Creating electricity through a controlled nuclear chain reaction seemed to be an oxymoron when first proposed by the federal government. Even though the United States Atomic Energy Agency built and operated test reactors after World War II to demonstrate the feasibility of this new technology, public utilities were hesitant to accept what seemed certain to be strict and limitless liability for any nuclear accident no matter how small or insignificant. The 1971 edition of Prosser’s The Law of Torts boldly predicted:

In the field of strict liability, the first case raising the question as to the use of nuclear energy has yet to reach the courts. When it does, it may be predicted with a good deal of confidence that this is an area in which no court will, at last, refuse to recognize and apply the principle of strict liability . . .

Even though Congress relaxed the complete federal monopoly on nuclear technology, this important non-fossil fuel source of electricity would have remained undeveloped and unrealized without governmental stimulation and protection. Congress concluded that “atomic energy [is] . . . vital to the common defense and security” and “that the national interest would be best served if the Government encouraged the private sector to become involved in the development of atomic energy for peaceful purposes under a program of federal regulation and licensing.” Today 104 privately owned and operated commercial nuclear power plants produce about 20% of the electricity in the United States. In addition, there are 18 nuclear facilities associated with nuclear weapons production. Finally, there are many nuclear fuel cycle sites where some work is done with radioactive material which eventually is manufactured into reactor fuel. As discussed infra, an

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7 The nuclear fuel cycle includes mining uranium ore, preparation of fuel for reactors, storage of used (“spent”) fuel, and reprocessing of used fuel. See http://en.wikipedia.org/wiki/Nuclear_fuel_cycle.
essential element in this use of nuclear energy to produce electricity and to provide for the common defense has been the federal government’s control over when strict liability would be applied to a nuclear facility.\(^8\)

The 1957 Price-Anderson Act

While the 1946 Atomic Energy Act\(^9\) replaced the federal monopoly over nuclear matters with a system of federal control of private industry through licensing and regulating, private industry was still hesitant to invest in or utilize nuclear power out of fear of unlimited liability.\(^10\) To address that concern, Congress provided for a system of financial responsibility in the Price-Anderson Act of 1957. That system combined private insurance up to a certain level with federal responsibility for any damages over that level.\(^11\) Such a system provided complete coverage while also limiting the liability of private companies. When the 1988 Amendments Act amended the Price-Anderson Act, Congress established a sole and exclusive federal cause of action, the Public Liability Action (“PLA”), for any property damage or personal injury from radiation exposure due to “source, special nuclear or byproduct material” (essentially the source of the fuel, the fuel itself or any byproducts produced by burning that fuel in a nuclear reactor).\(^12\)

The 1988 Public Liability Cause of Action

Congress broadly defined “public liability action” to mean “\(\textit{any}\) suit asserting public liability”\(^13\) and defined “public liability” to mean “\(\textit{any}\) legal liability arising out of or resulting from a nuclear incident . . .”\(^14\) Congress then broadly defined “nuclear incident” to include:

\(\textit{any occurrence}, \text{ including an extraordinary nuclear occurrence, . . . \textit{causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property}}, \text{ or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material.}\)\(^15\)

Further, Congress provided that a “public liability action shall be deemed to be an action arising under section 2210 of this title . . .”\(^16\)

\(^8\) 42 U.S. C. § 2012(i)(“in the interest of the general welfare and the common defense and security, the United States . . . may limit the liability of those persons liable for such losses.”)


\(^11\) \textit{Id.}


\(^15\) 42 U.S.C. § 2014(q) (emphasis added).

By defining public liability so broadly as to include “any legal liability,”
Congress preempted all state law causes of action for damages arising from nuclear
materials covered under the Act.17 As the Third, Sixth, Seventh, Ninth, Tenth and
Eleventh Circuits have held: “After the Amendments Act, no state cause of action based
upon public liability exists. A claim growing out of any nuclear incident is compensable
under the terms of the Amendments Act or it is not compensable at all.”18

“[A]ny occurrence . . . causing . . . bodily injury, sickness, disease, or death . .
arising out of or resulting from the radioactive, toxic, explosive or other hazardous
properties of . . . byproduct material” is a “nuclear incident.”19 The sole cause of action
for a nuclear incident is a PLA.20 “Public liability” is defined to include “any legal
liability,” eliminating any other cause of action and any other liability.21 The public
liability action is an exclusive federal cause of action for radiation injury.22

There are two types of PLA causes of action: a PLA for personal injury and a
PLA for property damage. An essential element of either PLA cause of action is a dose
over the federal numerical dose limits.23 Therefore, as virtually every federal court which
has decided a PLA has previously held, to properly assert a public liability action, the
plaintiff must plead a dose in excess of the federal permissible dose limits relevant to the
activity from which the alleged radiation exposure arose.24 The courts reason that

17 In re TMI Litig. Cases Consol. II, 940 F.2d at 854.
18 Id (emphasis added). See also Roberts v. Florida Power & Light Co., 146 F.3d 1305, 1306 (11th
Cir. 1998), cert. denied, 525 U. S. 1139 (1999) (“Congress passed the Price-Anderson Amendments Act of
1988 . . . , creating an exclusive federal cause of action for radiation injury.”); O’Conner, 13 F.3d at 1100
(“a new federal cause of action supplants the prior state cause of action.”); Nieman v. NLO, Inc., 108 F.3d
1546, 1553 (6th Cir. 1997) (“state law claims cannot stand as separate causes of action. [Plaintiff] can sue
under the Price-Anderson Act, as amended, or not at all.”); Kerr-McGee Corp. v. Farley, 115 F.3d 1498,
1504 (10th Cir. 1997), cert. denied, 522 U.S. 1090 (1998) (“[The Act’s] provisions [are] broad enough to
create a federal forum for any tort claim even remotely involving atomic energy production. The PAA on
its face provides the sole remedy for the torts alleged . . . .”); In re Berg Litig., 293 F.3d 1127, 1131 (9th
Cir. 2002) (“A ‘nuclear incident’ is defined in the Act as ‘any occurrence . . . .’”); Corcoran v. New York Power
Authority, 935 F. Supp. 376, 383-85 (S.D.N.Y. 1996)(PLA is the “sole means by which a plaintiff could
recover for damages sustained in a nuclear incident”); 141 Cong. Rec. S10,185-01, S10,185-86 (daily ed.
July 18, 1995).
that one of the relevant issues in a PLA is "whether the duty owed was breached," as determined by federal
dose limits); Lokos v. Detroit Edison, 67 F. Supp. 2d 740, 743 (E.D. Mich. 1999); see also Roberts, 146
F.3d at 1308 (plaintiffs failed to state a PLA claim where they failed to allege a dose in excess of the
federal dose limits); Bohrmann, 926 F. Supp. at 220 (plaintiff must “establish a breach” of the federal dose
limits); Corcoran, 935 F. Supp. at 387 (same).
23 Good v. Fluor Daniel Corp., 222 F. Supp. 2d 1236, 1247 (E.D. Wash. 2002) (“In order to prevail
on a PLA claim, these plaintiffs must demonstrate . . . that they were exposed to radiation in excess of the
maximums established by the federal safety regulations.”); Roberts, 146 F.3d at 1308 (“[V]irtually every
different federal court . . . has] held that ‘federal regulations must provide the sole measure of the defendants’
duty in a public liability cause of action.’”); TNS, 296 F.3d at 398 (“[T]he Sixth Circuit has joined with almost
every other circuit in holding that NRC safety regulations conclusively establish the duty of care owed by
defendants in safety personal injury cases governed by the 1998 amendments to the Price-
Anderson Act.”); In re TMI, 67 F.3d at 1113; O’Conner, 13 F.3d at 1105; Nieman, 108 F.3d at 1553;
imposing a standard of care based on the federal regulations achieves coherence and consistency between the Atomic Energy Act, the Price-Anderson Act and the federal preemption of nuclear safety effectuated through the federal regulations governing permissible doses.25

The ENO PLA and Non-ENO PLA

While any nuclear incident is a PLA, a special type of nuclear incident creates a special type of PLA. A nuclear accident so large and so significant that it “has resulted or will probably result in substantial damages to persons offsite or property offsite” is an “extraordinary nuclear occurrence (“ENO”).”26 Only the Commissioner of the Nuclear Regulatory Commission (“NRC”) or the Secretary of the Department of Energy (“DOE”) can deem an ordinary nuclear incident to be an ENO.27 This determination cannot either be made or be altered by the judicial system.

Any determination by the Nuclear Regulatory Commission of the Secretary of Energy, as appropriate, that such an event has, or has not, occurred shall be final and conclusive, and no other official or any court shall have the power or jurisdiction to review any such determination.28

Clearly, only the federal agency which has regulatory authority over the nuclear operation at issue and over the private or public entity (the PLA defendant) can determine whether or not an ENO has occurred. While Congress allows private companies to utilize nuclear energy and allows the federal judiciary to adjudicate claims for damages from such use of nuclear technology, Congress kept some decisions exclusively within the power and control of the federal agencies. As will be seen infra, only in the context of an ENO-PLA can Price-Anderson’s form of strict liability be applied. Since only the NRC or the DOE can establish an ENO, only the NRC or the DOE can authorize the use of strict liability for a nuclear incident.

The Elements of the Non-ENO PLA Cause of Action

If a nuclear incident does not rise to the level of an ENO as determined by either the NRC or the DOE, it remains an ordinary PLA (or a non-ENO PLA). The elements of the PLA cause of action are essentially those for the negligence of a professional in

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25 O'Conner, 13 F.3d at 1105 (the numerical dose limits "are part of this statutory scheme. Imposing a standard of care other than the federal regulations . . . is inconsistent with the Price-Anderson scheme and consequently cannot be applied in a public liability action.").


27 Id.

radiation protection since all cases will result from some alleged failure in radiation protection: i.e. a duty owed, a breach of the duty owed, proximate causation and damages. “The only relevant issues are whether the duty owed was breached (O’Conner’s exposure), and whether that exposure caused his claimed injury (causation).”  

29 The professional duty owed is to comply with the federal numerical safety standards which establish allowable radiation doses. As mentioned supra, an essential element of a PLA cause of action is a dose over the federal dose limits. This maintains regulatory coherence and effectuates the complete federal preemption of nuclear safety.

The Elements of the ENO PLA Cause of Action

An ENO PLA has the same four elements as an ordinary PLA. If a release has occurred to people and property offsite which is expected to cause “substantial damages” the release will obviously have exceeded the federal dose limits for such releases. Almost by definition an ENO will not be declared unless the NRC or DOE has determined that the PLA duty owed was breached because the release exceeded the federal radiation safety standards. Thus, once an ENO has been declared, it is almost certain a determination has also been made that the first two elements (duty and breach of duty) in a PLA have been established in the plaintiff’s favor. In such a case it makes little sense to waste scarce judicial resources and expend the limited “financial protection” 30 (under Price-Anderson all defense costs are subtracted from the limited funds available for compensation 31) on the litigants fighting over elements of the cause of action which a federal agency has already determined adverse to the defendant. Therefore, one of the key aspects of deeming a nuclear incident to be an ENO is the ability of the NRC or DOE to then require its licensee (which would be the defendant in the PLA lawsuit) to waive the defense of not being at fault.

With respect to any extraordinary nuclear occurrence . . . the Commission [NRC] or Secretary [DOE], as appropriate [whichever is licensing the underlying activity], . . . may require provisions to be incorporated in insurance policies or contracts furnishing as proof of financial protection, which waive (i) any issue or defense as to conduct of the claimant or fault of persons indemnified . . . . The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. 32

The statutory text specifically refers to such a waiver as a “waiver of . . . an element in the [PLA] cause of action.” Thus, fault (i.e. breach of a duty owed) necessarily is an element in a PLA cause of action. An ENO PLA may skip litigating fault and proceed

30 Congress limited liability by setting a limit on total damage awards while also promising congressional review for any damage exceeding that limit. The available funds are the “financial protection” provide by Price-Anderson. 10 U.S.C. § 2014(k). The exact amount has varied over time.
31 42 U.S.C. § 2014(k) (“and to meet the costs of investigating and defending claims”).
32 42 U.S.C. § 2210(n).
directly to litigating the damages. Clearly though, Congress intended that fault (i.e. a breach of a duty owed) must be an element of the PLA cause of action whether it be a non-ENO PLA or an ENO PLA. If fault can be waived only under certain conditions the default situation (i.e. the normal situation in the absence of those conditions) must be that lack of fault (i.e. compliance with the duty owed) is always a defense in a PLA.

This waiver of an element in the cause of action is the PLA’s corollary to Strict Liability. Congress specified its application only in the case of an ENO. No such waiver can be forced upon the defendant in a non-ENO PLA. Moreover, the denial of this defense to a PLA defendant can only be ordered by the NRC or by the DOE. No court has jurisdiction to take this element of the cause of action away from a defendant because the waiver only occurs in the context of an ENO and no court can deem a nuclear incident to be an ENO or overrule any such determination, or lack thereof, by the NRC or DOE. A form of Strict Liability can exist in PLA litigation but it is strictly and rightfully controlled by the federal agency charged with effectuating the complete federal preemption of nuclear safety.33

The federal government maintains complete control of the safety and “nuclear” aspects of energy generation . . . .

State safety regulation is not preempted only when it conflicts with federal law. Rather, the federal government has occupied the entire field of nuclear safety concerns, except the limited powers expressly ceded to the states . . .34

Any court which attempts to take the defense of compliance with federal dose limits away from a PLA defendant or to impose any form of strict liability on a PLA defendant without NRC or DOE direction to that effect, is acting outside its jurisdiction. “[N]o other official or any court shall have power or jurisdiction to review any such determination.”35 Such a court would also be violating the Congressional directive to not apply any “rule for decision” which is “inconsistent with” the provisions in Section 2210 since the specific and sole preconditions to taking the defense of not being at fault away from a PLA defendant is specified in Section 2210(n); which is quite obviously titled in part waiver of defenses.

Strict Liability and the PLA

34 Id. at 212-13 (emphasis supplied).
Strict Liability is a state law cause of action. The PLA has extinguished all state law causes of action and replaced them with the sole and exclusive federal PLA cause of action. Thus, there can be no strict liability in a PLA unless the NRC or the DOE invoke their powers under the Price-Anderson Act to require the defendant to waive the defense of not being at fault. This can occur only under the pre-conditions specified in the United States Code. No court has any power to make those determinations or in any way to invoke any form of strict liability.

A state law cause of action for strict liability and an ENO-PLA waiver of the defense of no fault involve different considerations. Under state law the presiding judge determines as an issue of law whether or not defendant will be allowed to raise no fault as a defense. Under the PLA, the federal agency with authority over the underlying nuclear activity determines as a matter of policy, applying published factual criteria, whether or not litigating fault would be a waste of scarce resources.

Moreover, criteria for the two decisions are different. The criteria for strict liability determination under state law are found in Restatement of Torts 2d § 520. Essentially they are:

The existence of a high degree of risk of some harm to the person, land or chattels of others; likelihood that the harm that results from it will be great; inability to eliminate the risk by the exercise of reasonable care; extent to which the activity is not a matter of common usage; inappropriateness of the activity to the place where it is carried on, and; extent to which its value to the community is outweighed by its dangerous attributes.


39 42 U.S.C. §§ 2014(j) and 2210(n)(1)(i).

40 Restatement of Torts 2d § 520.
The criteria for an ENO are found in the Code of Federal Regulations. Essentially, both the NRC and the DOE require:

- a substantial discharge of radioactive material (for example, enough to cause a dose of 20 rem [20,000 millirem] to a person) and substantial damage (for example, the death of five or more people).41

Obviously, these criteria are substantially different. Any application of Restatement of Torts factors to deny the defense of no fault in a PLA necessarily is inconsistent with Section 2210 of the Price-Anderson Act.

Even when an ENO is deemed to have occurred by the NRC or DOE, the defense of no fault is not absolutely waived in every such situation. The statutory language is “may require” (not must require) a waiver, which indicates some regulatory judgment still exists as to whether or not to require the waiver once an ENO has been deemed to exist. The parameters of this agency discretion have never been explored since no ENO has ever occurred. Even the Three Mile Island accident of March, 1979, did not release enough radiation to qualify as an ENO.42

The Hanford Cases

Hanford Nuclear Reservation produced plutonium to be used in nuclear weapons, among other activities.43 A byproduct is the radioactive gas iodine 131, some of which was released into the atmosphere allegedly causing harm to nearby residents.44 Plaintiffs claim they suffered bodily injury from radiation exposure; which invokes the Price-Anderson PLA cause of action.45

In its 2004 decision46 the district court committed three errors of law. First, the court failed to realize that strict liability was one of the state law causes of action which had been extinguished and replaced by the PLA. “After the Amendments Act, no state cause of action based upon public liability exists.”47 Consequently, defendants could not be liable pursuant to a Washington strict liability cause of action and the Court’s application of it was an error of law.

Second, even if the court had been allowed to adjudicate and apply a strict liability cause of action (which it was not) it could not have done so because it had no jurisdiction to require the waiver of the defense of no fault in the absence of an ENO which has not been declared by the DOE. “[N]o other official or any court shall have power or jurisdiction to review any such determination.”48

Third, any application of the criteria listed in Restatement of Torts § 520 as the determinant of whether or not the defense of no fault will be taken away from a PLA

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41 10 C.F.R. §§ 140.83-140.85 and §§ 840.3-840.5.
42 On April 23, 1980 (45 FR 27590), the NRC published its finding in the Federal Register that the TMI accident was not an ENO.
43 In re Hanford, 350 F.Supp.2d at 883.
44 In re Hanford, 350 F.Supp.2d at 877-878.
45 In re Hanford, 350 F.Supp.2d, at 875.
48 10 C.F.R § 2014(j).
defendant is impermissibly inconsistent with Section 2210 which uses entirely different
criteria to determine whether or not an ENO has occurred. No state law can be used
which “is inconsistent with the provisions of such section [referring to Section 2210 and
its incorporation of the federal regulatory scheme through which the complete
preemption of nuclear safety is effectuated].”49 Section 2210(n)(1)(i) specifically states
an ENO is a precondition to the waiver of the defense of not being at fault.

In sum, the Washington State law cause of action applied by the court has been
extinguished and replaced by the PLA. Since the Hanford releases have not been
sufficient to amount to an ENO, a PLA defendant must be allowed to defend itself by
asserting the defense that it was not at fault because it complied with the applicable
federal safety standards. The district court improperly denied defendants this defense.50
Unfortunately, the district court was substantially led astray by its adoption of Judge
Kane’s erroneous Cook decision.51

Policy Considerations

The complete federal preemption of nuclear safety as reflected in national
radiation safety standards must be incorporated into and harmonized with the PLA cause
of action. This is accomplished when the numerical federal dose limits are deemed to be
the standard of care or duty owed by the defendant. If a user of nuclear technology
exposes its own workers or members of the public to “harmful” levels of radiation (i.e.
doses above the numerical federal safety standards) liability will attach if causation is
established. But if a user of nuclear technology keeps the doses to its workers or to
members of the public below the numerical federal safety limits, that user should be
allowed to continue operation unimpeded by distracting and expensive personal injury or
property damage litigation. After all, it is the proper role of the federal regulatory agency
to set safe safety standards and to allow operation within those standards.

Some individuals will desire to argue over the adequacy of the existing standards.
This is an argument to pursue with the federal agency and not in the context of PLA
litigation. The PLA is not the proper avenue for regulation to lower levels of radiation
through the imposition of monetary penalties for doses less than the federal safety
standards. Doing so would take the complete preemption of nuclear safety from the
federal government and place it in the hands of a lay jury. Moreover, limited funds are
available to compensate persons truly harmed by a nuclear accident and the cost of
defending claims comes out of those limited funds. These funds should not be dissipated
through defense costs for highly questionable cases used as a proxy by anti-nuclear
individuals who wish to attack the federal safety standards. The financial protection
funds made available through Price-Anderson were never intended to be consumed in
litigations over whether or not the federal radiation safety standards are “safe enough.”

Any court which uses a state law cause of action in strict liability necessarily
delegates judgments about nuclear safety to state law. No court has jurisdiction to do so.
Moreover, the criteria used to determine whether or not state tort law strict liability
applies is not the same criteria used by federal regulation to determine whether or not an

50 In re Hanford, 350 F.Supp.2d at 888.
ENO has occurred, which is a necessary predicate to taking the defense of no fault from the PLA defendant.

Congress wisely determined that judgments as to what constitutes adequate nuclear safety are best left to the federal agencies with technical expertise in such a highly technical area. Judges and juries simply are not competent to make those judgments and are highly unlikely to gain such competence during one or more cases. Moreover, a national standard of care should exist because the issue is the same across the United States. The same amount of radiation will not vary in safety depending upon the jurisdiction in which it occurs.

Conclusion

Nuclear safety is completely preempted and that includes allowing only the federal agencies with expertise to determine when a form of strict liability is appropriate. Congress so specified when it created the sole and exclusive PLA cause of action and when it specifically set forth the necessary preconditions to any waiver of the defense of not being at fault. There is nothing wrong with this system. No one has shown that the federal safety standards are not adequately safe and are not providing adequate protection to the American nuclear worker and general public. Even if such an argument could be made and proven, the proper response would be to simply change the federal safety standards; not to abandon the present system and rely upon the whims of lay judges and juries.