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Need for Foreign Nuclear Liability Insurance

This paper addresses the many inquiries we receive about nuclear liability exposures and coverages outside the United States. The paper is addressed to U.S. domiciled suppliers who provide products or services to foreign nuclear facilities. It reviews what potential nuclear exposures these suppliers have, and whether they should consider purchasing foreign nuclear liability insurance.

The Nuclear Liability Conventions

Unlike the United States, where the federal Price-Anderson Act almost exclusively governs nuclear liability, many countries with established nuclear regimes have sought to comply with the principles adopted in international conventions on civil nuclear liability. These conventions are reviewed briefly below.

The ***Convention on Third Party Liability in the Field of Nuclear Energy***, or Paris Convention, entered into force in 1968. It includes all Western European countries except Ireland, Austria, Luxembourg and Switzerland. It is the first international convention to regulate civil nuclear liability.

The Convention's Preamble describes the Convention's objective as providing "adequate and equitable compensation for persons who suffer damage caused by nuclear incidents whilst taking the necessary steps to ensure that the development of the production and uses of nuclear energy for peaceful purposes is not thereby hindered." Like Price-Anderson, the Convention thus has a two-fold purpose – to provide a system of compensation **and** to encourage the development and use of nuclear power.

Under the Paris Convention, the operator of a "nuclear installation" as defined is exclusively and strictly liable for damages from most nuclear incidents. Nuclear installations include power reactors, fuel enrichment and manufacturing facilities, and fuel reprocessing facilities. The operator is liable for incidents at the facility and in many cases during transportation of certain nuclear materials. All legal liability, in other words, is channeled to the facility operator. This legal channeling is different from the situation in the United States, where Price-Anderson provides economic (but not legal) channeling of liability.

The ***Vienna Convention on Civil Liability for Nuclear Damage*** is similar to the Paris Convention. This convention entered into force in 1977, and has been adopted by some countries with nuclear regimes outside Western Europe (excluding the United States and Canada). Like the Paris Convention, the Vienna Convention provides for the nuclear operator's exclusive and strict liability. Its definition of "nuclear installation" is similar to Paris's, and the end result is the same: legal channeling of liability to the facility operator in most cases. In theory, a supplier will not be held liable, regardless of whose product or service caused the nuclear incident.

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To ensure adequate compensation for damages, both conventions require financial security in the form of insurance or other resources. Beyond amounts set by the conventions, each country can establish additional financial security. These amounts vary considerably, but the point is that they involve compensation to the public. They do not affect a supplier's liability, which regardless of financial security normally remains legally channeled to the facility operator.

There are certain limitations to the operator's exclusive and strict liability. Both the Paris and Vienna Conventions exonerate the operator in the event of war, civil war or insurrection, or if the injured party's gross negligence can be established. Both conventions impose limitations in time and amount for recovery of damages. Finally, the conventions' principles can be modified by an individual country's nuclear legislation. For instance, both conventions eliminate compensation if an action is not brought within ten years of a nuclear incident. But that period can be lengthened under a participating country's national regime.

Originally, the Paris and Vienna Conventions operated independently of each other. If, for instance, a person in a Paris Convention country suffered injury because of a nuclear incident in a Vienna Convention country, that person could not claim compensation in the country where the incident occurred. After the Chernobyl accident in 1986, however, a **Joint Protocol** was enacted. This protocol links the geographical scope of the two conventions, to ensure broader protection for victims of nuclear incidents covered under the two conventions.

Finally, there is the **Convention on Supplementary Compensation for Nuclear Damage (CSC)**, which came into force on April 15, 2015. The CSC requires parties to have nuclear liability laws that conform to international standards. The Convention provides the basis for a global nuclear liability regime where victims of nuclear incidents are provided prompt compensation. The CSC acts like an umbrella which can accommodate countries that currently belong to an existing nuclear liability treaty, such as the Paris or Vienna Conventions mentioned above, as well as to countries that do not belong to any nuclear liability treaty but accept the basic principles of nuclear liability law embodied in those treaties.

A major feature of the CSC is the creation of an "international supplementary fund," which provides a second tier of compensation not otherwise available under a State's national law and to which each party to the CSC contributes. The first tier of compensation is provided by the State where the nuclear incident occurred, and is set in the Convention at a minimum of 300 million Special Drawing Rights (SDR's). If that amount is insufficient, a second tier of compensation described above becomes available and is funded by contributions from the CSC member States. The amount of the second tier compensation is determined by a formula prescribed in the Convention. Currently, the United States could owe as little as approximately \$70 million for a nuclear loss that triggers the second tier of compensation as set forth in the CSC. The total amount will depend upon which countries are parties to the CSC and what those countries' installed nuclear capacities are.

Thus far, Argentina, Japan, Montenegro, Morocco, Romania, the United Arab Emirates (UAE) and the United States have ratified the CSC. The CSC is the only international nuclear liability convention that the U.S. has ratified.

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National Regimes

Most countries with commercial nuclear programs have their own legislative regimes for nuclear liability. These national regimes often implement the conventions' principles, and impose the financial security requirements that vary from country to country.

For discussion purposes here, countries can be divided into three categories. The first category includes those countries that are parties to one or more of the conventions, and which have their own legislative regimes. Prominent examples are France, Germany, Spain and the United Kingdom, all of which are parties to the Paris Convention; and the Czech Republic, Hungary and Romania, all of which are parties to the Vienna Convention. Romania also is a party to the CSC.

The second category includes those countries that are not parties to the conventions, but which have their own legislative regimes. Prominent examples are Canada, Japan, South Korea and Taiwan. These four countries impose exclusive and strict liability on their nuclear installation operators. So they conform with the channeling requirements of the Paris and Vienna Conventions, despite not being parties to those conventions.

The final category includes those countries that neither are parties to the conventions nor have their own legislative regimes. Although these countries are relatively few, China is the most prominent example. China has certain directives stating its position on nuclear liability, but has not yet developed a specific regime. Nor is China a party to any of the conventions.

Foreign Nuclear Exposures

What does all this mean for a supplier? If their products or services are provided exclusively to a nuclear installation in a country subject to the Paris or Vienna Convention, the supplier might not need nuclear liability insurance. The supplier should not be held liable for damages resulting from a nuclear incident. Liability should be channeled to the facility operator.

The reader should note the words "might" and "should" in the preceding paragraph. There are potential gaps in the legal framework of conventions, national laws, and other vehicles designed to clarify and limit the liability of suppliers in the nuclear business. The PC Conference Working Party on Liability Insurance commented on these potential gaps in a 1992 report:

"...gaps may have unwittingly occurred as a result of imprecise wordings in legislation or from imperfect policy drafting. As there is a dearth of case law precedent it was conceivable that in certain circumstances, liability might attach outside the scope of the international Conventions or domestic nuclear legislation."

What was true in 1992 remains true today. Gap issues likely would be resolved in court, and related costs might be tendered to a supplier.

Nuclear exposures exist even if the legal framework is found to have no gaps. Here are some examples.

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- 1. Liability for damages outside a convention jurisdiction:** Often the national and the nuclear installation's liability policy do not apply to damages outside a convention jurisdiction (e.g., French accident resulting in Swiss injury). In these cases, both the facility operator and the supplier might be sued in a non-convention country for damages occurring in that country.
- 2. Damages suffered in a contracting State which arose from an incident in a non-contracting state:** A large share of nuclear power originates in non-contracting states, even in countries (e.g., China) without comprehensive national nuclear laws. An accident in one of these non-contracting states, which results in damages in a contracting state, might present unprecedented issues that would have to be resolved.
- 3. Suit brought outside the country for damages suffered within the country:** An individual visiting the country where an accident occurs (e.g., France) might sue the operator and the supplier in that person's domicile (e.g., the U.S). The domiciliary court is not required to apply the law of the country where the accident occurred.
- 4. Transport exposures:** Suppliers face exposure uncertainties in many transport situations. For example, even transportation losses that occur on the territory of the convention countries, and which cause damage in those countries, might not be covered by the national law, if the transport was not from a site domiciled in that territory.

The convention and national law provisions on channeling might not apply to damage offshore. Even transports within convention countries that are to or from nuclear installations might not be covered by the national laws if they constitute a "small quantities" transport.

Maritime and other shipping law is rather arcane, and might apply in transport cases involving nuclear damages, as national nuclear laws might not be viewed as overriding international maritime treaties and laws. While the conventions and some national nuclear laws protect against damage suffered on the high seas, this protection generally applies only to ships registered in, and to residents of, contracting states.

- 5. Exposures outside the scope of national law:** National nuclear laws might exclude small quantities of nuclear materials, natural disasters, mental anguish, etc. Further, in cases of small quantities of nuclear materials, or mixed waste, or non-reactor activities, national environmental laws might apply, rather than national nuclear laws.
- 6. Liability not always channeled:** Germany, Austria, Spain and Greece at times have not adhered to the channeling concept. For instance, Spain's nuclear law at one time and under certain circumstances limited channeling and permitted operators to seek recourse against other parties. India's current law in certain situations allows recourse against suppliers.
- 7. Defense costs despite channeling provisions:** A supplier might incur defense costs responding to a claim that arises despite a specific country's channeling provisions. Even if the claim ultimately is deemed without merit, the supplier can incur significant costs in responding to the claim.

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All of this argues for several situations where the supplier's own insurance might be helpful. The decision whether to purchase insurance often reflects how risk averse an individual supplier's risk management philosophy is. If a supplier is comfortable with the protection afforded by the conventions and by a specific country's legislative regime, that supplier might very well forego their own insurance. If, on the other hand, a supplier is uncomfortable relying upon the conventions and the national nuclear liability laws, or is uncertain where they supply products or services, that supplier might very well purchase the insurance. For those who choose the latter course, ANI makes available a foreign Supplier's and Transporter's policy.

Foreign Supplier's and Transporter's (S&T) Insurance

The foreign S&T policy insures the foreign activities and products of U.S. companies, subject to policy terms and exclusions. The policy is designed to pay for losses not excluded by national nuclear laws, or losses in excess of or not covered by any other nuclear insurance (e.g., the local nuclear pool policy).

The policy is an indemnity only policy that reimburses the insured for payments made in connection with third-party bodily injury or property damage resulting from the nuclear energy hazard, which is defined as "the radioactive, toxic, explosive or other hazardous properties of nuclear material." The policy is continuous from inception until cancellation or termination, at which time the insured has ten years to report claims for damages that took place during the policy period. Defense costs are reimbursed only with ANI's written approval.

The policy's current maximum limit of liability is \$50,000,000. This limit is available in all insured countries except France, Spain and Sweden, where the available limit is \$15,000,000 because of reinsurance commitments. Although \$50,000,000 is available in many countries, ANI normally does not quote or offer that limit. The policy excludes certain countries, most notably the U.S., Canada, China, India and Japan. The U.S. is excluded because ANI has a separate pool and policy to insure U.S. nuclear liability exposures. Canada is excluded because there is a Canadian market to insure nuclear liability exposures in Canada. China and India are excluded because they have questionable legislative regimes, and because they are not parties to the Vienna Convention. (China is covered if claims are brought and enforced outside China and certain other countries.) And Japan is excluded because of both reinsurance commitments and the exposure brought to light by the March 2011 earthquake and tsunami there.

There are several other exclusions worth noting.

- Worker's compensation and employer's liability.
- Contractual liability, other than a warranty of materials, parts or equipment.
- Bodily injury or property damage arising out of any nuclear weapon, or resulting from nuclear material used for military purposes.

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- Bodily injury or property damage arising out of war.
- Bodily injury or property damage arising out of a “terrorist act” as defined.
- Bodily injury or property damage arising out of any radioactive isotope.
- Bodily injury or property damage with respect to which any government indemnity or available insurance applies.
- Any obligation arising out of the ***Convention on Supplementary Compensation for Nuclear Damage (CSC)***.

Property damage (including business interruption and loss of use) to any nuclear facility or to any property at the facility, arising out of nuclear material at the facility.

This last exclusion is particularly noteworthy. The policy cannot be purchased to afford property damage protection to a supplier at a nuclear facility where that supplier has furnished products or services. A normal recourse is contractual risk transfer, because conventional liability policies also normally exclude nuclear property damage to a nuclear facility.

Coverage is available for an insured’s majority-owned subsidiaries. Coverage can be limited to transportation of nuclear material. Finally, any payment for loss or loss expense under a foreign S&T policy reduces that policy’s limit of liability. Reinstatement of that limit is solely at ANI’s discretion.

Policy premiums are based upon the limit of liability, the product or service supplied, the dollar volume of the product or service, and the countries where the product or service is supplied. There is no “typical” premium. But assume that a supplier provides products to power reactors in Britain and Germany. Sales total \$1,000,000. For that exposure, the estimated annual premium would be \$33,000 for a limit of \$10,000,000, or \$50,000 for a limit of \$25,000,000.

We welcome your questions or comments, so please feel free to contact us if any arise.

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