POLICY COVERAGE AND CLAIMS EXPERIENCE

The nuclear liability policy written for nuclear site operators is designed to respond to an insured's liability for damages because of bodily injury or offsite property damage caused by a large, sudden catastrophic accident. However, it can also respond to allegations of injury from very small amounts of nuclear material. That bears repeating. In addition to providing coverage for catastrophic events, we are providing coverage for alleged offsite damages from normal plant operations.

All of our insured facilities release very small amounts of material within acceptable regulatory limits. But the public perception of what is "acceptable" and what constitutes "damage" is a moving target. Indeed, almost all of our claims allege injury or damage (or fear of future injury or damage) from little or no documented radiation exposure. And, with the exception of the accident at Three Mile Island, few of the claims from members of the offsite public are the result of a clearly identifiable event. Instead, our claims experience is more related to routine releases and the latent injury phenomenon now popular – at least in the U.S. – in the toxic torts arena. The alleged damages usually involve somatic, psychosomatic or genetic effects from exposure to radiation at *de minimis levels.*

From inception, ANI has handled some 205 reported claims or incident notifications. We've paid just under $187 million for indemnity and legal defense and have incurred losses of $463 million, all through March 1 of this year. The difference between the paid and incurred loss figures represents what is reserved for indemnity and defense on outstanding claims.

Radiation claims are costly to defend and there is often no relationship between the amount of radiation alleged and the expense necessary to defend the claim. While the judicial process is expensive, it does expose claims that have no basis in scientific fact. Given the finite resources available to compensate truly injured victims, it serves no one's interest for insurers to compensate claims without merit. The importance of the legal framework established in the Act, including the cost of defense within the system, cannot therefore be overstated.

NRC'S REPORT TO CONGRESS . . . PRIMARY LIABILITY LIMITS

In its 1998 Report to Congress on the status of the Act, the NRC strongly supported reauthorization of the Price-Anderson Act and offered eight recommendations. In the interest of time, and because the Committee is, I'm sure, familiar with the report, I will focus particular attention on just one of the recommendations – specifically, that Congress discuss with insurers the potential for increasing the primary liability insurance limit. The NRC indicated in its report that an increase to roughly $350 million would at least keep pace with inflation since 1957.

As was noted earlier in my testimony, the Act requires power reactor licensees to maintain primary financial protection equal to the maximum amount of liability insurance available from private sources at reasonable terms. But for this provision, it is doubtful that limits at the levels written could have been sustained without interruption or fluctuation for more than forty years. To illustrate the point, when, in the mid-1980's, liability insurance became unavailable at almost any price for conventional lines of business, nuclear liability insurers continued to provide a stable market for their limited customer base – thanks, in part, to this provision.

Liability limits have been increased periodically from $60 million in 1957 to $200 million presently. The limit was last increased to its present level in 1988 coincident with the last renewal of the Act. The attached Table of Limits outlines the history of primary liability limits from 1957.

We believe an increase in the level of primary insurance coverage would benefit the system and enhance public protection for a number of reasons:

(1) The existing limit has not changed since 1988 and its value has, in fact, been eroded by inflation. When measured against the rate of inflation from 1988 to June 1998, the limit would have grown to roughly $275 million. When measured against inflation from 1957 to June 1998, the limit would have increased to about $350 million.

(2) An increase in the primary limit to reflect the impact of inflation is consistent with inflationary increases mandated by the Price-Anderson law in the second layer. Section 170.t. of the Act requires that the maximum retrospective premium in the second layer be adjusted at five-year intervals. The maximum retrospective premium in the second layer has, in fact, been increased twice since 1988 to reflect the impact of inflation.

(3) A higher primary limit would provide an added buffer between loss in the primary layer and retrospective assessments on utility operators in the second layer. Sound funding for the remote but nevertheless possible nuclear catastrophe calls for pre-funding a substantial portion of the costs of that accident. The higher the potential retrospective liabilities on the nuclear industry in the second layer, the more desirable reasonable increases in the primary insurance layer become.

(4) The number of reactor licensees can be expected to decrease in the coming years as reactor units are sold to a relatively smaller number of buyers. The effect of this would be to substantially increase the maximum potential retrospective assessment on those remaining operators at a time of severe economic stress for nuclear utilities generally – that is to say, following a large-scale nuclear accident. In these circumstances, a higher primary liability limit would provide a better balance between pre- and post-funded layers of accident protection, in effect enhancing the protection to the public.

(5) Deregulation of the electric utility industry may hamper a utility's ability to pass on to ratepayers the cost of a retrospective assessment. A higher primary limit would reduce the chances of, or at least delay, an assessment in the second layer.

Consistent with the long-standing objective of Congress to provide the most financial protection possible to compensate the public, we will work with our members and reinsurers to develop higher primary insurance limits coincident with the renewal of the Act. This assumes the Act is renewed in essentially its existing form. Any effort on our part to increase the primary limit would also have to be balanced against the needs and desires of our customer base. If these needs can be balanced, our goal would be to develop only capacity that is financially secure and committed for the long term. While I cannot provide any commitments at this time, a reasonable goal might be a primary limit in the range of $300 million, again assuming a satisfactory renewal of the Act.

POSSIBLE NEW PROTECTION IN THE SECOND LAYER

As my testimony has indicated, in the unlikely event that retrospective premiums in the second layer need to be assessed because of a severe nuclear accident, those assessments will be levied at a time of great political and financial stress. The pressures on the utility that suffers the accident will, in all likelihood, be the most severe. For that reason, we have begun to discuss with the industry a potential new coverage under the existing Secondary Financial Protection (SFP) program that would pay up to one full retrospective premium (currently up to $88.095 million) on behalf of the utility at whose site the accident occurs. Payment of this retrospective premium would be made on a guaranteed cost basis – that is to say, we would not expect to be reimbursed. Since coverage would apply on a guaranteed cost basis, we would have to secure additional capacity over and above whatever additional capacity might be developed for the primary layer.

We envision that coverage would be added by endorsement to the existing SFP program for an additional per reactor premium. We would prefer that coverage be purchased on a voluntary basis and not made part of the financial protection requirements. For the coverage to be viable, at least half the number of reactor units in the SFP program would have to participate.

This coverage would shift to the insurance industry some of the strain that would undoubtedly be felt within the utility industry after a severe nuclear accident. If the potential new coverage is something the industry desires, we will try to implement it coincident with the renewal of the Act, or as soon thereafter as reasonably possible.

PRICE-ANDERSON AS A SUBSIDY?

Some have argued that Price-Anderson is a subsidy for the nuclear industry. For what it's worth from our perspective as independent insurers, that view is clearly inaccurate. We are not aware of any payments made by the Federal Government to private licensees under Price-Anderson. Indeed, the industry not only pays the cost of the insurance required by the Act, it has paid millions of dollars in indemnity fees and has assumed

more than $9 billion in potential retrospective assessments to compensate injured accident victims – all of this at no cost to the government.

Some argue that the Act's limitation on liability is a subsidy for the industry in that it limits potential recoveries of accident victims. The fact is, however, that, in exchange for the limit on liability, the Act provides for a large, ready source of funds for accident victims that would not otherwise exist.

Insurers have a great deal of experience handling litigation that is "unfettered" by limitations on liability. No case stands out in my mind more that the Bhopal accident in India in 1984. As many as 4,000 people died and another 500,000 were injured. After years of litigation, Union Carbide settled with the Indian Government for $470 million – or roughly $1,000 in compensation for each of those killed or injured.

The simple fact is that there is always a limit on liability – that limit equal to the assets of the company at fault. Those who helped shape the Price-Anderson Act understood that fact. It was their belief that those who share in the benefits of nuclear energy should also share in the risks through a system of solid financial protection provided by industry and by government.

Beyond serving the public interest, the limitation on liability enables insurers to quantify their potential liabilities. Without the limitation, suppliers and others who might incur potential nuclear liabilities would be forced to seek separate insurance protection for their own accounts, in turn, exposing insurers to unacceptable accumulations. In these circumstances, the level of available liability insurance might well diminish.

CONCLUSION

To the best of our knowledge, the financial protection that the Act provides the public far surpasses the performance of any other system in place in the United States. The essential fact is that the public is far better off with this system of financial protection than without it. For us as insurers, its provisions make an otherwise difficult risk insurable. We therefore urge the members of this Committee to support renewal of the Act with little if any change as recommended by the NRC report to Congress and the Administration's *National Energy Policy* released last week. In terms of the legislation pending before this Committee, we support in general the Price-Anderson reauthorization provisions of S. 388, the National Energy Security Act of 2001 (Subtitle A of Title IV); S. 472, the Nuclear Energy Electricity Supply Assurance Act of 2001 (Subtitle A of Title I); and S. 597, the Comprehensive and Balanced Energy Policy Act of 2001 (Title IX).

We are grateful to the Committee for the opportunity to express the views of insurers on this important issue.

Attachment to Testimony of John L. Quattrocchi

Table of Limits

History of Maximum Nuclear Liability Insurance Available from 1957 to Present

Year	Liability Limits ($ in Million)	% Increase
1957	$60	-----
1966 *	74	23.3%
1969	82	10.8%
1972	95	15.8%
1974	110	15.8%
1975 *	125	13.6%
1977	140	12.0%
1979	160	14.3%
1988 *	200	25.0%

* Coincident with the renewal of the Price-Anderson Act.