

PROXIMITY, PRESUMPTIONS, AND PUBLIC PARTICIPATION: REFORMING STANDING AT THE NUCLEAR REGULATORY COMMISSION

DAVID A. REPKA* AND TYSON R. SMITH**

TABLE OF CONTENTS

Introduction	584
I. Background	585
A. Standing to Participate in NRC Hearings	585
B. Application of Judicial Concepts of Standing in NRC Proceedings	586
C. Proximity Presumption	587
II. Discussion	589
A. Changes in Federal Standing Jurisprudence.....	589
B. Other Issues with Proximity Presumption	591
1. Concrete and Particularized.....	591
2. Speculative	592
3. Imminence.....	592
4. Causation and Redressability	593
C. Possible Solutions for Improving Standing Assessments.....	594
1. Revert to Strict Application of Judicial Concepts in Agency Proceedings	594
2. Develop Regulations with Clear Criteria for Sufficient Interest.....	595
3. Require Standing for Each Contention	596

* Partner, Winston & Strawn LLP. J.D., 1981, Georgetown University Law Center; B.A., 1978, Northwestern University, Physics.

** Associate, Winston & Strawn LLP. J.D., 2003, Lewis & Clark School of Law, Certificate in Environmental and Natural Resource Law; M.S., 1999, Stanford University, Civil and Environmental Engineering; B.S., 1995, Vanderbilt University, Civil and Environmental Engineering.

4. Eliminate Hearings on NEPA Issues.....	598
Conclusion.....	600

INTRODUCTION

Various federal statutes provide opportunities for members of the public to participate in agency administrative proceedings if their “interests” may be affected by a licensing or permitting action. An agency’s selection of criteria to assess the adequacy of the interests can have significant legal, financial, and regulatory consequences for the public, the regulators, and the regulated community. However, the nature of the issues at stake in some administrative hearings poses challenges to the application of traditional Article III judicial standing principles as the threshold test for participation.

For some agencies, such as the U.S. Nuclear Regulatory Commission (NRC or Commission), the decision to grant a request for a hearing by a member of the public permits active participation by public stakeholders in the hearing process but can also cost millions of dollars and add years of delay to the licensing process.¹ NRC licensing was the subject of substantial controversy in the 1980s.² Now, as the industry seems poised for rebirth in the United States, the NRC licensing process is again a focus of attention. It is therefore appropriate to reconsider the criteria and processes by which the NRC determines whether a person does or does not have standing to

1. Among the twenty-five most recently licensed plants, the length of time from filing of the application for a construction permit through issuance of the operating license ranged from 11.5 to 24.7 years. Letter from Nils J. Diaz, Chairman, Nuclear Regulatory Comm’n, to Rep. Joe Barton (R-Tex.), U.S. House of Representatives (Feb. 20, 2006), <http://www.nrc.gov/reading-rm/doc-collections/congress-docs/correspondence/2006/barton-02-20-2006.pdf>.

2. Although initial applications for many plants were filed in the early 1970s, operating licenses were not issued until the late 1980s or early 1990s. These licensing delays contributed to large construction cost overruns and additional delays. The cancellation of the Shoreham nuclear power plant, which had been completed but never operated after expenditures of \$5.5 billion, epitomizes the regulatory gridlock of the era. CHARLES KOMANOFF & CORA ROELOFS, KOMANOFF ENERGY ASSOCS., *FISCAL FISSION: THE ECONOMIC FAILURE OF NUCLEAR POWER; A GREENPEACE REPORT ON THE HISTORICAL COSTS OF NUCLEAR POWER IN THE UNITED STATES* 23 (1992), <http://www.earthtrack.net/earthtrack/library/FiscalFission.pdf>. Many other plants faced similar delays and cost overruns. Comanche Peak Units 1 and 2 cost more than \$9 billion to complete. Jack Z. Smith, *Another Shot for Nuclear*, FORT WORTH STAR-TELEGRAM, Dec. 28, 2007, at B13. Vogtle Units 1 and 2 cost \$8.87 billion. Jon Gertner, *Atomic Balm?*, N.Y. TIMES, July 16, 2006, (Magazine), at 36, 38. Seabrook Unit 1 alone cost \$6.2 billion. Matthew L. Wald, *N.R.C. Panel Supports a License for Seabrook*, N.Y. TIMES, Nov. 14, 1989, at D2. Watts Bar Unit 1 cost \$6.8 billion. U.S. GOV’T ACCOUNTABILITY OFFICE, *TENNESSEE VALLEY AUTHORITY: FINANCIAL PROBLEMS RAISE QUESTIONS ABOUT LONG-TERM VIABILITY* 5 (1995).

participate in a particular NRC proceeding. Below, we discuss the history of standing at the NRC, describe the difficulties involved in applying Article III case law to NRC adjudications, and explore options for reforming standing at the NRC in a way that balances the public's right to participate in the hearing process with the applicant's right to an efficient and timely licensing decision.

I. BACKGROUND

A. *Standing to Participate in NRC Hearings*

As set forth in the Atomic Energy Act (AEA), the NRC must offer an opportunity for a hearing on many licensing actions involving a facility that produces or uses nuclear material, including an application for a license to construct and operate a nuclear facility.³ Administrative judges from the Atomic Safety and Licensing Board (ASLB) conduct these hearings, typically in three-judge panels (one legal judge and two technical judges).⁴ The judges are employees of the NRC but are independent from the NRC staff and have no stake in the outcome of a proceeding. The Commission entertains appeals and petitions for review of the decisions of the ASLB.⁵

According to the NRC, “[a] petitioner’s standing, or right to participate in a Commission licensing proceeding, is grounded in section 189a of the [AEA], 42 U.S.C. § 2239(a)(1)(A), which requires the NRC to provide a hearing ‘upon the request of any person whose interest may be affected by the proceeding.’”⁶ Any person who requests a hearing or seeks to intervene in a Commission proceeding must demonstrate that he or she has a sufficient interest, or standing.⁷ “Standing is not a mere legal technicality”; it is a necessary and vital part of our legal system that serves to ensure that litigation is limited to real disputes that are appropriate for judicial resolution.⁸

3. For example, the NRC offers an opportunity to request a hearing on applications to construct and operate new nuclear power plants. 42 U.S.C. § 2239 (a)(1)(A) (2006).

4. 10 C.F.R. § 2.313 (2009).

5. *Id.*

6. *In re* Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), LBP-02-4, 55 N.R.C. 49, 61 (2002); *see also In re* Me. Yankee Atomic Power Co. (Me. Yankee Atomic Power Station), CLI-04-5, 59 N.R.C. 52, 56 n.14 (2004) (citing 42 U.S.C. § 2239(a)(1) (2000)).

7. 10 C.F.R. § 2.341 (2009).

8. *In re* Westinghouse Elec. Corp. (Nuclear Fuel Export License for Czech Republic—Temelin Nuclear Power Plants), CLI-94-7, 39 N.R.C. 322, 331–32 (1994) (citation omitted).

B. *Application of Judicial Concepts of Standing in NRC Proceedings*

Because agencies are neither constrained by Article III⁹ nor governed by judge-made standing doctrines limiting access to the federal courts, “administrative standing” may be easier to attain than “judicial standing.”¹⁰ While judicial proceedings are intended to resolve genuine controversies, administrative tribunals were created to “uphold the public interest.”¹¹ Agencies may therefore wish to encourage greater public participation than that permitted by Article III in order to enhance the quality and transparency of their decisionmaking. Agencies may also seek different perspectives than those of the typical participants in administrative proceedings (i.e., regulated entities). Nonetheless, the NRC has, as a matter of choice, long applied contemporaneous judicial concepts of standing to determine whether a party has a sufficient interest to intervene as a matter of right.¹²

In *In re Portland General Electric Co. (Pebble Springs I)*, the NRC’s Appeal Board certified a question to the Commission: Should standing in NRC proceedings be governed by “judicial” standards?¹³ The Commission responded to the certified question in *Pebble Springs II* by ruling that judicial concepts of standing should be applied by adjudicatory boards in determining whether a petitioner is entitled to intervene as of right under § 189a of the AEA.¹⁴ This continues to be current Commission practice.¹⁵

The Commission in *Pebble Springs II* also held that licensing boards may, as a matter of discretion, grant intervention in licensing cases to petitioners

9. U.S. CONST. art. III.

10. *Envirocare of Utah, Inc. v. NRC*, 194 F.3d 72, 74 (D.C. Cir. 1999) (citation omitted); *see also* HENRY J. FRIENDLY, *FEDERAL JURISDICTION: A GENERAL VIEW* 118 (1973) (citing 3 KENNETH CULP DAVIS, *ADMINISTRATIVE LAW TREATISE* § 22.08, at 241 (1st ed. 1958)) (asserting that the differences between judicial standing and administrative standing include “[t]he need for a ‘case or controversy’ to seek judicial review but not to intervene in an administrative hearing; the differences between statutes and agency rules controlling intervention and statutes controlling judicial review; and the differing characters of administrative and judicial proceedings”).

11. *See, e.g.*, *Tex. Indus. Traffic League v. R.R. Comm’n*, 628 S.W.2d 187, 197 (Tex. App. 1982), *rev’d on other grounds*, 633 S.W.2d 821 (Tex. 1982) (adding that administrative tribunals accomplish this purpose “through the exercise of their investigative, rulemaking and quasi-judicial powers”).

12. *In re Yankee Atomic Elec. Co. (Yankee Nuclear Power Station)*, CLI-98-21, 48 N.R.C. 185, 195 (1998).

13. *In re Portland Gen. Elec. Co. (Pebble Springs Nuclear Plant, Units 1 & 2) (Pebble Springs I)*, ALAB-333, 3 N.R.C. 804, 807 (1976).

14. *In re Portland Gen. Elec. Co. (Pebble Springs Nuclear Plant, Units 1 & 2) (Pebble Springs II)*, CLI-76-27, 4 N.R.C. 610, 613–14 (1976).

15. *In re Calvert Cliffs 3 Nuclear Project, L.L.C. (Combined License Application for Calvert Cliffs, Unit 3) (Calvert Cliffs 3)*, (No. 52-016-COL) CLI-09-20, slip op. at 6–7 (N.R.C. Oct. 13, 2009) (applying *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992)).

who are not entitled to intervene as of right under judicial standing doctrines but who may, nevertheless, make some contribution to the proceeding.¹⁶ This is referred to as “discretionary standing,” and the criteria for assessing discretionary standing are now codified in NRC regulations.¹⁷

C. Proximity Presumption

Under Article III, the Supreme Court has established the now-familiar three-prong test for standing.¹⁸ Ostensibly in furtherance of its application of this judicial test, the NRC has established a “shortcut” that obviates the need for a petitioner to provide information addressing each of the three prongs of traditional standing concepts (injury in fact, causation, and redressability).¹⁹ In proceedings involving proposed nuclear power reactors, the Commission has adopted a presumption whereby a petitioner can base its standing upon a showing that his or her residence, or—in the case of an organization—that of its members, is within the geographical proximity (usually taken to be fifty miles) of the proposed nuclear unit. The presumption is that individuals within the radius might be affected by a potential accidental release of fission products from a nuclear power plant.²⁰ For other lesser NRC approvals, such as license amendments, the geographic scope of the presumption is more limited.²¹

16. *Pebble Springs II*, CLI-76-27, 4 N.R.C. at 616.

17. 10 C.F.R. § 2.309(e) (2009).

18. *See, e.g., Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992) (reciting the bases for the injury in fact, causation, and redressability elements of the Article III standing inquiry).

19. *See Calvert Cliffs 3*, CLI-09-20, slip op. at 6–7. In this case the Commission focused on its ability to deal with standing issues generically. That principle seems uncontroversial. The Commission, however, did not deal as effectively with the issue of whether standing can be based on a risk widely shared by all persons living in the vicinity of the proposed plant. The Commission relied on its technical expertise and the generic conclusion that off-site risks may be significant. The issue of standing based on risk is discussed further below.

20. *In re Houston Lighting & Power Co.* (S. Tex. Project, Units 1 & 2), LBP-79-10, 9 N.R.C. 439, 443 (1979); *In re Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), LBP-79-1, 9 N.R.C. 73, 78 (1979); *see also In re Phila. Elec. Co.* (Limerick Generating Station, Units 1 & 2), LBP-82-43A, 15 N.R.C. 1423, 1447 (1982) (holding that a residence more than seventy-five miles from a plant will not “alone . . . establish an interest sufficient for standing as a matter of right”).

21. The Commission will apply the proximity presumption to licensing actions if the party shows that a particular licensing action raises an “obvious potential for offsite consequences.” *In re Exelon Generation Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), CLI-05-26, 62 N.R.C. 577, 581 (2005); *see id.* (concluding that the risks associated with transferring a non-operating, 50% ownership interest in a power reactor were *de minimis* and therefore did not justify proximity standing); *In re U.S. Dep’t of the Army* (Army Research Lab.), LBP-00-21, 52 N.R.C. 107, 107–08 (2000) (declining to apply the proximity

According to the Commission, a petitioner residing near a nuclear facility need not personally show a causal relationship between injury to its interest and the licensing action being sought in order to establish standing.²² Instead, mere proximity is deemed sufficient—standing alone—to establish the requisite interest for intervention on the basis that “in construction permit and operating license cases . . . persons living within the roughly 50-mile radius of the facility ‘face a realistic threat of harm’ if a release from the facility of radioactive material were to occur.”²³ Thus, this “proximity presumption” purports to reflect a generic determination and application of judicial concepts.²⁴ Petitioners invoking the presumption need not show any other injury beyond mere risk, such as injury from planned construction activities or from routine operations of the plant.

The proximity presumption used in reactor construction and operating license proceedings also applies to reactor license renewal proceedings. The Commission determined that reactor license extension cases should be treated similarly because they allow operation of a reactor over an additional period of time during which the reactor could be subject to some of the same equipment failures and personnel errors as during operations over the original period of the license.²⁵ According to the Commission, “the incremental risk of reactor operation for an additional 12–15 years is sufficient to invoke the presumption of injury in fact for persons residing within 10 to 20 miles from the facility.”²⁶ In such a case the petitioner is

presumption in a proceeding for an amendment to a materials license based on a person’s residence twenty miles from a site); *In re* Entergy Nuclear Vt. Yankee, L.L.C. (Vt. Yankee Nuclear Power Station), LBP-04-28, 60 N.R.C. 548, 553–54 (2004) (applying the proximity presumption to an extended power uprate application based on representative members living within fifteen miles of the plant).

22. *In re* Armed Forces Radiobiology Research Inst. (Cobalt-60 Storage Facility), ALAB-682, 16 N.R.C. 150, 153 (1982), (citing *In re* Va. Elec. & Power Co. (N. Anna Nuclear Power Station, Units 1 & 2), ALAB-522, 9 N.R.C. 54, 57 n.5 (1979)); *In re* Ga. Inst. of Tech. (Ga. Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 N.R.C. 281, 287 (1995).

23. *Calvert Cliffs 3*, CLI-09-20, slip op. at 7.

24. *Id.* Although the Commission asserted in *Calvert Cliffs 3* that the Supreme Court in *Lujan* created a similar presumption for persons living adjacent to the site for a proposed federal dam, the Commission does not recognize that *Lujan* was referring to a procedural rather than a substantive injury. In footnote 7 in *Lujan*, the Supreme Court distinguished a procedural injury (e.g., the failure to prepare an environmental impact statement) from a person who lacks a concrete interest, such as a person living far from the proposed dam site. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 572 n.7 (1992). The Commission’s proximity presumption presumes a concrete harm even in the absence of an alleged procedural harm. The Commission therefore has effectively eliminated the requirement that a petitioner specifically demonstrate a concrete injury in fact.

25. *In re* Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, & 3), LBP-98-33, 48 N.R.C. 381, 385 n.1 (1998).

26. *See, e.g., In re* Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), LBP-93-1, 37 N.R.C. 5, 6 (1993).

not required to show “that his concerns are well-founded in fact.”²⁷

II. DISCUSSION

A. Changes in Federal Standing Jurisprudence

The Commission’s proximity presumption has remained relatively unchanged since it was first adopted in the late 1970s. However, judicial concepts of standing have been clarified since that time, effectively refuting the basis for a presumption based on hypothetical accident risk. In *Lujan v. Defenders of Wildlife*, the Supreme Court made clear that plaintiffs must suffer a concrete, discernible injury to be able to bring suit.²⁸ This injury in fact requirement is case specific, “turn[ing] on the nature and source of the claim asserted”²⁹ and “whether the complainant has personally suffered the harm.”³⁰ Moreover, the alleged harm must be “concrete and particularized” and “actual or imminent, not conjectural or hypothetical.”³¹ These qualifiers ensure that courts address only cases and controversies in which the plaintiff is “in a personal and individual way”³² “immediately in danger of sustaining some direct injury,”³³ thus avoiding advisory opinions on matters “in which no injury would have occurred at all.”³⁴

By requiring plaintiffs to demonstrate an injury in a concrete factual context, courts also avoid claims involving only “generalized grievances” shared by other members of the public.³⁵ When a party’s “asserted injury arises from the government’s allegedly unlawful regulation (or lack of regulation) of *someone else*”—such as when a petitioner challenges a license application but is not itself regulated by the NRC—“standing . . . is

27. *In re Va. Elec. & Power Co.* (N. Anna Nuclear Power Station, Units 1 & 2), ALAB-522, 9 N.R.C. 54, 56 (1979); *see also In re Duquesne Light Co.* (Beaver Valley Power Station, Unit 2), LBP-84-6, 19 N.R.C. 393, 410, 429 (1984).

28. *Lujan*, 504 U.S. at 560.

29. *Raines v. Byrd*, 521 U.S. 811, 818 (1997) (quoting *Warth v. Seldin*, 422 U.S. 490, 500 (1975)).

30. *Wilderness Soc’y v. Alcock*, 83 F.3d 386, 390 (11th Cir. 1996).

31. *Lujan*, 504 U.S. at 560 (quoting *Whitmore v. Arkansas*, 495 U.S. 149, 155 (1990)) (internal quotation marks omitted); *see also Summers v. Earth Island Inst.*, 129 S. Ct. 1142, 1152 (2009) (“Standing, we have said, is not an ingenious academic exercise in the conceivable . . . [but] requires . . . a factual showing of perceptible harm.” (quoting *Lujan*, 504 U.S. at 566) (internal quotation marks omitted) (alterations in original)); *id.* at 1151–52 (declining to rely on a “statistical probability” or a “realistic threat” to establish that individuals are threatened with concrete injury).

32. *Lujan*, 504 U.S. at 560 n.1.

33. *City of Los Angeles v. Lyons*, 461 U.S. 95, 102 (1983).

34. *Lujan*, 504 U.S. at 564 n.2.

35. *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State*, 454 U.S. 464, 475 (1982).

ordinarily ‘substantially more difficult’ to establish.”³⁶ Indeed, the Supreme Court has held that “much more is needed” in terms of the “nature and extent of facts . . . averred” to show that the petitioner will be affected by the alleged injury “in such a manner as to produce causation.”³⁷ The Supreme Court’s standing test is plainly more demanding than the Commission’s now outdated and overly simplified proximity presumption, which is based on no more than the speculative, hypothetical possibility of a reactor accident in the future that will somehow injure any and all off-site residents within a fifty-mile radius.³⁸

Recently, the Supreme Court issued a decision on standing that directly undermines the basis for the NRC’s proximity presumption.³⁹ The Court began by reiterating the traditional standing principles—that is, that standing requires a concrete injury in fact that is actual and imminent and not hypothetical or conjectural. The Court then found that a plaintiff’s “intention” to visit the National Forests in the future, without showing that the challenged regulations would affect a specific forest visited by the plaintiff, “would be tantamount to eliminating the requirement of concrete, particularized injury in fact.”⁴⁰ The Court rejected a standing test that would have accepted a statistical probability that some of an organization’s members would be threatened with concrete injury.⁴¹ The Court also declined to substitute the requirement for “imminent” harm with a requirement of a “realistic threat.”⁴² In doing so, the Supreme Court rejected a standing test that is substantially similar to the test embedded in the NRC’s proximity presumption, which is based on hypothetical accidents or risk rather than concrete injury in fact.⁴³

36. *Lujan*, 504 U.S. at 562 (quoting *Allen v. Wright*, 468 U.S. 737, 758 (1984)).

37. *Id.* at 560–62.

38. In the absence of an actual injury from plant construction or from an ongoing discharge from the plant, there could be no standing based on an unsupported claim regarding the risk of an accidental release or the fear of an accidental release. *See generally* *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766 (1983) (holding that fear of an accident is not a cognizable injury under the National Environmental Policy Act (NEPA)).

39. *See Summers v. Earth Island Inst.*, 129 S. Ct. 1142 (2009).

40. *Id.* at 1150.

41. *Id.* at 1151. The Court also declined to reduce the threshold for standing because the case involved a procedural injury (such as a claim under NEPA). Specifically, the Court concluded that “deprivation of a procedural right without some concrete interest that is affected by the deprivation—a procedural right *in vacuo*—is insufficient to create . . . standing.” *Id.*

42. *Id.* at 1152 (emphasis omitted).

43. *Summers* would also appear to call into question the types of standing analyses that have recently been used by the D.C. Circuit to permit a finding of injury in fact based on a showing that harm was “substantially probable.” *See Fla. Audubon Soc’y v. Bentsen*, 94 F.3d 658, 665 (D.C. Cir. 1996); *Natural Res. Def. Council, Inc. v. EPA*, 464 F.3d 1, 6 (D.C. Cir.

B. Other Issues with Proximity Presumption

The NRC's proximity presumption creates additional issues for an orderly administrative process. As discussed above, the proximity presumption presupposes harm from an accidental release from a plant. A petitioner, therefore, can raise issues of accident risk for hearing. But can a party less than fifty miles away who is only affected by a prospective accident raise other issues, or "contentions," for hearing (e.g., construction impacts, wetland destruction, or occupational exposures)? The NRC has said yes, but this also does not appear to be a defensible construction of judicial standing.

1. Concrete and Particularized

In the recent *Calvert Cliffs* case, the affidavits accompanying the request for hearing noted the location of the individuals' residences from the proposed facility (e.g., forty-five miles away) and the affiants expressed "concern" that the proposed new unit could affect their health and safety and the integrity of the environment.⁴⁴ Specifically, for standing, each individual stated only that he or she was concerned about the risk of accidental releases to the environment and the potential harm to groundwater and surface water supplies. That, however, was the extent of the alleged injury. The petitioners provided no information regarding the potential for an accident, how it might occur, the quantitative risk, or methods by which they personally might be harmed by an accident. Based on that showing of standing, the petitioners offered their contentions for hearing. The specific contentions they presented also had nothing to do with accidents or accidental releases.⁴⁵

2006).

44. *In re Calvert Cliffs 3 Nuclear Project, L.L.C.*, (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, slip op. at 7–9 (N.R.C. Mar. 24, 2009).

45. In contrast to the petitioners' focus on the risk of an accident as the basis for standing, the admitted contentions had little to no bearing on the potential for or causes of accidental releases. For example, one contention related to prospective foreign participation in the project and compliance with the Atomic Energy Act's foreign ownership and control restrictions. *Id.* at 24–31; *see also* 42 U.S.C. § 2133(d) (2006). This contention related primarily to security and control of special nuclear material, not accident risk. Other contentions related to the applicants' satisfaction of the financial test to provide decommissioning funding assurance through a parent guarantee or to on-site storage of *low-level* radioactive waste. Certainly, neither the timing of financial tests for decommissioning funding nor low-level waste management relate to the risk of accidents. *See, e.g., In re Calvert Cliffs 3 Nuclear Project, L.L.C.* (Combined License Application for Calvert Cliffs Unit 3) LBP-09-04, slip op. at 31–33.

2. *Speculative*

Another issue arises in connection with the speculative nature of an accident. Judicial standing would require a concrete or threatened injury. However, presuming that an accident will occur at some unspecified point in the future from some undetermined cause is, by its nature, speculative and hypothetical. The probabilities of an accident occurring are projected to be very low (on the order of 1E-06/year).⁴⁶ The probability of an accident resulting in an actual injury to a person within fifty miles is much smaller still. And, in the absence of a posited accident mechanism, it cannot be said that the injury is “fairly traced” to the NRC’s licensing of the facility.

3. *Imminence*

Using proximity as a surrogate for injury also undermines the temporal aspect of standing. In *Lujan*, the Court’s standing analysis crystallizes and focuses on two aspects of the injury-in-fact requirement: the particularity (or specificity) aspect, which requires that the injury be to the party seeking review; and the temporal aspect, which requires that the injury be impending (or “soon”).⁴⁷ As to the former aspect, it is an irreducible constitutional minimum of standing that a person suffer an injury-in-fact.⁴⁸ According to the Supreme Court, in order for injury to be “particularized,” it must affect the plaintiff in a *personal and individual* way, such that “the party seeking review be himself among the injured.”⁴⁹ As to the latter, the Court recognizes that the timing of injury may be flexible, but at the very least, “imminent” means sooner than “in this lifetime.”⁵⁰

The problems that the NRC creates by relying on judicial tests are highlighted by the proposed high-level waste repository at Yucca Mountain. The spent fuel from nuclear plants is proposed to be placed into canisters and stored within tunnels carved into the mountain. Even assuming canister failures and releases to the environment, the releases would not occur for tens, if not thousands, of years—well beyond the lifetime of any person alive today.⁵¹ There is no suggestion—by anyone—

46. The total core damage frequency (CDF) for the design of Calvert Cliffs Unit 3 is 5.3E-07/year. AREVA, U.S. EPR FINAL SAFETY ANALYSIS REPORT 19.1.8.1, <http://adamswbsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML091671748>. The large early release frequency (LERF) from internal events is 2.6E-08/year. *Id.*

47. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 564 n.2 (1992).

48. *Sierra Club v. Morton*, 405 U.S. 727, 734–35 (1972).

49. *Id.*

50. *Lujan*, 504 U.S. at 564 n.2.

51. Potentially imminent injuries might include impacts due to construction (e.g.,

that such releases would occur in the near future. Under these circumstances, judicial standing could not be demonstrated based on the hypothetical, unintended releases because no person currently alive would be personally injured. Yet, a petitioner would have standing under the NRC's proximity presumption.⁵²

4. *Causation and Redressability*

The NRC's analysis also seems plainly inconsistent with the causation and redressability elements of standing. Consider the situation where a petitioner is concerned with the impact of the facility on a nearby water body (e.g., harm to a particular aquatic species). In such circumstances, the NRC would permit a party to participate based on a speculative, hypothetical future injury from an accident. However, the speculative "injury" (harm from an accident) would not be caused by the aquatic species' impacts that the petitioners seek to litigate. Moreover, addressing the harm to aquatic species would not redress an injury caused by the hypothetical accident.

Under judicial standing precedent, the petition would fail at least two, and possibly all three, of the elements of standing. Yet, under NRC precedent, the petitioner would be allowed to participate in the proceeding, triggering automatic disclosure requirements and (potentially) adjudicatory hearings. In light of the tenuous relationship between the purported injury and the issues subject to the proceeding, it is far from clear that the proximity presumption and a lack of a tie between standing and the claims involved comport with efficiency of the process (time and expertise required to address the point).

In this regard, it is an important factor that the NRC also permits (quite voluntarily it would seem)⁵³ parties to litigate National Environmental Policy Act (NEPA) issues in its hearing process. It is a fundamental tenet of NEPA that the statute demands only "disclosure" and not a particular course of action. If the remedy for a NEPA violation in an NRC proceeding is mere disclosure, then how can additional disclosure redress

clearing land or construction dust). Injuries due to routine operations might also arguably be imminent if they could be identified.

52. The NRC's regulations provide that state and local governments are excused from demonstrating standing to participate in a proceeding for a repository within their borders and need only satisfy the admissible contention requirements of 10 C.F.R. § 2.309(f). 10 C.F.R. § 2.309(d)(2)(iii) (2009).

53. The AEA does not require litigation of National Environmental Policy Act (NEPA)-related contentions (as opposed to contentions involving issues of radiological health and safety). NEPA has its own public participation process and will be discussed in greater detail below.

an injury (i.e., eliminate “risk”) from a future accident? At bottom, the proximity presumption may be fairly straightforward to apply and certainly increases public participation. But the presumption also yields results that are inconsistent with judicial standing principles and potentially inconsistent with the NRC’s own policy considerations related to efficiency and timely processing of applications.

C. Possible Solutions for Improving Standing Assessments

Although we have highlighted some of the apparent inconsistencies between the NRC’s proximity presumption and traditional concepts of judicial standing, we can appreciate the challenges that an agency such as the NRC faces in attempting to satisfy the AEA “interest” requirement and, in so doing, balancing the need for public participation in its processes and the rights of applicants to fair, efficient, and timely reviews of license applications. Below, we explore several possible approaches to improve the test for demonstrating an adequate interest in NRC or other administrative proceedings under the AEA or the Administrative Procedure Act (APA).

1. Revert to Strict Application of Judicial Concepts in Agency Proceedings

One approach to resolving the conflict between NRC practice and judicial concepts is also one that would be simple to implement. Rather than carve out exceptions from judicial concepts where there is a remote possibility of an accident, or awkwardly attempt to justify a results-driven application of judicial concepts, the Commission could simply require a petitioner to satisfy the judicial Article III test. This would require petitioners (or members of petitioning organizations) to do more than merely provide their addresses and the distance from their homes to the proposed reactor. Such a test would undoubtedly increase the showing required to participate but would not be a prohibitive barrier to participation.

Petitioners regularly challenge environmental rules, permits, and licenses in federal courts where they are required to establish injury, causation, and redressability. At the NRC, for environmental contentions, a petitioner would need to demonstrate that he or she would be injured by the construction or operation of the proposed plant and that a favorable outcome to the challenge would redress that harm. The injuries would need to involve concrete impacts from the project (e.g., excavation, land clearing, or routine effluents). For radiological safety issues, the petitioners would need to show some realistic nexus to off-site harm. Consistent with the case law, however, merely speculating that there might be an accident one day would not be enough. This approach also has the advantage of

providing the NRC with an existing body of cases (in the form of federal court decisions) that it could look to in evaluating standing.

2. *Develop Regulations with Clear Criteria for Sufficient Interest*

As noted above, agencies are neither constrained by Article III nor governed by judge-made standing doctrines.⁵⁴ Agencies therefore have wide discretion to craft their regulations governing participation in administrative hearings.⁵⁵ The Commission could therefore avoid the vexing legal issues of the judicial-standing inquiry entirely. It could establish, by rule, a balance between the need to permit public participation and the objectives of the hearing process. For example, the Commission could permit litigation on issues where a petitioner is likely to contribute something of value to the process and decline to litigate issues that have no bearing on the ultimate outcome of the licensing review or that could easily be remedied through the licensing review process (e.g., inadvertent omissions). No party benefits from the need to brief arcane legal concepts of standing, and the effort increases the cost, delay, and regulatory burden associated with a hearing. The Commission could establish a set of clear, objective criteria that would be sufficient to establish the requisite interest.

The Commission already has in place criteria for evaluating discretionary intervention.⁵⁶ Other criteria might also be transparent and easily applied. Some criteria might confer standing as of right. Others might require a case-by-case assessment by the presiding licensing board. For example, the right to participate could be based on

- (i) distance to the proposed reactor (e.g., within ten miles);
- (ii) participation in the NEPA process (e.g., attending meetings or submitting comments);
- (iii) the extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record;⁵⁷

54. *Envirocare of Utah, Inc. v. NRC*, 194 F.3d 72, 74 (D.C. Cir. 1999).

55. *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 543–49 (1978).

56. See 10 C.F.R. § 2.309(e)(1)–(2) (outlining factors for standing consideration); *Pebble Springs II*, 4 N.R.C. 610, 616 (1976) (presenting factors both in favor and against intervention).

57. Considerations in determining the petitioner's ability to contribute to development of a sound record include the following:

- (1) a petitioner's showing of significant ability to contribute on substantial issues of law or fact which will not be otherwise properly raised or presented; (2) the specificity of such ability to contribute on those substantial issues of law or fact; (3) justification of time spent on considering the substantial issues of law or fact; (4) provision of additional testimony, particular expertise, or expert assistance; and (5) specialized education or pertinent experience.

- (iv) the nature and extent of the requestor's/petitioner's property, financial, or other interest in the proceeding;
- (v) the availability of other means whereby requestor's/petitioner's interest will be protected;
- (vi) the extent to which the requestor's/petitioner's interest will be represented by existing parties; or
- (vii) the extent to which requestor's/petitioner's participation will inappropriately broaden or delay the proceeding.

Permitting intervention could therefore be based upon a petitioner's demonstration of the potential significant contribution it could make on substantial issues of law and fact not otherwise raised or presented and a showing of the importance and immediacy of those issues.

3. *Require Standing for Each Contention*

The Commission could continue to use a proximity presumption for standing but limit its applicability to contentions (i.e., claims or issues) that relate to accidents. Under this formulation, the Commission could decide to use the proximity presumption for a limited set of accident-related contentions. For contentions that relate to other safety or environmental concerns, a petitioner would need to establish standing through the traditional standing inquiry (injury in fact, causation, and redressability). This would eliminate the situation described above whereby a petitioner has standing (based solely on speculative risk of an accident) to raise claims relating to foreign ownership, low-level waste disposal, or impacts to aquatic species.

One example of this would be emergency planning issues. A petitioner may have difficulty demonstrating an injury in fact from a future, hypothetical accident. There is a very low probability that an accident would ever occur and the risk of an accident that would actually harm the specific petitioner is lower still. Yet the NRC could presumptively grant standing to persons living within a ten-mile or a fifty-mile radius for contentions involving emergency planning issues that arise in connection with the specific area in question. This approach would recognize the public's interest in participating in the hearing on significant issues where an individual might otherwise have difficulty in establishing standing under judicial standing principles. For the typical environmental or safety issue, however, the person would need to demonstrate injury in fact, causation, and redressability.

This approach would also be broadly consistent with the judicial

In re Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-81-1, 13 N.R.C. 27, 33 (1981).

approach to standing. The Supreme Court recently reaffirmed the principle that standing must be shown for every single claim in *Davis v. Federal Election Commission*.⁵⁸ Precisely relevant to the current situation, the *Davis* Court reiterated that “standing is not dispensed in gross” and remarked that a party “must demonstrate standing for each claim he seeks to press” and “for each form of relief that is sought.”⁵⁹ According to the Court, standing for one claim does not suffice for all claims even where those claims arise from the same nucleus of operative facts.⁶⁰

Because standing is rooted in the need for an actual “case” or “controversy,” holding otherwise, the Court noted, would undermine other important judicial principles and permit, for example, adjudication of moot or unripe claims.⁶¹ The Court explained that the actual injury requirement would not ensure that there is a legitimate role for an agency adjudicatory body in dealing with a particular grievance if, once a party “demonstrated harm from one particular inadequacy in government administration,” the adjudicatory body was “authorized to remedy *all* inadequacies in that administration.”⁶² As the Court emphasized in *Lewis*, “The remedy must of course be limited to the inadequacy that produced the injury in fact that the [party] has established.”⁶³

In *Calvert Cliffs 3*,⁶⁴ the Commission incorrectly distinguished *Lewis* and *DaimlerChrysler*. The Commission defined a claim as an issue that could result in the agency denying the license.⁶⁵ However, the NRC does not require that a claim (or contention) refer to some articulated form of relief, and this issue is often overlooked. For a NEPA-based contention, an applicant’s failure to fully discuss impacts on the environment would not result in denial of the license. NEPA only compels disclosure; NEPA does not mandate a substantive outcome. Moreover, the responsibility to comply with NEPA actually lies with the NRC, not the applicant.

58. See 128 S. Ct. 2759, 2769 (2008).

59. *Id.* (citing *DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 352 (2006), and *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc.*, 528 U.S. 167, 185 (2000)); see also *Rosen v. Tenn. Comm’r of Fin. & Admin.*, 288 F.3d 918, 928 (6th Cir. 2002) (“It is black-letter law that standing is a claim-by-claim issue.”).

60. *DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 352 (2006).

61. *Id.*

62. *Lewis v. Casey*, 518 U.S. 343, 357 (1996).

63. *Id.*

64. *In re Calvert Cliffs 3 Nuclear Project, L.L.C., & UniStar Nuclear Operating Servs., L.L.C. (Combined License Application for Calvert Cliffs, Unit 3) (Calvert Cliffs 3)*, No. 52-016-COL CLI-09-20, slip op. (N.R.C. Oct. 13, 2009).

65. See *id.* at 8 n.28 (“[S]o long as either denial of a license or issuance of a decision mandating compliance with legal requirements would alleviate a petitioner’s potential injury, then under longstanding NRC jurisprudence the petitioner may prosecute any admissible contention that could result in the denial or in the compliance decision.”).

Presuming that all contentions could lead to denial of a license is as flawed an approach as the proximity presumption.

By adopting an approach that would link interests and contentions, the Commission could maximize public participation while focusing on real issues and available relief. A petitioner who would have standing on accident risk would be required to demonstrate a contention that relates to accident risk. Petitioners who would raise other issues must show that they would personally suffer some injury related to the contention. And petitioners could not invoke generalized accident risk for standing on NEPA claims that cannot relieve or eliminate that risk. This approach would allow participation on those aspects of licensing with the greatest potential for significant environmental harm (accidents), while otherwise limiting the time and expense of a hearing to those issues where a petitioner can demonstrate an actual concrete harm to his or her interest with relief available in the proceeding.

4. *Eliminate Hearings on NEPA Issues*

Similar public policy objectives (fairness, efficiency, and public participation) might be achieved by focusing NRC hearings on issues of radiological health and safety. Under such an approach, public participation is not eliminated; the existing public scoping and comment process for environmental reviews would be used to resolve NEPA-related concerns. This would obviate the need for separate NRC hearings on NEPA issues. And in so doing, this approach would resolve some of the clearest inconsistencies between NRC practice and judicial standing concepts.

The Atomic Energy Commission (AEC), the predecessor to the NRC, initially elected to permit hearings on environmental issues but did not consider such hearings to be required by the AEA.⁶⁶ In 1971, the U.S. Court of Appeals for the D.C. Circuit rendered its decision in *Calvert Cliffs' Coordinating Committee v. Atomic Energy Commission*.⁶⁷ The court concluded that several aspects of the AEC's NEPA policy statement failed to comply with the NEPA statute. In the court's view, NEPA established environmental protection as an integral part of the AEC's basic mandate, and the court therefore concluded that the AEC must itself take the initiative of

66. See Implementation of the National Environmental Policy Act of 1969, 35 Fed. Reg. 5463 (Apr. 2, 1970) (codified at 10 C.F.R. pt. 50 app. D). The policy statement addressed preparation of the "detailed statement" (i.e., the Environmental Impact Statement) required by NEPA but also noted that the statement should not be construed as "extending the licensing or regulatory jurisdiction of the Commission." *Id.* at 5464.

67. 449 F.2d 1109 (D.C. Cir. 1971).

considering environmental values at every stage of the process beyond the staff's evaluation and recommendation.⁶⁸ The AEC subsequently revised its regulations to provide a hearing opportunity on environmental matters following the NEPA review.⁶⁹

Subsequent judicial decisions have altered the conclusions underlying the 1971 *Calvert Cliffs* decision. By its terms, NEPA imposes procedural requirements on agencies, not substantive ones. "The statute requires only that an agency undertake an appropriate assessment of the environmental impacts of its action without mandating that the agency reach any particular result concerning that action."⁷⁰ The statute also "does not require agencies to adopt any particular internal decisionmaking structure."⁷¹ And "[w]hile NEPA clearly mandates that an agency fully consider environmental issues, it does not itself provide for a hearing on those issues."⁷²

The AEC interpreted the agency's jurisdiction under the AEA as limited to protecting against radiological hazards.⁷³ Courts have agreed with the AEC, recognizing that the Commission has jurisdiction under the AEA only to the extent necessary to provide adequate protection to "the health and safety of the public with respect to the special hazards" of radiological impacts.⁷⁴ Moreover, the right of interested persons to intervene as a party in a licensing proceeding stems from the AEA, not from NEPA, and is covered in AEA § 189 and 42 U.S.C. § 2239(a)(1)(A). In this context, the

68. *Id.* at 1117–19.

69. 36 Fed. Reg. 18,071 (Sept. 9, 1971). The hearing requirements in 10 C.F.R. Part 50, Appendix D, were incorporated into 10 C.F.R. Part 2. *See* Restructuring of Facility License Application Review and Hearing Processes and Consideration of Environmental Statements, 37 Fed. Reg. 9331 (May 9, 1972). Appendix D to Part 50 eventually became 10 C.F.R. Part 51. *See* Licensing and Regulatory Policy and Procedures, 39 Fed. Reg. 26,279 (July 18, 1974).

70. *See, e.g.,* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989); *In re* Babcock & Wilcox (Apollo, Pa. Fuel Fabrication Facility), LBP-93-4, 37 N.R.C. 72, 93 (1993); *In re* La. Energy Servs., L.P. (Claiborne Enrichment Ctr.), LBP-96-25, 44 N.R.C. 331, 341–42 (1996); *In re* Ne. Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), CLI-01-3, 53 N.R.C. 22, 44 (2001).

71. *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 100 (1983).

72. *Kelley v. Selin*, 42 F.3d 1501, 1512 (6th Cir. 1995) (quoting *Union of Concerned Scientists v. NRC*, 920 F.2d 50, 56 (D.C. Cir. 1990)). The Council on Environmental Quality has stated that "[p]ublic hearings or meetings, although often held, are not required; instead the manner in which public input will be sought is left to the discretion of the agency." *Guidance Regarding NEPA Regulations*, 48 Fed. Reg. 34,263 (July 28, 1983) (codified at 40 C.F.R. pt. 1500).

73. *See New Hampshire v. AEC*, 406 F.2d 170, 174–75 (1st Cir. 1969) (noting that "[t]he Commission has been consistent in confining itself to [radiological] hazards").

74. *Id.* at 174–75; *see also* *Gage v. AEC*, 479 F.2d 1214, 1220 n.19 (D.C. Cir. 1973) (asserting that the Commission lacks the authority to mandate that an applicant take certain actions that are unrelated to radiological considerations).

AEA hearing requirement only extends to those determinations made under the AEA related to “radiological consequences.” The adequacy of the environmental impact statement is not a matter within the scope of the AEA.⁷⁵

Under this approach, standing to raise AEA safety issues could be based on proximity (i.e., accident risk). However, other environmental concerns would not be addressed through the AEA hearing process but rather would be dealt with through a separate and independent process. Environmental issues not material to the adequacy of the license application under the AEA from a radiological health and safety standpoint would be handled through the NEPA scoping and comment process.

CONCLUSION

In light of the renewed interest in licensing new reactors and the continued focus on renewing the licenses of existing reactors, the NRC’s hearing processes are again a focal point of attention from public stakeholders. Recent Commission decisions have focused on questions of the proper application of judicial standing principles to complex administrative matters. While the Commission’s approach to standing may have once been consistent with judicial standing principles, the agency’s long-standing proximity presumption is no longer aligned with those principles. Given the enormous potential for delay and the time and expense inherent in the NRC hearing processes, the Commission has an obligation to the public and its licensees to use its hearing powers wisely and in the pursuit of significant health and safety concerns. A consistent and defensible requirement for standing is an important part of that obligation.

Any reform must balance the public’s right to participate in NRC licensing proceedings if petitioners have an adequate “interest” with the public interest in efficient and timely adjudicatory proceedings. We have outlined several approaches that could form the basis for a potential rulemaking to address the issue on a generic basis, avoiding recurring legal arguments and judicial review. The approaches range from minor refinements in the current processes to a radical departure from long-standing but outdated requirements to conduct hearings on environmental issues. At a minimum, we hope to spark a conversation as to the proper role of NRC adjudicatory authority in the pursuit of public participation

75. Some issues discussed in the environmental impact statements may also have radiological health and safety components and therefore could not be excluded entirely from consideration in hearings. For example, radiological dose consequences, severe accidents, and decommissioning strategies have both radiological and environmental components.

and, ultimately, protection of the public health and safety. The safety of our nuclear infrastructure is an overriding concern, but process merely for the sake of process does not promote public confidence in the NRC, its regulatory programs, or its licensees.

* * *