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# “Is The Price-Anderson Act An Appropriate Model For The Railroads?”

by Michael F. McBride<sup>1</sup>

## Introduction

The railroads have proposed that a statute similar to the Price-Anderson Act of 1957, as amended, 42 U.S.C. § 2210 (with pertinent definitions in *id.*, § 2014), be adopted to limit their liability for accidents involving hazardous materials. The Price-Anderson Act is not simply a limit on liability. It is premised upon extensive governmental regulation of the safety of nuclear facility construction and operation. And it requires joint industry participation in insurance pools and purchase of large amount of commercial hazard insurance and waiver of various defenses to claims and expedited claims procedures. Under Price-Anderson, the financial impact of a serious accident an individual plant would be spread across the entire nuclear industry. The nuclear industry has voluntarily taken measures to improve its safety record, by creating, among other actions, a safety “watchdog,” called the Institute of Nuclear Power Operations (“INPO”), which rigorously oversees the safety of commercial nuclear power plants. I am not aware of any proposal from the railroads that fully captures these essential elements.

If the railroad industry believes that a limit on liability for shipments of hazardous materials is appropriate, it must seek that change from Congress. However, it is important to recognize that the Price-Anderson Act, as amended, is not simply a limit on the liability of those involved with nuclear power plants and transportation of nuclear materials (including railroads). As I explain below, it is part of a comprehensive regulatory, safety, insurance and waiver of defenses approach intended to assure safety of nuclear facilities and expedite compensation if accidents occur. Railroads do not have authority to impose limits on tort liability in their tariffs, nor may they ask the Board to adopt such limits which preempt State law.<sup>2</sup> Tort liability is the province of the courts, or the Congress and the State legislatures.

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2 The Board, as an agency of the United States, is a creature of statute. As such, it has only such authority as Congress has given it. *Bowen v. Georgetown University Hospital*, 488 U.S. 204, 208 (1988) (“It is axiomatic that an agency’s power to promulgate legislative regulations is limited to the authority delegated by Congress.”); *Stark v. Wickard*, 321 U.S. 288, 309 (1944); *American Petroleum Inst. v. EPA*, 52 F.3d 1113, 1119-20 (D.C. Cir. 1995)(same). Congress has not given the STB authority to limit the tort liability of railroads.

## The Price-Anderson Act Must Be Viewed Within the Context of Comprehensive System of Nuclear Reactor Regulation.<sup>3</sup>

### *Background on the Existing System of Nuclear Reactor Regulation.*

Because the Board's Notice raised the subject of the Price-Anderson Act of 1957, as amended, this testimony discusses *infra* the Price-Anderson Act, which must be viewed in the context of the overall federal and industry approach to assuring safety of nuclear facilities.

Any analysis of the Price-Anderson Act must take into account that the federal government, through the Nuclear Regulatory Commission ("NRC"), has an extensive and stringent regulatory program (almost certainly, the most extensive and stringent such safety-related regulatory program) to license and supervise the construction and operation of nuclear facilities. NRC standards are voluminous and exacting. NRC licensing actions and approvals take years, with considerable public participation. Moreover, the NRC has permanent inspectors stationed at commercial nuclear reactors, and maintains an ongoing and rigorous program of license conditions, mandatory licensee reporting, inspections, NRC Staff reports, and, if necessary, investigations, all to assure the safe operation of licensed nuclear facilities. The Price-Anderson Act's liability provisions, along with its waiver of defenses in the event of an "extraordinary nuclear occurrence" and assumption of all liabilities by commercial nuclear licensees (instead of their contractors and subcontractors, absent special circumstances) (the so-called "channeling" of liability to those in the best position to prevent accidents and incidents, and which also simplifies the provision of insurance to the industry), were paired with an unprecedented and uniquely comprehensive federal regulatory regime intended to achieve safe operation, from the beginning of the commercial nuclear industry.

Taking nothing away from the Federal Railroad Administration ("FRA"), which of course regulates the safety of the railroad industry, the NRC, with the very substantial resources committed to it by the federal government (along with substantial annual payments from NRC licensees), is considered by nearly all accounts the most comprehensive regulator of any American industry. Many doubt that the Price-Anderson Act would exist in the absence of the NRC's comprehensive regulatory program.

In that context, the Price-Anderson Act provides assurance of coverage for almost any conceivable nuclear incident, through a combination of primary commercial insurance required of each licensee, and required pooled secondary insurance by all operating commercial nuclear reactors, for an incident involving any such reactor. At this time, the required coverage is over \$10 billion. While there is, above the required amount of primary and secondary commercial insurance, a limit on liability for the commercial nuclear licensees and their contractors and subcontractors, the federal government has stated its intention to provide for reimbursement for any additional damages incurred. Moreover, the required amount of insurance is so high that liability for public claims for the only covered public incident to date (the Three Mile Island-Unit 2 ("TMI-2") accident in 1979) was only a small fraction of the liability limits.

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3 For a useful overview of the Price-Anderson Act, as amended, see James R. Curtiss, et al., *Nuclear Power; in 2 Energy Law and Transactions* § 54.15 (Daniel J. Muchow & William A. Mogel, eds., 2007); see also, "Nuclear Regulation: NRC's Liability Insurance Requirements for Nuclear Power Plants Owned by Limited Liability Companies," GAO Report 04-654 (May 2004).

### ***The Price-Anderson Act.***

Congress enacted the Atomic Energy Act of 1954 to create a comprehensive regulatory program to permit private industry to develop and apply atomic energy for peaceful uses, such as generating electricity from privately owned nuclear power plants. Soon thereafter, government and industry experts identified a major impediment to accomplishing the Act's objective: the potential for payment of damages resulting from a nuclear accident and the lack of adequate available insurance.

Faced with these concerns, Congress enacted the Price-Anderson Act in 1957, and it has been periodically reenacted since. Its twin goals were then, as now, (1) to ensure that adequate funds would be available to the public to satisfy liability claims in a catastrophic nuclear accident; and (2) to permit private sector participation in nuclear energy by removing the threat of potentially enormous liability in the event of such an accident.<sup>4</sup>

Under the Price-Anderson Act, each existing operator of a large commercial nuclear power plant licensed by the NRC must maintain an amount of primary financial protection against public liability claims equal to the maximum amount of liability insurance available at reasonable cost and on reasonable terms from private sources (the "primary insurance amount"). As of this writing, the primary insurance amount is \$300 million. One pool, American Nuclear Insurers ("ANI"), writes the entire primary layer of nuclear liability insurance.<sup>5</sup> Each of the 103 large commercial nuclear reactor licensees also must participate in a secondary insurance pool, under which a deferred (retrospective) premium of not more than \$95.8 million, plus any surcharge assessed under Section 170o(1)(E) (payable at a rate not to exceed \$15 million per year) for each nuclear reactor would become payable following a major nuclear accident (the "secondary insurance amount"). 10 C.F.R. § 1401.11(4).<sup>6</sup>

Public liability arising from nuclear incidents is limited to the amount of primary and secondary insurance. Primary and secondary insurance covers not only licensees but also any other person who may become liable.<sup>7</sup> *Id.*, §§ 140.91, art. II, 140.92, art I., ¶ 6. In sum,

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4 "Statement Submitted by the United States Nuclear Regulatory Commission to the Subcommittee on Transportation, Infrastructure and Nuclear Safety, Committee on Environment and Public Works, United States Senate, Concerning Price-Anderson Act Renewal," presented by William F. Kane, Deputy Executive Director for Reactor Programs (January 23, 2003) at 1 ("2003 NRC Statement"). The NRC's 2003 Statement explained that Price-Anderson coverage for NRC licensees is granted for the lifetime of the covered facilities and does not "expire" even if the Price-Anderson Act is not reenacted. As the NRC's 2003 Statement explained, pending re-enactment, "Thus, in any event, Price-Anderson coverage with respect to already licensed nuclear power reactors will continue and will afford prompt and reasonable compensation for any liability claims resulting from an accident at those facilities." *Id.* at 2.

5 ANI is a joint underwriting association of 50 insurance companies that provides insurance coverage to commercial nuclear power plants.

6 These amounts are subject to periodic updating by the NRC.

7 Contractors and subcontractors of commercial nuclear licensees are indemnified for any liability in the event of a covered incident or accident, absent special circumstances.

in the case of large power reactors, and taking into account the total amount of required primary and secondary commercial insurance, the liability limit is at present over \$10 billion.<sup>8</sup>

Pursuant to the Act, the NRC requires that the insurance policies and indemnity agreements provide that, after any accident found to have caused substantial offsite damage, the licensees and other persons responsible will waive any defense as to conduct or fault, including negligence and contributory negligence, any defense of governmental or charitable immunity, and any defense based on a statute of limitation, if suit is instituted within three years from the date the claimant knew or should have known of his/her injury. If a statute of limitations under state law provides a longer period, there is no defense to be waived, such statute is not affected, and claims are governed thereby.

The Act authorizes the Commission to enter into agreements with other indemnitors (*e.g.*, insurers) to establish procedures for the prompt settlement of claims. It also authorizes immediate assistance payments following a nuclear incident. Upon petition of the NRC or any other interested party, the United States District Court having jurisdiction over the situs of a nuclear incident must determine whether the damages from the incident may exceed the limits of liability. Payments in excess of 15 percent of the limit of the liability, in a case where it is found that damages may exceed the limit, must be consistent with a plan of distribution, including provision for possible latent injury claims, which is to be approved by the court.

Further, the Price-Anderson Act provides for the preparation and submission to the Congress of compensation plans in the event that damages from a nuclear incident are found to be likely to exceed the applicable limit on liability. Under the Act, the President is required, within 90 days after any determination by a court pursuant to Subsection 170(o) that public liability is likely to exceed the limit, to submit information to the Congress concerning estimates of the aggregate dollar value of personal injuries and property damage; recommendations of additional sources of funds to pay claims in excess of the limit, including possible revenue measures and the sector of the economy on which such revenue measures might be imposed; one or more compensation plans that, singly or in combination, would provide compensation for all valid claims; recommendations as to the relief to be provided, including any recommendations for setting aside of funds that may be needed to provide compensation for latent illness; and any additional legislation needed to implement such plans.<sup>9</sup>

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8 The NRC's 2003 Statement explained (at 2) that "Government indemnification was phased out in 1982 when the potential pool and available insurance reached" a predetermined amount. The NRC also explained (*id.* at 5) that "the United States government has not paid a penny for claims against nuclear power plant licensees. In the event a serious accident were to occur, over \$10 billion will be available to pay compensation for any personal injury or offsite property damage. The money will come from insurance policies bought by the industry and from retrospective premiums that will be paid by the industry." Then, addressing the hypothetical situation of claims in excess of the insurance made available by the industry, the NRC explained (*id.*): "If those funds are inadequate, Congress will be called upon to decide what action is needed to provide assistance to those harmed. We believe the public is protected by the broad base of prompt funding. The Price-Anderson Act further aids the public by establishing important procedural reforms for claims arising from nuclear accidents. It channels liability to the licensee, establishes a single federal forum for all claims, eliminates the need to prove fault, requires waivers of other significant defenses, makes prompt settlements possible, and, if litigation is needed, establishes legal management processes to assure fairness and equity in the distribution of damage awards."

9 The NRC may request additional funds from Congress if claims for an incident exceed the approximately \$10 billion currently available in primary and secondary insurance. GAO Report 04-654 (May 2004) at 1.

To summarize, the Price-Anderson Act as amended requires those licensed to operate large commercial nuclear power reactors to maintain the maximum amount of primary commercial liability insurance available and also to contribute retrospective premiums to provide a pooled second layer of insurance to pay liability claims if the first layer should prove insufficient. Again, the current level of primary insurance is \$300 million. As noted above, for a nuclear incident occurring after the 1988 amendments and the 1998 inflation adjustment, retrospective premiums could be as large as \$95.8 million for each licensed facility, subject to indexing and a potential five percent surcharge. Retrospective premiums are payable at a rate of \$15 million/year. All of this results in over \$10 billion in liability coverage at comparatively modest cost – without the need to pre-fund the entire amount or build up reserves for the second layer.

Power reactor licensees purchase the “Facility Form” of nuclear energy liability policy as primary insurance. The nuclear insurance pool ANI also administers the secondary layer of financial protection to provide the retrospective layer of insurance. This insurance pool also provide contingent liability coverage for a modest advance premium for licensees defaulting in payment of retrospective premiums of up to \$30 million for one incident, and up to a total of \$60 million per year. The NRC is also obligated to cover licensee defaults in deferred premium payments, has related borrowing authority, and retains its right (as do the insurers) to receive reimbursement for such advances from the licensee involved.

The Price-Anderson Act has rarely been used. Only one incident, the TMI-2 accident in 1979, triggered public claims payable under the Act. Those claims were all paid, and the total paid was far below the amount of commercial insurance available. Curtiss, *supra*, at pp. 54-101 to 54-102. Other claims made under the Price-Anderson Act are typically made by nuclear plant employees (*id.* at p. 54-102), but the railroads are subject to FELA, the statute applicable to railroad employee work-related injury claims, so that aspect of the Price-Anderson Act may not be relevant here.

The Atomic Energy Act of 1954, as amended,<sup>10</sup> including the Price-Anderson Act, has been extraordinarily successful. It achieved its purpose of encouraging the safe development of the commercial nuclear industry. There has never been an incident that even approached, let alone exceeded, the amount of insurance coverage available.

### ***The Institute of Nuclear Power Operations***

INPO is an organization created by the commercial nuclear power industry to act as a “watch dog” over the operations and status of commercial nuclear power reactors. Created in the wake of the TMI-2 accident in 1979, INPO has acted as a second overseer, in addition to the NRC, to ensure that commercial nuclear reactor operations are conducted safely. Public reports are regularly issued, based on INPO inspections, for each of the 103 operating reactors.<sup>11</sup> Performance is graded in accordance with INPO’s performance standards, and the NRC is notified about the performance of each licensee and about all of INPO’s inspections and reports. INPO, with the strong support of the senior managements of every commercial nuclear licensee, has played an extraordinarily important role in encouraging safe operations of commercial

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10 42 U.S.C. § 2011, *et seq.*

11 There are 104 commercial nuclear power plants licensed to operate in the United States, but one plant, Browns Ferry Unit 1, was shut down in 1985 and remains idle. GAO Report 04-654 (May 2004) at 1.

nuclear power plants. It is an industry model that would be useful for the railroad industry to emulate, because the act of self-policing on the part of an industry often works more efficiently and effectively than regulation by the government to achieve improved safety (and resulting financial performance). It would especially be useful if railroad safety performance were graded, and the results of a railroad safety “watchdog” group such as INPO were to publish its reports and inspections (or at least provide them to the federal government) so that there would be every incentive to reduce accidents and incidents, as there has been in the nuclear industry.

The comprehensive safety regulation of the NRC, together with the complementary and substantial oversight of INPO, as well as the involvement of the senior managements of the nuclear licensees in INPO, and the public liability of the commercial reactor licensees for nuclear incidents and accidents (if they should ever occur), all act to create powerful incentives on nuclear licensees to operate safely.

INPO thus serves to complement the NRC’s vital role in regulating and inspecting commercial nuclear reactors by performing its own inspections and publishing its own reports. Those inspections and reports act to encourage the entire nuclear industry to resolve potential safety problems at any commercial nuclear facility. The desire of the nuclear industry to continue to provide much-needed electricity (and to be able to expand), together with the potential liability of the other commercial nuclear reactor licensees for covered incidents and accidents at any such licensed facility, encourages all such licensees to support and defend the actions of INPO.

### *Incentives to Operate Safely*

The commercial nuclear industry has a tremendous incentive to operate safely, and does operate in an extraordinarily safe manner, for all of the reasons discussed above. The proof is the fact that no member of the public has ever died as a result of operations or a nuclear accident at a commercial nuclear power plant.<sup>12</sup>

### **The Railroad Industry Vis-à-vis the Price-Anderson Act**

The Price-Anderson Act precedent would confirm that the railroads are solely responsible for the safety of rail operations. After all, the railroads, not their customers, are solely responsible for the safe operation of their facilities. It would require the railroads to establish and create large insurance pools to cover potentially extremely high liability costs and through the pool concept would have railroads insure each other in the event of extremely large liabilities. It would demand a high level of government regulation to assure safe operations and would back this up with an intensive self-regulatory mechanism from the industry.<sup>13</sup> It would exempt shippers from liability.

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12 Although some may suggest that the fact that the Price-Anderson Act has a limit on liability demonstrates that the reactor licensees do not have complete liability for all damages occurring as a result of a nuclear incident, the fact is that the liability limits have never been applicable to any such incident, because the relatively small amount of damages arising from such an incident (including the Three Mile Island accident) has been far below those limits.

13 The STB does not have safety-related authority over the railroads. Rather, DOT and other agencies, depending on the circumstances, have such authority. *Boston & Maine Corp. v. STB*, 364 F.3d 318, 321 (D.C. Cir. 2004); *Akron, Canton, supra*; *Conrail v. ICC, supra*. Interestingly, Canadian Pacific Railway Company appears to agree. See letter from CP to the STB, filed June 11, 2008 in STB Finance Docket No. 35081, *Canadian Pacific Railway Company, et al.—Control – Dakota, Minnesota & Eastern Railway Co.* (arguing that other federal agencies, not the STB, have primary jurisdiction over rail safety matters).

The railroad industry's safety record has improved since the 1970s, but it could still be better. Maintaining insurance or indemnification obligations for such accidents or incidents reinforces such incentives, because safe operations are rewarded with lower insurance premiums and lesser indemnification risks. Generally, the costs of such insurance or indemnification are ultimately borne by customers (especially captive customers), in any event

As stated above, it is critical to understand that the nuclear licensees who operate the reactors, not their customers, are directly responsible for payment of the premiums for the primary and secondary commercial insurance that is available (but generally may recover them if rates are cost-based). Applying the Price-Anderson Act by analogy, therefore, the railroads, who of course operate their systems on their own without any shared control by customers or any other entities, should retain the liability for their actions, rather than attempt to shift the liability to their customers (because the customers have no ability to prevent transportation accidents once they tender their shipments in compliance with all applicable governmental regulations). Moreover, under the Price-Anderson Act, nuclear licensees are the only potentially liable entities for covered incidents and accidents. That potential and undiluted liability imposes a great incentive to operate safely and in accordance with all required governmental regulations. The same incentives will continue to apply to the railroads if they retain liability for their own transportation incidents and accidents.

Accordingly, if the railroad industry wants Congress to adopt a regime for it akin to the Price-Anderson Act, despite the fact that the railroad industry is an existing industry that did not need such legislation to come into existence, the analogy would work only if the railroads, not their customers, provided all the required commercial insurance available to them that might be triggered in the event of a covered incident.

To delve deeper, let us look at how the insurance provisions would apply to the railroads by analogy. There are 103 operating commercial nuclear power plants in the United States, the licensee for each of which is required (under NRC regulations implementing the Price-Anderson Act) to provide \$300 million in primary commercial liability insurance and \$95.8 million of secondary insurance for each covered incident for any reactor licensee in the pool. 10 C.F.R. § 140.11(4). Taking into account the \$300 million in commercial insurance for each covered incident, and \$95.8 million/covered incident in retrospective premiums from each commercial nuclear reactor licensee multiplied by 103 operating reactors, the cumulative liability protection available per covered incident is over \$10 billion.<sup>14</sup>

In contrast, there are only 7 Class I railroads operating in the United States, and many of the smaller Class II and Class III railroads are not sufficiently capitalized to provide a large amount of insurance for a railroad transportation accident. Accordingly (and assuming only the Class I railroads were required to provide the necessary insurance), in addition to the required primary insurance for each Class I railroad, each of the Class I railroads would

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14 \$300 million in commercial insurance available for each reactor licensee, plus \$9,867,400,000 (103 reactors x \$95.8 million=\$9,867,400,000) in required secondary commercial insurance, equals \$10,167,400,000 available for every covered incident.

have to agree to provide a relatively large amount of secondary insurance – perhaps \$600 to \$700 million -- to satisfy the public that damages associated with the \$5-6 billion “nightmare scenario” of which the railroads are concerned.<sup>15</sup>

Similarly, let us look at safety regulation. Enforcement of the Price-Anderson Act is performed by the NRC. It is not clear that the STB, with its mission being the economic regulation of the railroads, would be the proper agency to enforce any Price-Anderson-like statute enacted with respect to the railroads, or rather whether FRA or another governmental agency with the mission of regulating the safety of railroad transportation would be assigned the enforcement of the statute.

## **Conclusion**

The risks faced by the railroad industry in transporting hazardous materials are of concern to all involved parties, including shippers, rail labor, and the potentially affected communities. A legislative solution that addresses the problem of liability for accident exposure that cannot be insured is a matter that should be addressed promptly.

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15 Based on the testimony of Norfolk Southern Railway Company at the April 24-25, 2008 hearing in Ex Parte No. 677, there is available to each Class I railroad at least a face amount of commercial hazard insurance in excess of \$1 billion per covered event. Accordingly, if that is assumed to be the maximum amount of primary commercial insurance available to each Class I railroad, to provide the additional \$4-5 billion in insurance that the Class I railroads testified may be needed for their “nightmare scenario,” each of the seven Class I railroads would have to provide secondary commercial insurance of approximately \$600-700 million/covered incident to provide sufficient insurance for any such covered incident. Although that may seem to be a large amount, it is largely a function of the relatively small number of Class I railroads, as compared to the number of commercial nuclear reactor licensees.