Abstract

The Price-Anderson Act establishes nuclear liability law in the United States. First passed in 1957, it has influenced other nuclear liability legislation around the world. The insurer response to the nuclear accident at Three Mile Island in 1979 demonstrates the application of the Act in a real life situation. The Price-Anderson Act is scheduled to be renewed in 2002, and the future use of commercial nuclear power in the United States will be influenced by this renewal.

BACKGROUND

By the mid-1950's, the United States recognized that it was in the national interest to promote commercial development of nuclear energy in medicine and industry, particularly in the generation of electric power. But the uncertainties of the technology and the potential for severe accidents were clear obstacles to commercial development. Exposure to potentially serious uninsured liability inhibited the private sector’s developmental efforts.

These impediments led the United States Congress to enact the Price-Anderson Act in 1957. The Act had several purposes.

- The first was to encourage 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 requires the operators of nuclear power plants to provide evidence of financial protection against public liability claims for bodily injury or property damage caused by a nuclear incident. At the same time, that is to say in the mid-1950's, Congress encouraged the insurance industry to develop a way to secure large amounts of insurance capital (or capacity) to insure what was then a fledgling technology. Insurers chose the “pooling” technique. Pooling provides a way to secure large amounts of capacity by spreading the risk of a small number of exposure units – that is, reactors and other nuclear related risks – over a large number of insurance companies. The pooling concept has and continues to be successfully used to provide insurance for a number of commercial enterprises with a need for large amounts of insurance capacity, including the nuclear industry, commercial airlines, offshore drilling rigs and others.
All of this led to the creation in the U.S. of American Nuclear Insurers (ANI) and its predecessor organization in 1956. ANI acts as managing agent for its member insurance companies. We maintain reinsurance relationships with other nuclear insurance pools around the world, including those represented here today. Together, we can respond to the needs of the nuclear around the world with insurance capacity that is stable and secure. Put another way, we are involved both before and after the accident, as was the case following the Three Mile Island (TMI) accident in 1979.

THE PRICE-ANDERSON ACT...MAJOR PROVISIONS

I will now turn to some of the major provisions of the Price-Anderson Act and discuss how those provisions impact the protection available to the public.

Financial Protection

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 nuclear liability insurance sources provided that capacity is offered on reasonable terms. This provision has enabled insurers to develop and sustain secure, high quality insurance capacity from worldwide sources. Evidence of this is demonstrated in the stability of limits, price, and coverage that insurers have provided in what is a highly specialized line of business. Indeed, primary insurance limits actually increased after the TMI accident in 1979 from $140 million to $160 million, and prices rose only modestly. The limit was increased to $200 million in 1988 coincident with the last renewal of the Act. This limit is written by American Nuclear Insurers at each operating power 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. 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 of $88.095 million per reactor, per incident. In other words, the second layer of protection is drawn from reactor operator's 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. 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).

Limitation on Aggregate Public Liability

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.
Quantifying the extent of liability provides economic stability and incentives that would not exist without the limit.

**Legal Costs Within the Limit**

The expense 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.

**Economic Channeling of Liability**

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 liability for a nuclear accident that will be backed by solid financial resources to respond to those liabilities.

**Waiver of Defenses**

In the event of what is called an Extraordinary Nuclear Occurrence (ENO), insurers and insureds waive most standard legal defenses available to them under state law. 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.

**Federal Court Jurisdiction in Public Liability Actions**

Historically, state tort law principles have governed nuclear liability determinations. The Price-Anderson Act now provides for a federal overlay to the application of state law. The act confers jurisdiction over public liability actions to 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**

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. Let us now examine the law's first big challenge.
THE ACCIDENT AT THREE MILE ISLAND

The accident at Three Mile Island started in the early morning hours on March 28, 1979. The Three Mile Island nuclear site is located in the State of Pennsylvania about 180 kilometers southwest of New York City. On March 30, 1979 the Governor of the State advised pregnant women and pre-school age children to evacuate if they lived within a five mile area around the site. Within twenty-four hours of the advisory, 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. This office was located in Harrisburg, Pennsylvania approximately 15 miles from the reactor site. The claims staff grew to over 50 people within the next two weeks. All of the claims staff came from member insurance companies around the country.

As the office was being established, we placed advertisements on the radio, television and in the newspapers informing the public of our operations and the location of our 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. The amounts advanced were per deim amounts based on what we knew about the cost of living in the area. Approximately $1.3 million in emergency assistance payments were made to some 3,100 families without requiring a claims release of any kind.

We were able to respond as quickly as we did because we were prepared in advance for emergency situations. Emergency drills had been conducted periodically, and an emergency response manual that had been drafted in advance of the accident 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 and efficient response to TMI. In responding as we did, we help to alleviate some of the fear and dislocation of those affected by the accident.

In retrospect, that was the easy part. Shortly after the accident, several class action lawsuits were filed alleging everything from business interruption and lost wages to cancer, and fear of cancer or other illness. In 1981, we settled claims for economic loss to businesses and individuals located within 25 miles of the site for $20 million. As part of the same settlement, we paid $5 million to establish a public health fund that would study the health impact, if any, on people living within the area for a period of 20 years. Then, in 1985, we paid $1.25 million to settle consolidated claims for bodily injury and emotional distress involving 280 people.

Based on everything we knew about the accident, it was clear that businesses and individuals did indeed suffer economic loss as a result of the accident. While there was no real contamination of offsite property, business revenues were interrupted and individuals did suffer wage losses as a result of an accident in which imminent danger of contamination was perceived.
It was also clear that no one was actually physically harmed as a direct result of the accident given the extremely low levels of radioactive releases from the site. Our agreement to settle the bodily injury cases was simply a business decision that reflected the uncertainty of liability for physical harm induced by emotional distress resulting from the accident. In retrospect, that decision was a mistake. Shortly after the settlement was announced, an additional 2,200 claims were filed against the site operator and others alleging radiation-induced bodily injury, emotional distress and other damages. Those claims were considered to be without merit and have been vigorously defended ever since. In June, 1996, or more than 17 years after the accident, the Federal District Court for the Middle District of Pennsylvania granted summary judgment in favor of the defendants.

Plaintiffs have appealed the decision to the Third Circuit Court of Appeals, but we expect the decision to be upheld. If so, that should effectively end the TMI litigation.

POLICY COVERAGE

I mentioned earlier that our policies are used by U.S. reactor operators as evidence of financial protection required by the Price-Anderson Act. Let me take a minute to outline the coverage afforded. The Facility Form policy is site oriented and is designed to respond to nuclear-related liabilities arising out of operations at a defined location. A key policy feature is its broad definition of “insured” which, in addition to the named insured, includes any other person or organization. The definition is consistent with the way in which the Act channels financial responsibility for public liability claims to the site operator.

Under the terms of the policy, insurers are obligated to pay on behalf of the insured all sums (up to the policy limit) that the insured becomes legally obligated to pay as “covered damages” because of “bodily injury” or “property damage,” or as “covered environmental cleanup costs” because of “environmental damage.” Coverage applies only to claims for bodily injury, property damage or environmental damage caused during the policy period by the “nuclear energy hazard,” if such claims are brought within ten years of policy cancellation or termination. The terms I’ve enclosed in quotation marks are specifically defined, and interested observers should refer to the policy for the precise definitions of policy terms.

In addition to the coverage provided for operations at the insured facility, the policy also affords coverage for liability that arises out of an “insured shipment” as defined. In effect, the insured is protected against public liability claims that are brought as a result of an incident involving specified types of nuclear material while in transit to or from the insured location.

A very limited coverage for “covered environmental cleanup costs” was added to the policy in 1990. It covers only those offsite environmental cleanup costs that are incurred directly as a result of an Extraordinary Nuclear Occurrence or a “transportation incident” as that latter term is defined in the policy. Insurers are able to extend coverage for offsite environmental cleanup costs in these circumstances because the costs can be tied to
clearly identifiable events. No coverage is provided for environmental cleanup costs that are unrelated to these events, unless such costs are found by a court to be tort damages because of offsite property damage.

In 1994, we added coverage for the additional costs incurred by a state or municipality in responding to a severe nuclear incident. The coverage provides for a direct reimbursement for the added costs incurred in providing emergency food, shelter, transportation or police services stemming from an evacuation of the public. The coverage applies only to those additional costs incurred by the state or municipality during the time the official evacuation order is in effect, plus an additional 30 day period immediately thereafter.

Now a word about radiation claims of workers. Although claims under state or federal workers compensation statutes are exempted by the Price-Anderson Act, radiation tort claims of workers are not. These are claims from workers alleging radiation-related bodily injury against someone other than the worker's employer. Examples would include a claim by a power plant employee against a contractor or a claim by a contractor against the power plant operator. These claims are covered by ANL under a separate policy referred to as the Master Worker Policy. The policy is subject to a single industry-wide aggregate limit of $200 million which can be reinstated by insurers. In that sense, it can be thought of as a kind of group insurance contract.

The SFP Master Policy referenced earlier provides "following form" coverage with that provided under the underlying Facility Form and Master Worker Policy - in effect providing a seamless stream of coverage up to the limitation on aggregate public liability.

NRC'S CONCLUSIONS AND RECOMMENDATIONS

And that provides me an opportunity to segue into the United States Nuclear Regulatory Commission's (NRC) latest review of the Act. The Act has been extended three times - in 1965, 1975 and 1988. It is up for renewal again in 2002, and we fully expect another extension, primarily because it is in the public interest to do so.

By law, the NRC was obligated to furnish the U.S. Congress with a report on the status of the Price-Anderson law by August 1, 1998, and that was done. The report is balanced and provides a good foundation for Congressional review of the Act. It makes a strong case for renewal - a case embodied in these statements:

"The Price-Anderson provisions of the Atomic Energy Act of 1954, as amended, have proven to be a remarkably successful piece of legislation. Price-Anderson embodies two core values of the United States that remain essential as the nation crosses into the next century. These twin values are the development of technology to improve living standards for all and the compensation of those who may suffer from the consequences of deploying or testing advanced technologies... Because the Act has benefited from extensive public discussion and legislative modification over the years, only modest changes, if any, need be contemplated in connection with its renewal."

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The report offers three recommendations of particular importance:

1. **The Commission recommends that Congress consider an increase in the maximum annual retrospective premium from $10 million to $20 million.**

   The impetus for this recommendation is not clear. While it does not appear to be a significant issue, a doubling of the maximum annual retrospective premium could pose problems for individual utilities, particularly in a deregulated environment.

2. **The Commission recommends that Congress discuss with nuclear liability insurers the potential for increasing the primary liability insurance limit.**

   The present primary limit of $200 million has been in place since 1988. A higher limit would offset the effects of inflation. It would also help offset any decreases in the SFP layer resulting from reactor closures, and would provide more of a buffer between loss at the primary level and retrospective assessments in the second layer. This last benefit could be particularly helpful to utilities as the pressure of competition intensifies.

   A higher primary insurance limit would require us to assemble increased capacity commitments from our member companies and reinsurers. As has always been our practice, we would look only to sources of high quality, financially secure capacity. Since limits have not been increased since 1988, it may be possible to increase the current limit by a significant percentage coincident with the renewal of the Act.

3. **The Commission recommends that any changes made in the Act reflect any potential U.S. obligations under the Convention on Supplementary Compensation for Nuclear Damage.**

   The Supplementary Funding Convention was signed by the U.S. in 1997, but has not yet been ratified. The Convention would supplement the existing international legal framework for nuclear accidents. It would provide a single legal forum for lawsuits (i.e., the courts of the country in which the accident occurs), channel legal liability to the operator, except in the U.S. where the Price-Anderson system applies and provide a new funding source to compensate accident victims if damage claims exceed certain minimum limits. A major stumbling block to ratification has been the insistence that U.S. industry find a way to pay the U.S. Government's share of any new funding obligation.

   The technical changes required in the Act to accommodate the Convention should not be difficult to achieve, but we need to be careful not to allow the funding issue to become a Price-Anderson renewal issue.

The Act has encouraged maximum levels of insurance for the nuclear risk in the face of normally overwhelming obstacles for insurers - that is, catastrophic loss potential, lack of credible predictability, very small spread of risk and limited premium volume. This has
been accomplished over more than forty years without interruption and without the “ups and downs” (or market cycles) that have affected nearly all other lines of business.

The essential fact is that the public is far better off with this system of financial protection than without. It represents a carefully worked out balancing of the interests of the public as private citizens, as members of the body politic, and as participants in and beneficiaries of private business enterprise. The soundness of the program lies in its simplicity and sense of balance in meeting a few clearly defined objectives.

Finally, let me add that nuclear power represents a very tiny fraction of the private insurance industry's overall operations. Insurers do not expect to reap great financial rewards from nuclear insurance. They do not advocate one energy source over another. Instead, they have taken their cue from Congress. For more than four decades now, the American national policy has been to develop and exploit the use of nuclear power as a clean, viable part of our nation's energy mix. If nuclear power is to continue to be a significant source of energy in the U.S., we would urge Congress to renew the Price-Anderson Act with little or no change. It has stood the test of time and deserves a place in America's future.

1 The Price-Anderson Act is Section 170 of the Atomic Energy Act of 1954, as amended. Section 170 was added in 1957.
2 Defined in Section 11.k. of the Atomic Energy Act of 1954, as amended.
3 Defined in Section 11.w. of the Atomic Energy Act of 1954, as amended.
4 Defined in Section 11.q. of the Atomic Energy Act of 1954, as amended.
5 See Note 2.
6 The Atomic Energy Act of 1954, as amended, Section 170.b.
7 The Atomic Energy Act of 1954, as amended, Section 170.b.
8 The Atomic Energy Act of 1954, as amended, Section 170.e. (1) (A) and Section 170.o. (1) (E).
9 The Atomic Energy Act of 1954, as amended, Section 170.e. (2).
10 The Atomic Energy Act of 1954, as amended, Section 170.e. (1) (A).
12 The Atomic Energy Act of 1954, as amended, Section 170.n. (1).
13 Defined in Section 11.j. of the Atomic Energy Act of 1954, as amended. Without citing all specifics, the term refers to a significant nuclear incident that results in severe offsite consequences.
14 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 the 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 cause thereof.
15 The Atomic Energy Act of 1954, as amended, Section 170.n. (2).