Recent Developments in the Areas of Nuclear Liability Coverage in the United States of America and International Regimes

O.F. Brown II
Davis Wright Tremaine

INTRODUCTION

This paper will discuss recent nuclear liability developments in the United States. Since this conference has participants from about 17 countries, I also will use this opportunity to address international concerns and developments, including ongoing attempts to adopt a more global nuclear liability regime.

I am pleased to have this opportunity to present another paper at my seventh consecutive PATRAM conference, beginning with the 5th PATRAM here in Las Vegas in 1978. At the 6th PATRAM in Berlin in 1980, the 7th in New Orleans in 1983, the 8th in Davos, Switzerland in 1986, the 9th in Washington, D.C. in 1989, and the 10th in Yokohama, Japan in 1992, I presented descriptions of the Price-Anderson nuclear hazards insurance-indemnity system as it existed at those times. Since then, there have been several further developments here in the United States. These include a 1993 inflation adjustment increasing coverage to a high of US$9.3959 billion, followed by reductions in the amount applicable to power plants due to recent decommissionings; possibly troublesome changes in insurance coverage for workers' tort claims; recent appellate court decisions related to personal injury claims from the 1979 Three Mile Island (TMI) accident; and unresolved issues about coverage for "mixed waste."

BACKGROUND ON U.S. SYSTEM

By way of background, the Price-Anderson Act provides for a comprehensive and unique system of private insurance and U.S. Government indemnity for "public liability" that might arise from use of "source, by-product and special nuclear material." The system provides broad coverage for public liability associated with certain fixed nuclear facilities and transportation of nuclear materials to or from such facilities. Substantive tort law generally is left to the States (except courts have ruled Federal radiation protection regulations provide the "standard of care"

and when a "nuclear incident" rises to the level of an "extraordinary nuclear occurrence," in which case certain ordinarily available State law defenses are waived).

The Price-Anderson Act first was adopted in 1957, and last was amended in 1988. The Act's authority to extend new coverage will expire on August 1, 2002, unless again extended by Congress. Reports to Congress from the U.S. Nuclear Regulatory Commission (USNRC) and the U.S. Department of Energy (USDOE) on whether to extend the Act are due in 1998. USNRC already has begun to contact insurance experts about assisting with its report.

Assuming there is liability for a particular nuclear accident, financial coverage under Price-Anderson is different from conventional insurance: Under the unique, so-called "omnibus" feature of the Price-Anderson system, there is coverage for "anyone liable" (except the U.S. Government) for "any legal liability arising out of or resulting from a nuclear incident." This desirable feature sometimes is referred to as "economic channeling" of liability. It is similar to the "legal channeling" of liability to the installation operator under the international conventions and domestic laws of many other countries. The Price-Anderson Act provides that the liability of all entities covered by it is limited to the amount of coverage provided by the system. The limitation does not apply to uranium mines and mills, nuclear fuel fabrication facilities (other than certain plutonium fuel fabricators), certain transportation, or nuclear incidents outside the territorial limits of the United States. Price-Anderson also will not apply to any uranium enrichment facility constructed after October 24, 1992 (*e.g.,* the United States Enrichment Corporation's (USEC's) AVLIS facility or Urenco's Louisiana facility, if built). The 1993 lease between USEC and USDOE for the uranium enrichment facilities at Paducah and Portsmouth includes a Price-Anderson nuclear hazards indemnification agreement specifically authorized by the amendments to the Atomic Energy Act that created USEC. Unless renewed, the USDOE-USEC lease will expire in 1999.

ROLES OF USNRC, USDOE, AND NUCLEAR INSURANCE POOLS

USNRC administers the portions of the Price-Anderson Act applicable to commercial nuclear facility licensees. USNRC indemnity agreements (or USDOE indemnity agreements, as discussed below) may be the sole source of funds for public liability associated with nuclear risks where there is not insurance from private sources. Private insurance, when applicable, can furnish either underlying or exclusive coverage. It is provided by either the two nuclear insurance pools (American Nuclear Insurers, the pool of stock insurance companies, and Mutual Atomic Energy Liability Underwriters, the pool of mutual insurance companies) or the conventional insurance market. As a general rule, the pools cover nuclear fuel-cycle activities, while non-fuel-cycle activities (which are not considered to involve a level of risk requiring a pooling arrangement) are covered by the conventional insurance market. The pools issue two principal types of nuclear liability policies (now up to US$200 million): the Facility Form, and the Supplier's

and Transporter's Form. The other principal kind of Price-Anderson coverage is that issued by USDOE. The Act, as amended in 1988, now requires USDOE to provide indemnity to its contractors in an amount equal to the maximum amount ever provided for power plant licensees.

DEFERRED PREMIUMS FOR POWER PLANT OPERATORS

In the case of liability associated with USNRC-licensed power plants, if the primary level of financial protection afforded by the plant's Facility Form were insufficient to pay all claims, power plant operators would be assessed a "standard deferred premium" per incident. This amount was raised to US$63 million per power plant by the 1988 Amendments and to US$75.5 million by the USNRC's 1993 quinquennial inflation adjustment. Under the 1988 Amendments, an additional 5 percent can be added to the standard deferred premium to cover legal defense costs, bringing the current amount to US$79.275 million. As of December 1995, the amount of power plant coverage and the limitation on liability for power plants is US$200 million under the Facility Form plus US$ 8.640975 billion under the Retrospective Plan (based upon 109 nuclear power plants (including Watts Bar-1 and excluding Trojan) "operating" as of December 1995 times US$79.275 million each) for a total of US$8.840975 billion. At the high point of 116 nuclear power plants "operating," the figure had reached US$9.3959 billion. This higher amount still is applicable under USDOE indemnification agreements, since the 1988 Amendments provide the USDOE amount cannot be reduced from the maximum previous USNRC amount. With the number of nuclear power plants in the United States now decreasing for the first time and not taking into account additional inflation adjustments, the amount of USDOE coverage is likely to remain constant for some time.

INSURANCE COVERAGE FOR NUCLEAR WORKERS

In 1988, the nuclear insurance pools modified their liability insurance program to provide a separate policy for tort liability claims of workers employed at commercial nuclear facilities. (Under worker compensation laws, workers usually are barred from suing their own employers, but not third parties, such as suppliers.) A separate Master Worker Policy now covers the tort claims of workers first employed in the nuclear industry on or after January 1, 1988 (so-called "new workers"). It is subject to a single industry aggregate limit of US$200 million. Coverage for tort claims of workers first employed prior to January 1, 1988 (so-called "old workers") continues to be provided under individual Facility Form policies, but this coverage now will end on December 31, 1997. An industry group composed almost exclusively of utility representatives has been considering alternatives, such as self-insurance. Most suppliers have been excluded from these discussions. At this stage, it is unclear what coverage, if any, will be available for "old workers" as of January 1, 1998, or whether any new utility program would be available to other than power plant operators. This is a significant matter that should be watched carefully.

ONGOING THREE MILE ISLAND LITIGATION

In October of this year, the U.S. Court of Appeals for the Third Circuit issued two opinions concerning the protracted tort litigation that arose from the March 1979 Three Mile Island nuclear power plant accident. A number of TMI cases for such matters as economic losses, evacuation costs, and some bodily injury claims were disposed of long ago (for a total of about US$63 million, including legal defense costs). However, there still are pending the consolidated personal injury claims of more than 2,000 plaintiffs. Earlier, the Third Circuit had ruled that the Price-Anderson Act preempts State tort law on the issue of the standard of care owed to plaintiffs by USNRC licensees. One of the October decisions specifically found that USNRC's radiation protection standards constitute the Federal standard of care, rather than the USNRC's as-low-as-reasonably-achievable (ALARA) regulations. The court declined to rule on whether Federal law controls other aspects of plaintiffs' tort claims such as causation and damages, because they were not at issue. Ten test cases are expected to go to trial in Spring 1996. The second TMI appellate decision released in October affirmed the ruling of a lower court granting plaintiffs the right to attempt to recover punitive damages from the private defendants, but emphasizing the district court has authority to prioritize the various claims if punitive damages are awarded. Note the 1988 Price-Anderson Amendments specifically preclude punitive damages in cases where the U.S. Government is obligated to make indemnification payments.

COVERAGE FOR "MIXED WASTE"

In the last several years, there has been continuing concern about coverage for liability that might arise from handling and transportation of "mixed" waste, *i.e.*, waste that contains both radioactive constituents (regulated by USNRC and USDOE under the Atomic Energy Act) and hazardous constituents (regulated by the U.S. Environmental Protection Agency under the Resource Conservation and Recovery Act). The Price-Anderson system covers losses arising only from "the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material," as those terms are defined in the Atomic Energy Act. Price-Anderson does not cover nonnuclear hazardous activities. In the past, nuclear risks generally were considered more significant, so this issue did not receive much attention. In January 1995, USDOE distributed to its contractors and other "stakeholders" a memorandum from its General Counsel concluding damages resulting from the nonnuclear component of mixed waste would not be covered by Price-Anderson indemnification. The USDOE opinion went on to say that, although it is reasonable to assume that, in an incident involving mixed waste, a court would attempt to provide coverage for that portion of liability resulting from the nuclear component, it is "...difficult to predict with any certainty how such apportionment might be accomplished." USDOE did not suggest how the potential liability for the hazardous component might be covered.

INTERNATIONAL DEVELOPMENTS

Recently, American companies have become involved in making transportation arrangements in the former Soviet Union and Eastern Europe and in advising nuclear power plant operators and others about upgrading the safety of their Soviet-designed nuclear facilities. This has led to serious concern about nuclear liability coverage for American companies doing work abroad, especially since neither the United States nor certain States of the former Soviet Union or Eastern Europe are members of any nuclear liability convention. To eliminate the liability problem presented by this work and to better ensure protection of the public prior to the availability of an improved international nuclear liability regime, countries with Soviet-designed installations have been urged to adopt domestic legislation that channels nuclear liability to the plant operator and provides an adequate level of compensation (*e.g.,* 150 million SDRs), and to become parties to the existing Vienna Convention on Civil Liability for Nuclear Damage.

The American tort system has made American companies especially cautious of potential liabilities. The worst-case scenario involves an accident in a foreign country followed by a lawsuit brought against the American company in an American court, where the damage award could be high and assets in the United States would be subject to seizure to satisfy any judgment. The Bhopal chemical accident in India is the prime example. Until the United States itself is party to a treaty and even if other countries adopt domestic laws and join the existing Vienna Convention, American contractors will remain vulnerable to Bhopal-like lawsuits in U.S. courts (especially where countries adopt low liability limits). Contractors in other Western countries have expressed similar apprehension, even though some enjoy additional protection from liability by virtue of being government-owned.

EXISTING INTERNATIONAL COVERAGE

The Price-Anderson System provides up to US$100 million of protection for some "nuclear incidents" outside the United States. However, the statutory definition of "nuclear incident" limits coverage outside the United States to situations where the nuclear material is "owned by, and used by or under contract with, the United States...." In some cases, nuclear liability coverage for transportation of nuclear material outside the territorial limits of the United States can be obtained from the American nuclear insurance pools under a Foreign Supplier's and Transporter's Form policy. This coverage now is available in amounts of up to US$25 million per occurrence, but is "single interest," rather than "omnibus", *i.e.,* it covers only named insureds.

Bilateral Agreements, such as the ones the United States entered into with the Russian Federation and Ukraine in 1993, and the European Commission entered into with the Russian Federation in February 1995, provide unprecedented

nuclear liability coverage. However, these Bilateral Agreements have been intended solely for governmental safety assistance work and provide the framework for government-to-government protection, which presents issues of enforceability. For most American and other Western contractors, a Bilateral Agreement is not viewed as providing adequate protection. The U.S. Government has declined to provide indemnification under Public Law 85-804, except in a few limited cases involving nonproliferation activities (such as Project Sapphire, which involved transportation of highly enriched uranium from Kazakhstan).

The 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy and the 1963 Brussels Supplementary Convention established a nuclear liability regime for Western Europe. The 1963 Vienna Convention aimed at a worldwide system, but it has not attracted sufficiently comprehensive membership and its current requirement for minimum coverage of US$5 million is being reexamined. Where countries are in treaty relations under the Paris or Vienna Conventions, there are provisions to cover nuclear shipments between and among them. The 1988 "Joint Protocol" attempted to link the Paris and Vienna Conventions, but the goal of a global treaty has not been met. For example, Germany, France, and the United Kingdom have not ratified the Joint Protocol, so are not in treaty relations with any Vienna Convention country.

Countries with a majority of the world's 420-plus operating nuclear power plants are not yet parties to any nuclear liability convention. There are plants in those countries closer to international borders than Chernobyl. Shipments between and among them are not covered by any convention. Countries that are not party to a nuclear liability convention include Canada, China, Japan, Russia, South and North Korea, Switzerland, Thailand, Ukraine, and the United States. (Some countries, such as the United States, have domestic laws that cover cross-border damages, but would benefit from being party to a convention.) Similarly, some nonnuclear countries that border nuclear countries are not convention parties (*e.g.*, Austria and Belarus). Countries like Canada and Japan have not yet recognized the need to be parties to a convention, in part because their contractors have not expressed much concern. Harmonizing liability coverage, if any, that applies to a particular international shipment would be facilitated, if more countries were in treaty relations with each other.

IAEA ACTIVITIES

Almost a decade ago in 1986, Chernobyl demonstrated nuclear power plant accidents can have cross-border consequences. Existing international nuclear liability regimes are not adequate to deal with cross-border consequences. After almost 10 years of meetings of legal experts at the International Atomic Energy Agency (IAEA) in Vienna, the problem remains unsolved. Before the 10th anniversary of Chernobyl next April, policy-level officials from nuclear and nonnuclear states need to do more to focus on and resolve the liability problem.

Since 1990, the IAEA Standing Committee on Nuclear Liability has held *13* meetings to consider amending the Vienna Convention to improve its coverage and attract more adherents worldwide. The Committee has made some progress, but has not yet reached final agreement on amendments to the Vienna Convention or on supplemental funding through international contributions for transboundary and perhaps installation State damages. Some European governments appear to favor a Eurocentric approach, rather than a more global treaty. Asian and South American countries unfortunately have shown little interest so far.

The IAEA has been considering convening a Diplomatic Conference in 1996 to bring the Vienna Convention revision project to a close. Ideally, the Conference would consider and adopt amendments to the Vienna Convention and supplemental funding, and make them available for ratification by individual countries. This effort should not be delayed indefinitely by the Standing Committee's inability to reach consensus after 13 meetings.

In 1994, the U.S. Government put forward a proposal for an "umbrella" convention designed to break the IAEA stalemate. It contained a supplementary funding scheme to compensate only transboundary damage, the problem highlighted by Chernobyl. As first proposed, the "umbrella" was a free-standing nuclear liability convention, consistent with the existing Vienna, Paris, and Brussels Conventions, and the Price-Anderson Act. This approach did not focus on individual national or regional systems, and has been supported by many nonnuclear countries and environmentalists. It would allow somewhat more flexibility to Member States than the current Vienna or Paris Convention, and would not preclude development of new regional systems (*e.g.,* for Latin America). For example, the draft would allow the United States to keep in place our earlier and slightly different Price-Anderson system (which generally leaves tort law to our individual States and utilizes "omnibus" coverage for anyone liable ("economic channeling"), instead of "legal channeling" of liability to the plant operator).

The most recent meeting of the IAEA Standing Committee on Nuclear Liability was held in Vienna during the week of October 30. I understand progress was made on the issues of Vienna Convention revisions and supplemental funding. Recent discussions on supplemental funding have centered on a common structure, rather than actual treaty language. Under this approach, a country could be a party to a new Supplemental Fund Convention, if it were a member of the Vienna or Paris Convention, or had a domestic law in conformity with the new Convention's "annex." The annex would set a "world standard" for nuclear liability, including the U.S. Price-Anderson "economic channeling" approach. A remaining dispute is whether the Supplemental Fund, if created, should cover on a nondiscriminatory basis installation State, as well as transboundary, damages. The next IAEA Standing Committee meeting will be held in Vienna during the week of January 29, with an informal drafting session the week before. These next sessions will be very important for reaching a final consensus on the approach. It now is assumed there will be another Standing Committee meeting

(the *15th)* in May 1996. This means that the earliest time for a Diplomatic Conference at the IAEA probably is the Fall of 1996.

NEED FOR MORE INTERNATIONAL PROGRESS

Adherence to an international convention by more countries (including the United States) would promote the open flow of services and technology, and better facilitate international transportation. The conventions protect the public, harmonize legislation in the participating countries, and promote the use of nuclear energy. American and other market economy contractors have become accustomed to the nuclear liability conventions' common principles: channeling of liability, absolute liability, liability limited in amount, liability limited in time, a single competent court to adjudicate claims, compulsory financial security, and nondiscrimination based on nationality, domicile, or residence. In the last few years, Armenia, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Slovakia, and Slovenia have acceded to the Vienna Convention. However, some of these have not adopted domestic implementing legislation or established limitations of liability at levels much beyond the US$5 million Vienna Convention minimum set in 1963. Progress, nevertheless, is being made. A key influencing factor recently has been the upcoming "G-7-plus-1" Nuclear Summit to be held in Moscow in April 1996. This appears to be causing more high-level attention to the nuclear liability issue by the G-7 countries and the Russian Federation. In 1994, the Paris-based OECD Nuclear Energy Agency established a Contact Group on Liability Issues Raised by Nuclear Safety Assistance Programmes to Eastern Europe. As one of three U.S. members of the Contact Group, I have been advising various former Soviet bloc countries on their nuclear liability regimes.

CONCLUSIONS

Potential nuclear liability is a major constraint on contractors doing work abroad and international transportation. A better international nuclear liability regime is needed to facilitate upgrading Soviet-designed plants, and to also cover new plants planned for Asia and elsewhere. Establishment of a worldwide nuclear liability system is in everyone's interest: nuclear countries, nonnuclear countries, plant operators, transporters, package designers, suppliers, and environmentalists. More treaty adherents would better protect the public and facilitate nuclear commerce worldwide. Participants in this conference who look to markets abroad for transportation and packaging services should be doing more to promote both near-term and longer-term solutions to the international nuclear liability issue, including encouraging your governments to ask the IAEA to schedule the Diplomatic Conference in 1996. Otherwise, the goal of a worldwide system will remain unfulfilled; there will be strong criticism of this on the upcoming 10th anniversary of Chernobyl; and, fear of liability can be expected to inhibit prudent contractors from pursuing and performing nuclear work internationally.