

Managing the Line Between Nuclear Power and Nuclear Terror: Considering the Threat of Terrorism as an Environmental Impact

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I. INTRODUCTION

When the Ephrata, Pennsylvania community hospital discharged Pierce Nye from its mental ward, few people suspected that he planned to invade the nation’s nuclear infrastructure. But on February 11, 1993, he crashed his Plymouth station wagon through two fences and into the “protected area” of Three Mile Island in what the Nuclear Regulatory Commission (NRC) at that time labeled “the most serious intrusion on record in this country.”¹ In the wake of this intrusion and the World Trade Center bombing of the same year, the public and the government recognized the need to upgrade security at the nation’s nuclear power plants.² In 2001—following the terrorist attacks in New York and

¹ Matthew L. Wald, *Gate Crasher Shakes Up Nuclear Debate*, N.Y. TIMES, Feb. 11, 1993, at A16. The “protected area” of a nuclear power plant is an area guarded by physical barriers that is accessible only by official personnel, vehicles, and materials. 10 C.F.R. § 73.55 (2011).

² See *The World Trade Center Bombing, The Three Mile Island Intrusion and the Potential Threat to U.S. Nuclear Power Plants: Hearing Before the Subcomm. on Clean Air and Nuclear Regulation of the S. Comm. on Env’t and Pub. Works*, 103d Cong. 1 (1993) (statement of Dr. Bruce Hoffman, RAND Corporation); Protection Against Malevolent Use of Vehicles at Nuclear Power Plants, 59 Fed. Reg. 38,889 (Aug. 1, 1994) (codified at 10 C.F.R. part 73) (increasing security at nuclear facilities following the World Trade Center bombing and a vehicular incursion at Three Mile Island).

Washington, D.C.—the NRC considered the threat of an airborne attack on the nuclear infrastructure, and modified its security requirements accordingly.³ Following the 2001 attacks, however, many states, organizations and private citizens began to demand that the NRC account for the possible environmental effects of a terrorist attack on a nuclear power plant or nuclear fuel storage facility as part of its licensing process.⁴ Though the NRC, an administrative agency, typically rejected such demands, a split between the Ninth and Third Circuits, reviewing the decisions of the NRC, has pushed this issue into the national spotlight.

In 1974, Congress established the NRC to promote the civilian use of nuclear power while protecting the public and the environment from its potentially harmful effects.⁵ Since its inception the NRC has designated security and the environmental impacts of its facilities among its top priorities.⁶ As part of the licensing process, the NRC provides a forum for private citizens to address their concerns and participate in the construction and licensing of nuclear facilities.⁷ The National Environmental Policy Act (“NEPA”) requires federal agencies to establish a procedure for examining the significant environmental

³ See, e.g. Security Zone, San Diego, CA, 67 Fed. Reg. 5480 (Feb. 6, 2002) (codified at 33 C.F.R. part 165) (establishing a temporary security zone in the waters immediately adjacent to the San Onofre (Cal.) nuclear generating station); Entergy Nuclear Operations, Inc.; Notice of Issuance of Director’s Decision Under 10 CFR § 2.206, 67 Fed. Reg. 70,467 (Nov. 22, 2002) (stating that the NRC has partially granted a request for a security upgrade in light of the terrorist attacks of September 11, 2001, but finding that the existing emergency response plans are sufficient to respond to a terror event); Order Modifying Licenses (Effective Immediately), 67 Fed. Reg. 65,150 (Oct. 23, 2002) (modifying license requirements for nuclear fuel storage facilities following the terrorist attacks of September 11, 2001, specifics of which were not released to the public, but supplement the existing requirements enumerated in 10 C.F.R. § 73.55); All Operating Power Reactor Licensees; Order Modifying Licenses (Effective Immediately), 67 Fed. Reg. 9792 (Mar. 4, 2002) (modifying license requirements for nuclear generating stations following the terrorist attacks of September 11, 2001, specifics of which were not released to the public, but supplement the existing requirements enumerated in 10 C.F.R. § 73.55).

⁴ See generally *N.J. Dep’t of Env’tl Prot. v. U.S. Nuclear Regulatory Comm’n*, 561 F.3d 132 (3d Cir. 2009); *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm’n*, 449 F.3d 1016 (9th Cir. 2006), cert. denied, 549 U.S. 1166 (2007); *Private Fuel Storage L.L.C.*, 56 N.R.C. 340 (2002).

⁵ *About NRC*, U.S. NUCLEAR REGULATORY COMM’N, <http://nrc.gov/about-nrc.html> (last visited Aug. 15, 2011).

⁶ Atomic Energy Act, 42 U.S.C. §§ 2011–2023 (2006); Energy Reorganization Act, 42 U.S.C. §§ 5801–5879 (2006) (creating the Nuclear Regulatory Commission); 10 C.F.R. § 51.10 (2011).

⁷ JOSEPH A. CAMILLERI, *THE STATE AND NUCLEAR POWER: CONFLICT AND CONTROL IN THE WESTERN WORLD* 76 (The University of Washington Press, 1984).

impacts of their actions.⁸ One requirement of this procedure is the publication of an Environmental Impact Statement (“EIS”)—a detailed written report that discusses the significant environmental impacts of a proposed federal action.⁹ The satisfactory preparation and disclosure of an EIS by the NRC fulfills the “twin aims” of NEPA: (1) “to inject environmental considerations into the [NRC]’s decisionmaking process,” and (2) “to inform the public that the agency has considered environmental concerns in its decisionmaking process.”¹⁰ Opponents of nuclear power frequently challenge the thoroughness of the NRC’s compliance with NEPA by claiming that the NRC failed to adequately review a particular environmental impact in its EIS.

In a 2002 administrative decision, *Private Fuel Storage, L.L.C.*,¹¹ the NRC responded to growing concerns for plant security by addressing the issue of whether the threat of a terrorist attack on a nuclear facility is an environmental effect to be considered in the construction, licensing, and operation of a nuclear power plant or fuel storage facility, as required by NEPA.¹² Opposing the licensing of a nuclear fuel storage facility, the state of Utah claimed that a nuclear facility’s EIS must discuss the potential environmental impact of a terrorist attack on that facility.¹³ The NRC held that the environmental impact of a terrorist act on a nuclear plant is not a factor subject to EIS analysis because (1) consideration of terrorism conflicts with NEPA’s goals and the rule of reason,¹⁴ (2) the NRC cannot adequately determine the risk of an attack,¹⁵ (3) NEPA does not require analysis of a “worst case scenario,”¹⁶ and (4) NEPA’s public process is an inappropriate forum for review of sensitive security issues.¹⁷

⁸ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370 (2006) (declaring it to be federal policy “to use all practicable means and measures . . . in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony,” and establishing a procedure for agencies to examine the significant environmental impacts of its actions).

⁹ 40 C.F.R. § 1502.1 (2011). The EIS is generally preceded by an environmental assessment that is a concise document that provides evidence and analysis “for determining whether to prepare an [EIS] or a finding of no significant impact.” 40 C.F.R. § 1508.9 (2011).

¹⁰ *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 143 (1981).

¹¹ 56 N.R.C. 340 (2002).

¹² *Id.* at 340.

¹³ *Id.* at 345.

¹⁴ *Id.* at 348–50.

¹⁵ *Id.* at 350–51.

¹⁶ *Id.* at 351–54.

¹⁷ *Private Fuel Storage*, 56 N.R.C. at 354–57.

The Ninth Circuit departed from the NRC's *Private Fuel Storage* precedent in *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission*,¹⁸ when it held that an EIS must address the environmental consequences of a terrorist attack on the proposed nuclear facility.¹⁹ Disagreeing with the Ninth Circuit, the Third Circuit in *New Jersey Department of Environmental Protection v. United States Nuclear Regulatory Commission*,²⁰ affirmed the NRC's decision that an EIS does not need to include a terrorism review.²¹ With its decision in *New Jersey Department of Environmental Protection*, the Third Circuit created a circuit split between itself and the Ninth Circuit regarding whether the NRC must consider the threat of a terrorist attack on a nuclear facility in an EIS for a nuclear power plant or nuclear fuel storage facility.²²

Part II of this Comment discusses the purpose of NEPA, relevant Supreme Court precedent, and the law according to the Third and Ninth Circuits in *New Jersey Department of Environmental Protection* and *Mothers for Peace*, respectively. Part III offers an analysis of the circuit split in light of the binding law and regulatory framework. It also explores the ramifications of following either circuit's approach and presents possible courses of action that address issues raised by this debate. This Comment concludes by arguing that the Third Circuit in *New Jersey Department of Environmental Protection* correctly resolved this issue by holding that an EIS need not include a discussion of terrorism as an environmental impact of a nuclear facility.

II. LEGAL AND HISTORICAL BACKGROUND

A. The Civilian Use of Nuclear Power

President Eisenhower initiated the "Atoms for Peace" program shortly after his inauguration in 1953.²³ The aim of this program—to transfer nuclear technology from the military to civilian enterprises—vested the development of nuclear energy in private companies.²⁴ The Atomic Energy Act of 1954²⁵ (AEA) established the Atomic Energy Commission ("AEC"), which regulated all aspects of private nuclear

¹⁸ 449 F.3d 1016 (9th Cir. 2006).

¹⁹ *Id.* at 1035.

²⁰ 561 F.3d 132 (3d Cir. 2009).

²¹ *Id.* at 142.

²² *New York v. U.S. Nuclear Regulatory Comm'n*, 589 F.3d 551, 554 n.1 (2d Cir. 2009).

²³ FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS AND THE ENVIRONMENT: CASES AND MATERIALS* 997 (3d 2010).

²⁴ *Id.*

²⁵ 42 U.S.C. §§ 2011–2023 (2006).

energy.²⁶ The Energy Reorganization Act of 1974²⁷ abolished the AEC and placed the regulatory and licensing authority of the AEC within the newly established NRC, while the Energy Research and Development Administration (the predecessor to the Department of Energy) retained the AEC's research and development functions.²⁸

The public initially approved of the use of nuclear power when the first commercial plant opened in 1957.²⁹ But growing fears about the risks of nuclear power resulted in new safety requirements and more complex procedures for plant licensure.³⁰ Despite the legal process the NRC provided for citizen participation, some interested parties have preferred a more direct approach. For example, in May 1977, the Clamshell Alliance, a New England-based coalition of anti-nuclear groups, coordinated the first forceful occupation of a nuclear plant in the United States at New Hampshire's Seabrook plant, which resulted in the arrests of 1,414 protestors.³¹ Similarly, four years later, police arrested 1,453 protesters at California's Diablo Canyon when demonstrators tried to block land and sea access to that plant.³²

The growing public concerns proved to be legitimate in 1979 when a series of mechanical malfunctions at Three Mile Island produced the "nation's worst nuclear accident."³³ The release of radioactive materials into the water and air during the Three Mile Island meltdown demonstrated that serious accidents present a material threat to the environment and illuminated the potential harmful consequences of nuclear power. No longer was a major incident merely hypothetical; one had actually occurred. Without appropriate measures by the NRC, accidents would likely occur again.³⁴ The NRC responded by studying the risk of future accidents and its ability to protect the public and the

²⁶ BOSSELMAN ET AL., *supra* note 23 at 997–98; *Our History*, U.S. NUCLEAR REGULATORY COMMISSION, <http://www.nrc.gov/about-nrc/history.html> (last visited Jan. 16, 2011).

²⁷ 42 U.S.C. §§ 5801–5879 (2006).

²⁸ *Nuclear Regulatory Comm'n*, FEDERAL REGULATORY DIRECTORY 343 (Congressional Quarterly, Inc., 13th ed. 2008).

²⁹ BOSSELMAN ET AL., *supra* note 23, at 998.

³⁰ *Id.*

³¹ *Id.*; *Arrests at Diablo Canyon Pass Total at Seabrook*, N.Y. TIMES, Sept. 23, 1981, at A16.

³² *Arrests at Diablo Canyon Pass Total at Seabrook*, N.Y. TIMES, Sept. 23, 1981, at A16.

³³ *See In re TMI Litig.*, 193 F.3d 613, 655–56 (3d Cir. 1999) (internal quotations omitted) (describing the Three Mile Island incident, its causes, and effects).

³⁴ *Limerick Ecology Action, Inc. v. Nuclear Regulatory Comm'n*, 869 F.2d 719, 741 (1983).

environment from them. Ultimately, the NRC implemented appropriate changes to its evacuation and disaster management plans.³⁵

In the early 1990s, several incidents throughout the nation either directly or indirectly implicated the NRC's security duties. For example, the truck bombings of the World Trade Center and the Oklahoma City Federal Building in 1993 and 1995, respectively, demonstrated the active and actual threat of land-based terrorist attacks to valuable installations. Additionally, Pierce Nye's invasion of Three Mile Island further demonstrated the vulnerability of the nation's nuclear industry.³⁶ These events, in addition to the protestor demonstrations at Seabrook and Diablo Canyon, illustrate the difficult task faced by the NRC in safeguarding the nation's nuclear infrastructure.

In recent years, the issue of terrorism has dominated the discourse on plant security and environmental risks. Until 1993, Americans generally considered terrorism to be an act that occurred abroad.³⁷ The bombing of the World Trade Center in February 1993,³⁸ however, revealed a weakness in American domestic security and reignited a twenty-year-old debate on the vulnerability of nuclear facilities.³⁹ Following the 2001 attacks on New York and Washington, D.C.,⁴⁰ the debate again intensified. Design-based requirements of nuclear plants in susceptible areas require that they be built to withstand hurricanes and earthquakes.⁴¹ Prior to 2001, however, no design-based mandates existed that required nuclear plants to be able to withstand large aircraft crashes.⁴² In 2001, the NRC began an intensive review of the design-based requirements at nuclear facilities and implemented increasingly stringent design-based and physical security standards.⁴³ The NRC's scrutiny generally looks beyond the possibility of an attack or invasion

³⁵ *Id.*

³⁶ Matthew L. Wald, *Gate Crasher Shakes Up Nuclear Debate*, N.Y. TIMES, Feb. 11, 1993, at A16.

³⁷ Hoffman, *supra* note 2.

³⁸ Robert D. McFadden, *EXPLOSION AT THE TWIN TOWERS: The Overview*, N.Y. TIMES, Feb. 27, 1993, § 1, at 1.

³⁹ Hoffman, *supra* note 2.

⁴⁰ Serge Schmemmann, *U.S. ATTACKED: President Vows to Exact Punishment for 'Evil'*, N.Y. TIMES, Sept. 12, 2001, at A1.

⁴¹ MARK HOLT & ANTHONY ANDREWS, CONG. RESEARCH SERV., RL 34331, NUCLEAR POWER PLANT SECURITY AND VULNERABILITIES 4 (2010).

⁴² *Id.*

⁴³ See sources cited *supra* note 3; *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n*, 449 F.3d 1016, 1030–31 (9th Cir. 2006). *But see* *Riverkeeper, Inc. v. Collins*, 359 F.3d 156, 161–63 (2d Cir. 2004) (refusing an environmental protection group's demands that New York's Indian Point nuclear generation plant be protected by a ten mile radius no-fly zone and defenses sufficient to defend this zone from an approaching aircraft).

and examines all potential environmental harms, including tsunamis, floods, and tornadoes.⁴⁴ The NRC refuses, however, to require nuclear facilities to assess the hypothetical effects of terrorism as an articulable environmental hazard.⁴⁵

B. The NRC's Obligations Under NEPA

The AEA grants the NRC the exclusive authority to regulate the safety of nuclear facilities and charges the NRC with ensuring that “the utilization or production of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public.”⁴⁶ To achieve this end, the NRC may promulgate rules, regulations, and orders, “as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property.”⁴⁷ Examples of the NRC’s compliance with this duty pervade its NEPA-enforcing regulations,⁴⁸ its physical protection requirements⁴⁹ and its plant licensing procedures,⁵⁰ to name a few.

Passed in 1969, NEPA established “a broad national commitment to protecting and promoting environmental quality.”⁵¹ Through NEPA, Congress declared a national policy intended to foster the productive and harmonious coexistence of man and nature, and to fulfill the nation’s present and future social and economic needs.⁵² Agencies implement this policy through a series of “action-forcing” procedures that require

⁴⁴ See, *Fact Sheet on Seismic Issues for Nuclear Power Plants*, U.S. NUCLEAR REGULATORY COMM’N, <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html> (last visited Sept. 26, 2011); Dina Cappiello & Matthew Daly, *Wolf Creek plant not entirely twister-proof*, THE WICHITA EAGLE, May 27, 2011, available at <http://www.kansas.com/2011/05/27/1866781/wolf-creek-plant-not-entirely.html#storylink=misearch>; A.G. Sulzberger & Matthew Wald, *Flooding Brings Worries Over Two Nuclear Plants*, N.Y. TIMES, June 21, 2011, at A19; Tom Zeller, Jr., *U.S. Nuclear Plants Have Same Risks, and Backups, as Japan Counterparts*, N.Y. TIMES, Mar. 14, 2011, at A10.

⁴⁵ See *Amergen Energy Co.*, 65 N.R.C. 124, 126–29 (2007); *Private Fuel Storage*, L.L.C., 56 N.R.C. 340, 344–46 (2002).

⁴⁶ 42 U.S.C. § 2232(a) (2006).

⁴⁷ 42 U.S.C. § 2201(b) (2006).

⁴⁸ 10 C.F.R. pt 51 (2011).

⁴⁹ 10 C.F.R. pt 73 (2011).

⁵⁰ 10 C.F.R. pt 2 (2011).

⁵¹ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989).

⁵² 42 U.S.C. § 4331 (2006). NEPA also established the Council on Environmental Quality (CEQ), which promulgates regulations interpreting NEPA and guides agencies in determining which actions are subject to an EIS. 42 U.S.C. §§ 4321, 4341–4357 (1970) (establishing the purpose, duties, jurisdiction and structure of the CEQ).

the agencies to take a “hard look”⁵³ at the effects of their actions on the environment and to disseminate the relevant information to the public.⁵⁴ In short, NEPA serves two paramount aims: (1) to require the federal agency to discuss environmental issues in its decision-making process, and (2) to assure the public that it has adequately discussed environmental considerations.⁵⁵

The completion and public disclosure of an EIS ensures that the NRC complies with its duty to serve NEPA’s twin aims.⁵⁶ Pursuant to NEPA, the agency responsible for any major federal action that will significantly affect the human environment must draft a detailed EIS.⁵⁷ The EIS must assess the environmental impact, unavoidable adverse consequences, and alternatives to the federal action.⁵⁸ Major federal actions in the NEPA context are those projects that will likely produce substantial environmental effects and that are subject to federal management and responsibility.⁵⁹ “Effects” includes “[d]irect effects, which are caused by the action and occur at the same time and place[,]” and “[i]ndirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁶⁰

Agencies must evaluate remote, but potentially significant impacts providing the evaluation remains grounded in “existing credible scientific evidence which is relevant to evaluating the reasonably

⁵³ *Greater Bos. Television Corp. v. Fed. Comm’n. Comm’n*, 444 F.2d 841, 851–52 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971) (describing the function of the court in reviewing administrative decisions as assuring “that the agency has given reasoned consideration to all the material facts and issues[,]” and stating that where the agency has given the facts and issues a hard look, the court should uphold the agency’s findings).

⁵⁴ *Robertson*, 490 U.S. at 350; *see also* *Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979) (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 409 (1976)).

⁵⁵ *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 143 (1981).

⁵⁶ *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983).

⁵⁷ 42 U.S.C. § 4332(C) (2006).

⁵⁸ *Id.* *Calvert Cliffs Coordinating. Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1116 (D.C. Cir. 1971). The EIS process requires the applicant (the party applying to construct a nuclear facility) to submit to the NRC its own “environmental report,” presenting its assessment of the environmental impact of the planned facility and possible alternatives that would alter the impact. The NRC will then consider the applicant’s report and prepare its own “detailed statement” of environmental costs, benefits and alternatives. The statement then circulates among interested parties and agencies and is made available to the public, who will provide comments on the statement. The NRC then prepares a final statement and makes final recommendations on the application. When construction is completed, the applicant must repeat the process to obtain an operating license. *Id.* at 1128.

⁵⁹ 40 C.F.R. § 1508.18 (2011).

⁶⁰ *Id.* at § 1508.8.

foreseeable significant adverse impacts on the human environment.”⁶¹ Instead of extending the theoretical limit of the EIS to a “worst case” analysis, the Statement must focus on “reasonably foreseeable impacts” of the proposed action.⁶² The “reasonably foreseeable” requirement serves the aims of NEPA by directing the agency’s resources at those issues of greatest concern to the public and the agency, rather than misleading the public by focusing on highly speculative and distracting risks.⁶³

C. Challenges to the NRC’s Environmental Review

Passed in 1946, the Administrative Procedure Act (“APA”) provides a generic process for agency rule-making⁶⁴ and a private right to judicial review of agency actions.⁶⁵ It also provides six separate standards by which a circuit court may hold an agency action unlawful.⁶⁶ A court may not overturn an agency decision merely because it is unhappy with the ruling.⁶⁷ Rather, the APA ensures that the agency follows its procedures and that the agency decision is not arbitrary or capricious.⁶⁸ So long as the agency takes a “hard look” at the federal action’s environmental consequences, a court will not supplant the

⁶¹ 40 C.F.R. § 1502.22 (2011).

⁶² *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 356 (1989). Prior to 1986, where “information relevant to the agency’s evaluation of the proposed action [was] either unavailable or too costly to obtain, the agency [was required to] include in the EIS a ‘worst case analysis and an indication of the probability or improbability of its occurrence.’” The CEQ removed this requirement because the “worst case” requirement overemphasized highly speculative harms, prompted agencies to exceed the rule of reason in their analysis of potential impacts, and proved wasteful of agencies’ time and resources, thus diverting the EIS process from its intended purpose. *Robertson*, 490 U.S. at 354 (citing 40 C.F.R. § 1502.22; National Environmental Policy Act Regulations, 50 Fed. Reg. 32,237 (proposed Aug. 9, 1985) (to be codified at 40 C.F.R. § 1502.22)).

⁶³ *Robertson*, 490 U.S. at 356 (citing National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,624–15,625 (Apr. 15, 1986) (codified at 40 C.F.R. § 1502.22); National Environmental Policy Act Regulations, 50 Fed. Reg. 32,237 (proposed Aug. 9, 1985) (to be codified at 40 C.F.R. § 1502.22)).

⁶⁴ 5 U.S.C. § 551–59 (2006). A specific agency’s enabling act may provide a different process for rulemaking, and may preclude or channel judicial review. In the case of the Atomic Energy Act, the APA provides the relevant administrative and judicial procedures. 42 U.S.C. §§ 2231, 2239(b) (2006).

⁶⁵ 5 U.S.C. § 702 (2006). No private right exists, however, where review of the action is barred by law or the action is “committed to agency discretion by law.” 5 U.S.C. § 701 (2006).

⁶⁶ 5 U.S.C. § 706.

⁶⁷ *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1980).

⁶⁸ 5 U.S.C. § 706(2)(A); *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 375 (1989); *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402, 413–14 (1971).

agency's expert judgment with its own.⁶⁹ Despite the broad deference courts give to federal agencies, opponents of nuclear energy frequently challenge the NRC's decisions, claiming that it has not sufficiently fulfilled its NEPA obligations. A few landmark cases brought by such interveners provide the historical and legal background to this issue.

1. *Metropolitan Edison v. People Against Nuclear Energy*

When Metropolitan Edison, the owner of Three Mile Island, sought to re-license the plant after the 1979 meltdown, opponents of nuclear power and of the re-licensing intervened and the case quickly found its way to the Supreme Court. The Court analyzed NEPA and the EIS requirements in what became a landmark decision for subsequent litigation concerning the sufficiency of EISs. In *Metropolitan Edison Co. v. People Against Nuclear Energy*,⁷⁰ the Court ruled that an EIS must address a particular factor if (1) the factor is the type of effect proximately caused by the federal action,⁷¹ and (2) the factor is the type of effect that Congress intended an EIS to address under NEPA.⁷²

When completing an EIS, federal agencies must consider the particular effects of the agency's proposed action that share a close causal relationship with that action. *Metropolitan Edison* equated this relationship to proximate causation in tort law.⁷³ Mere "but-for" causation will not bring an effect within NEPA's scope if a causal chain is too attenuated.⁷⁴ In the case of re-licensing Three Mile Island, the psychological effects that some residents and relatives of residents might suffer were too remote from the physical change that would result from continued production of energy, such as the release of low-level radiation and increased fog due to the plant's cooling towers.⁷⁵

Thus, the Court in *Metropolitan Edison* read "environmental effect" and "environmental impact" in NEPA to include a "reasonably close causal relationship between (1) a major federal action (re-licensing Three

⁶⁹ *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97–98 (1983); *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976); *Natural Res. Def. Council v. Morton*, 458 F.2d 827, 838 (D.C. Cir. 1972). The decisions that agencies make require evaluation of complex issues by experts with a high level of technical expertise. "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinion of its own qualified experts even if . . . a court may find contrary views more persuasive." *Marsh*, 490 U.S. at 377–78; see also *Kleppe*, 427 U.S. at 412; *Balt. Gas & Elec.*, 462 U.S. at 103.

⁷⁰ 460 U.S. 766 (1983).

⁷¹ *Id.* at 773–75.

⁷² *Id.* at 776–77.

⁷³ *Id.* at 774.

⁷⁴ *Id.*

⁷⁵ *Id.* at 774–75.

Mile Island); (2) a change in the physical environment (the risk of a nuclear accident); and (3) an effect (potential damage to psychological health).⁷⁶ When a hypothetical effect does not have a close causal connection to the physical environment, NEPA does not require its inclusion in an EIS.⁷⁷ Setting the stage for future discussions of what falls within NEPA's mandate, the Court held that both tort law and NEPA require courts to "look to the underlying policies or legislative intent in order to draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not."⁷⁸ With respect to the potential environmental impact of terrorism and the scope of an EIS, where to draw that "manageable line" became a contentious issue.

The scope of an EIS must remain manageable in order to ensure a thorough and fully-informed decision.⁷⁹ After the Three Mile Island meltdown, the NRC concluded that the risk of an accident had not changed since the publication of the original EIS in 1972.⁸⁰ Even after a serious accident had occurred, finding that the risk of an accident had not changed was not an "arbitrary and capricious" decision. *Metropolitan Edison* came to this decision by contemplating the purpose of NEPA and the congressional intent and policies of the Act. The Court held that Congress did not intend NEPA to address the effects of accidents that occurred in the past, nor does its language or legislative history suggest that the occurrence of an accident could broaden the Act's scope.⁸¹ Thus, the occurrence of a unique or traumatic incident does not automatically render that type of incident an "effect" or "environmental impact" required as part of an EIS.⁸² This limit on NEPA's scope, coupled with proximate cause, provides guidance for its future interpretation.

2. *Weinberger v. Catholic Action of Hawaii*

Notably, the year before it decided *Metropolitan Edison*, the Supreme Court issued a decision in a non-NRC case involving the requirements of an EIS. In *Weinberger v. Catholic Action of Hawaii/Peace Education Project*,⁸³ a coalition of environmental

⁷⁶ *Metro. Edison*, 460 U.S. at 775.

⁷⁷ *Id.* at 778.

⁷⁸ *Id.* at 774.

⁷⁹ *Id.* at 776 (citing *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1980)).

⁸⁰ *Id.* at 775, n.9.

⁸¹ *Id.* at 779.

⁸² *Metro. Edison*, 460 U.S. at 778.

⁸³ 454 U.S. 139 (1981).

protection groups demanded that the Navy produce a “hypothetical EIS” for nuclear weapons that may or may not have been stored in a facility located on the island of Oahu.⁸⁴ The Navy published a “candidate” EIS, detailing the environmental hazards associated with storing, handling and transporting nuclear weapons, but did not disclose the facility’s location.⁸⁵ The Court rejected the petitioners’ demand for a hypothetical EIS because such a requirement clearly departs from the NEPA requirement that provisions in the EIS be “reasonably foreseeable.”⁸⁶

The Court discussed the need to balance the goals of NEPA with national security. Under the *Totten* doctrine,⁸⁷ “public policy forbids the maintenance of any suit in a court of justice, the trial of which would inevitably lead to the disclosure of matters which the law itself regards as confidential, and respecting which it will not allow the confidence to be violated.”⁸⁸ Thus, an EIS that reveals information sensitive to national security, such as the location of nuclear weapons, may not be disclosed to the public.⁸⁹ Additionally, because the Freedom of Information Act (FOIA) governs disclosure under NEPA,⁹⁰ an EIS deemed “classified” pursuant to an executive order may be withheld from public disclosure.⁹¹ Therefore, the NRC could withhold from the public an EIS that has been classified or that discusses details of possible risks of terrorism.

3. *Private Fuel Storage*

The NRC first rejected the requirement to address terrorism in an EIS in early 2002 after interveners claimed that in light of recent terrorist attacks, the EIS should “consider the environmental consequences of terrorists flying a fully-loaded commercial jumbo jet into the [Private Fuel Storage] facility.”⁹² In *Private Fuel Storage*, an NRC administrative decision, the state of Utah claimed that recent terrorist attacks in New York and Washington D.C. made future attacks upon a

⁸⁴ *Id.* at 140.

⁸⁵ *Id.* at 141–42.

⁸⁶ *Id.* at 144.

⁸⁷ *Totten v. United States*, 92 U.S. 105 (1876).

⁸⁸ *Weinberger*, 454 U.S. at 146–47 (quoting *Totten*, 92 U.S. at 107).

⁸⁹ *Id.* at 146–47.

⁹⁰ Freedom of Information Act, 5 U.S.C. § 552 (2006).

⁹¹ *Weinberger*, 454 U.S. at 143–46.

⁹² *Private Fuel Storage, L.L.C.*, 56 N.R.C. 340, 345 (2002). The NRC decided this case concurrently with three other cases raising similar terrorism-related issues. *Id.* at 343. The discussion in *Private Fuel Storage* became the binding rationale for these and subsequent terrorism-related cases. *See also* *Duke Cogema Stone & Webster*, 55 N.R.C. 158 (2002); *Dominion Nuclear Conn.*, 55 N.R.C. 161 (2002); *Duke Energy Corp.*, 55 N.R.C. 164 (2002).

Utah nuclear fuel storage facility more likely.⁹³ The Commission addressed the issue by asking whether contemplation of the environmental impact of terrorism would serve the twin aims of NEPA.⁹⁴ An obligation to evaluate the risk of terrorism as an environmental factor, it noted—unlike reasonably certain effects on foliage and wildlife, water and air quality, and human culture and lifestyle—is unpredictable, “comes in innumerable forms and at unexpected times and places. . . . [a]nd is not a natural or inevitable byproduct of licensing[.]”⁹⁵ Ruling that an EIS need not include a discussion of terrorism, the NRC stated that such a requirement would provide no practical benefit to the Commission, the environment, or the public for four primary reasons.⁹⁶

First, NEPA review requires contemplation of “reasonably foreseeable” impacts,⁹⁷ a requirement referred to as the “rule of reason.”⁹⁸ The rule of reason does not demand examination of every conceivable effect of a project. “Remote and speculative” impacts, “worst case” scenarios, “impacts with . . . a low probability of occurrence,” or effects too attenuated from the federal action to fall within the range of proximate cause do not require NEPA analysis.⁹⁹ The rule of reason serves as the manageable line between likely effects of licensing and those that are “too attenuated to require a NEPA review, particularly where the terrorist threat is entirely independent of the facility.”¹⁰⁰

Second, the Commission noted that the risk of attack on a particular facility is not quantifiable, and that any attempt to quantify the risk would be speculative, and thus would fail the rule of reason.¹⁰¹ Even if the risk could be quantified, the Commission stated, it would be miniscule and thus fail the rule of reason.¹⁰² Moreover, the Federal Aviation Administration, the United States intelligence community, law enforcement agencies, and the Department of Defense all take active

⁹³ *Private Fuel Storage*, 340 N.R.C. at 345.

⁹⁴ *Id.*

⁹⁵ *Id.* at 347.

⁹⁶ *Id.* at 347–48.

⁹⁷ *Id.* at 348 (citing *Wyoming Outdoor Council, Inc. v. U.S. Forest Serv.*, 165 F.3d 43, 49 (D.C. Cir. 1999)); *Dubois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996); *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1993); *Private Fuel Storage*, 56 N.R.C. 340 at 348.

⁹⁸ *Deukmejian v. Nuclear Regulatory Comm’n*, 751 F.2d 1287, 1300–01 (D.C. Cir. 1984), *vacated on other grounds*, 760 F.2d 1320 (D.C. Cir. 1985); *Private Fuel Storage*, 56 N.R.C. at 348 (citing *Davis v. Latschar*, 202 F.3d 359, 368 (D.C. Cir. 2000)).

⁹⁹ *Private Fuel Storage*, 56 N.R.C. at 345 (internal quotations omitted).

¹⁰⁰ *Id.* at 350.

¹⁰¹ *Id.*

¹⁰² *Id.* at 351.

steps to protect nuclear facilities and their respective local airspace.¹⁰³ These efforts, coupled with the existence of many other inviting targets, place the risk of environmental effects arising from acts of terror well outside the scope of the rule of reason.¹⁰⁴

Third, the Commission equated the contemplation of the effect of a terrorist attack to a “worst case” scenario analysis. Both the Council on Environmental Quality and the Supreme Court expressly rejected the use of the “worst case” scenario analysis.¹⁰⁵ The risk of a terrorist attack on a nuclear plant, the NRC admitted, amounts to a “theoretical possibility,” that falls short of the “reasonably foreseeable” threshold for NEPA review.¹⁰⁶ Supplanting a “reasonably foreseeable” analysis with a “theoretically possible” discussion would essentially revive “worst case” analysis, and could harm the public by unduly exaggerating a project’s risks.¹⁰⁷

Finally, the Commission recognized the need to keep sensitive information out of the hands of those who might use it to do harm, and that NEPA’s public nature conflicts with this national security interest.¹⁰⁸ NEPA itself contains a limiting provision, stating that the means utilized to achieve its aims must abide by “considerations of national policy,” and that it should exercise restraint “based on ‘risk to health and safety, or other undesirable and unintended consequences.’”¹⁰⁹ In addition to these general limits in NEPA, the AEA forbids the NRC from disclosing security-related information.¹¹⁰ Based on these four factors, the NRC refused to require nuclear plant operators to conduct a terrorism analysis within an EIS.

D. The Circuits Address the Risk of Terrorism

1. San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission: The Ninth Circuit Rejects Private Fuel Storage

In *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission*, the Ninth Circuit held that an EIS must take into account

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 354–55 (1989) (discussing the CEQ’s abandonment of the “worst case” scenario analysis); *see also* National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618 (Apr. 15, 1986) (codified at 40 C.F.R. § 1502.22).

¹⁰⁶ *Private Fuel Storage*, 56 N.R.C. at 352.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 354.

¹⁰⁹ 42 U.S.C. § 4331(b) (2006); *Private Fuel Storage*, 56 N.R.C. at 355.

¹¹⁰ 42 U.S.C. § 2161 (2006); *Private Fuel Storage*, 56 N.R.C. at 355–56.

the potential environmental impact of a terrorist attack on a nuclear facility.¹¹¹ In December 2001, only months before the NRC's decision in *Private Fuel Storage*, Diablo Canyon—located on California's Pacific coast—applied for a license to construct and operate a dry cask storage facility.¹¹² Because Diablo Canyon's original storage capacity was to expire in 2006, the plant could not continue to operate without the additional facility.¹¹³ San Luis Obispo Mothers for Peace, a California-based organization concerned with dangers associated with the Diablo Canyon plant, intervened in the license board proceeding, urging the board to deny the license because the NRC's environmental review did not discuss the environmental effect of sabotage or a terrorist attack.¹¹⁴ In September of 2002, Mothers for Peace submitted a second petition for hearing on the effect of terrorism, expanding its challenge to include the security of the entire Diablo Canyon facility.¹¹⁵ The Commission denied their petitions under the precedential ruling of *Private Fuel Storage*. Subsequently, Mothers for Peace appealed to the Ninth Circuit.¹¹⁶ The Ninth Circuit rejected each of the four bases of the *Private Fuel Storage* decision, resulting in the first successful challenge of *Private Fuel Storage* and setting a binding standard on nuclear facilities located within the Ninth Circuit, requiring facilities to provide for the environmental impact of a terrorist attack.¹¹⁷

Instead of relying on the Supreme Court's "reasonably close causal relationship" standard,¹¹⁸ the Ninth Circuit applied its own holding in *No GWEN Alliance, Inc. v. Aldridge*, which held that an EIS need not

¹¹¹ San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n, 449 F.3d 1016, 1035 (3d Cir. 2006).

¹¹² *Id.* at 1021. Dry cask storage consists of a stainless steel canister, filled with spent fuel, welded shut and enclosed in concrete "overpacks" that allow circulating air to cool the fuel.

¹¹³ *Id.*

¹¹⁴ Pacific Gas & Elec., 56 N.R.C. 413, 447 (2002).

¹¹⁵ *Mothers for Peace*, 449 F.3d at 1023.

¹¹⁶ *Id.* at 1024. Agencies have the discretion to use adjudicative proceedings to establish binding legal norms. *Sec. & Exchange Comm'n v. Chenery Corp.*, 332 U.S. 194, 203 (1947). Because the NRC established binding legal rules in *Private Fuel Storage*, the Ninth Circuit reviewed the decision as a legal rule, instead of a factual finding, which would receive greater deference. *Mothers for Peace*, 449 F.3d at 1027.

¹¹⁷ *Id.* at 1035; *Tri-Valley Cares v. Dep't of Energy*, 203 Fed. Appx. 105, 107 (9th Cir. 2006); *Tri-Valley Cares v. Dep't of Energy*, No. C 03-3926, 2007 U.S. Dist. LEXIS 29437 (N.D. Cal. Apr. 6, 2007); *see also* *Areva Enrichment Serv., L.L.C.*, 70 N.R.C. 1, 5-6 (2009) (recognizing and applying the exception to the NRC's judgment, which *Mothers for Peace* carved out as binding on facilities located within the Ninth Circuit's jurisdiction).

¹¹⁸ *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 778 (1983).

address “remote and highly speculative consequences.”¹¹⁹ The court then held that the NRC’s determination “that terrorist attacks are ‘remote and highly speculative,’ as a matter of law, is inconsistent with the government’s efforts and expenditures to combat this type of terrorist attack against nuclear facilities.”¹²⁰ Because the NRC had recently taken steps designed to combat or mitigate the potential of a terrorist attack, the court reasoned, the NRC did not consider terrorist attacks so “remote and speculative” as to escape NEPA review.¹²¹ Neither did the Ninth Circuit.

Having addressed the Supreme Court’s causation standard, the Ninth Circuit then assessed the remaining *Private Fuel Storage* factors. The court observed that the second factor—stating that the risk of terrorism falls outside the rule of reason due to its highly speculative nature¹²²—misses the point.¹²³ Instead, the court stated that no NEPA provision, NRC regulation, or any other authority, case law, or policy statement allows the NRC to ignore an unquantifiable risk.¹²⁴ Rather, an agency enforcing NEPA must take a “hard look” at the environmental consequences, even if they are unquantifiable.¹²⁵

The third *Private Fuel Storage* factor states that NEPA does not require a “worst case” scenario analysis.¹²⁶ The Ninth Circuit in *Mothers for Peace* treated this factor as a red herring. The NRC removed “worst case” review from its requirements in 1986 due to their speculative,

¹¹⁹ *Mothers for Peace*, 449 F.3d at 1030; *No GWEN Alliance of Lane County, Inc. v. Aldridge*, 855 F.2d 1380, 1386 (9th Cir. 1988). *No GWEN Alliance* held that an EIS for a military-use radio microwave tower network need not discuss the threat of nuclear war that the network itself might provoke. *No Gwen Alliance*, 855 F.2d at 1386. The Ninth Circuit argued that the causal chain of *Metropolitan Edison* did not control because that case examined the requirement of an EIS in considering a physical change in the environment and its subsequent psychological effect, whereas *No GWEN Alliance* involved a federal action and the subsequent change in the physical environment. *Id.* at 1385. Instead of following *Metropolitan Edison*, the Ninth Circuit ruled that an EIS need not address “remote and highly speculative” effects, and in language echoing *Metropolitan Edison*, stated that “the nexus between construction of [the tower network] and nuclear war is too attenuated to require discussion of the environmental impacts of nuclear war in an [EIS].” *Id.*

¹²⁰ *Mothers for Peace*, 449 F.3d at 1030. Examples of such efforts and expenditures by the NRC include bolstering security at its facilities, upgrading its security policies, and establishing the office of Nuclear Security and Incident Response. *Id.* at 1030–31.

¹²¹ *Id.* at 1031.

¹²² *Private Fuel Storage*, 56 N.R.C. 340, 348–49 (2002).

¹²³ *Mothers for Peace*, 449 F.3d at 1033–34.

¹²⁴ *Id.* (Scirica, J., dissenting in part) (relying on *Limerick Ecology Action, Inc. v. Nuclear Regulatory Comm’n*, 869 F.2d 719, 754 (3d Cir. 1983)).

¹²⁵ *Id.* at 1032.

¹²⁶ *Private Fuel Storage*, 56 N.R.C. at 352.

wasteful and ambiguous nature.¹²⁷ Because that “worst case” analysis is not required, the court believed that the NRC “wrongly labels a terrorist attack the worst case scenario”¹²⁸

Finally, the court dismissed the fourth *Private Fuel Storage* factor, which examines whether the disclosure of sensitive national security information would increase security risks.¹²⁹ The court relied on the Supreme Court’s determination in *Weinberger*, that information that implicates national security may not be disclosed through NEPA’s processes, and explained that exempting classified information from disclosure in an EIS would not fail NEPA’s mandate because the public would not be prohibited from contributing to the hearing process.¹³⁰ Thus, after rejecting, but not overruling, the *Private Fuel Storage* decision, the Ninth Circuit held that an EIS must take into account the potential environmental impact of a terrorist attack on a nuclear facility.

2. *New Jersey Department of Environmental Protection v. United States Nuclear Regulatory Commission*: The Third Circuit Reaffirms the NRC’s Approach

In direct opposition to the Ninth Circuit’s holding in *Mothers for Peace*, the Third Circuit held in *New Jersey Department of Environmental Protection v. United States Nuclear Regulatory Commission*, that a nuclear plant’s EIS need not contemplate terrorist attacks as a potential environmental threat. The New Jersey Department of Environmental Protection challenged the 2005 application of AmerGen Energy Company, the owner and operator of Oyster Creek nuclear generating station, for “the NRC’s failure to prepare an [EIS] to study the effects of an aircraft attack on Oyster Creek.”¹³¹ The NRC agreed with the Atomic Safety and Licensing Board’s finding “that terrorism and ‘design based threat’ reviews . . . lie outside the scope of NEPA in general and of license renewal in particular.”¹³² In rejecting the

¹²⁷ National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618 (Apr. 15, 1986) (codified at 40 C.F.R. § 1502.22 (2011)).

¹²⁸ *Mothers for Peace*, 449 F.3d at 1034.

¹²⁹ *Id.*

¹³⁰ *Id.* at 1034–35.

¹³¹ *N.J. Dep’t of Envtl. Prot. v. U.S. Nuclear Regulatory Comm’n*, 561 F.3d 132, 135 (3d Cir. 2009).

¹³² *AmerGen Energy Co.*, 65 N.R.C. 124, 128–30 (2007) (finding a possible hypothetical act caused by a criminal actor to be too far removed from the natural or expected consequences of re-licensing Oyster Creek; moreover, “a NEPA-driven review of the risk of terrorism would be largely superfluous . . . given that the NRC has undertaken extensive efforts to enhance security . . .” and numerous practical obstacles prevent meaningful NEPA review of the issue).

appeal from the NRC's decision, the Third Circuit discussed the claim's "two insurmountable flaws."¹³³ First, that the requisite "reasonably close causal relationship" between the environmental effect and the federal action in the EIS statement did not exist between Oyster Creek's relicensing and the risk of a terrorist attack; second, that the Department of Environmental Protection's demand for NEPA-terrorism review was redundant and provided no meaningful analysis of the issue of terrorism.¹³⁴

The Third Circuit relied on the Supreme Court's decision in *Metropolitan Edison*, which required the court to "draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not."¹³⁵ The court also found support for its position in *Department of Transportation v. Public Citizen*,¹³⁶ which states that an agency need not prepare an EIS for actions, the effects of which lie beyond that agency's control and responsibility.¹³⁷ In both *Metropolitan Edison* and *Public Citizen*, the "manageable line" appears to encompass the boundaries of an agency's area of control.¹³⁸ Similarly, the Third Circuit cited to *Riverkeeper, Inc. v. Collins*,¹³⁹ in which the Second Circuit denied an intervener's request for a no-fly zone and anti-aircraft defenses surrounding a New York nuclear power plant, as they were protective measure beyond the province of the NRC.¹⁴⁰ Likewise, the Third Circuit denied the requirement for NEPA review of terrorism because the NRC's inability to combat terrorism beyond its physical borders placed the matter outside of its control and in the hands of another agency.¹⁴¹ The fact that the NRC has taken precautionary actions

¹³³ *N.J. Dep't of Env'tl. Prot.*, 561 F.3d at 136.

¹³⁴ *Id.*

¹³⁵ *Id.* at 139, (quoting *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774, n.7 (1983)).

¹³⁶ 541 U.S. 752, 763 (2004).

¹³⁷ *Id.*; see also *N.J. Dep't of Env'tl. Prot.*, 561 F.3d at 139.

¹³⁸ *N.J. Dep't of Env'tl. Prot.*, 561 F.3d at 139; see also 40 C.F.R. § 1508.18 (2011) ("Major Federal action includes actions with effects that may be major and which are potentially subject to [f]ederal control and responsibility.") (internal quotations omitted).

¹³⁹ 359 F.3d 156 (2d Cir. 2004).

¹⁴⁰ *Id.* at 161–68 (rejecting *Riverkeeper, Inc.*'s claim that the NRC abdicated its statutory duty to protect the public health and safety because the agency is best situated to determine how its resources are allocated, and noting that the heightened level of protection required of the NRC is in no way "absolute protection" of nuclear plants).

¹⁴¹ *N.J. Dep't of Env'tl. Prot.*, 561 F.3d at 139 (stating that the Federal Aviation Administration and the Department of Defense respond to the threat of terrorism). Additionally, though not mentioned by the Third Circuit, the mission of the Department of Homeland Security is to "(A) prevent terrorist attacks within the United States; (B) reduce the vulnerability of the United States to terrorism; [and] (C) minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States[.]" 6 U.S.C. § 111(b)(1)(A)–(C) (2006).

to protect nuclear plants from terrorism does not bring the possible environmental effect of terrorism within the scope of a “reasonably foreseeable causal relationship.”¹⁴²

The court also expounded on *Metropolitan Edison*’s suggestion that causation as precipitated by a federal action parallels tort law’s proximate cause.¹⁴³ Discussing the concept of intervening and superseding causes, the court determined that a criminal or terrorist act is a superseding cause that places the effect of terrorism farther from the licensing of the plant. Under the Restatement (Second) of Torts such effects cannot be anticipated.¹⁴⁴ Ultimately, a successful attack on a nuclear plant involves two superseding causes: (1) the criminal actions of a terrorist, and (2) the failure of the Federal Aviation Administration and the Department of Defense to protect the facility.¹⁴⁵ These superseding causes place the environmental effect of a terrorist attack beyond the “manageable line” of effects that an EIS must address.¹⁴⁶

Additionally, the court reasoned *arguendo* that even if required under NEPA, the NRC’s generic EIS¹⁴⁷ is not required to analyze the effects of a hypothetical terrorist attack.¹⁴⁸ According to the EIS prepared for Oyster Creek, “should the unlikely event occur, the effects would be ‘no worse than those expected from internally initiated events.’”¹⁴⁹ This generic analysis, the court found, was sufficient to satisfy the hard look requirement of an impact, the risks of which “are

¹⁴² *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143 (referencing *Ground Zero Ctr. for Non-Violent Action v. Dep’t of the Navy*, 383 F.3d 1082, 1090–91 (9th Cir. 2004)).

¹⁴³ *Id.* at 140.

¹⁴⁴ “An intervening force is one which actively operates in producing harm to another after the actor’s negligent act or omission has been committed.” RESTATEMENT (SECOND) OF TORTS § 441(1). “A superseding cause is an act of a third person or other force which by its intervention prevents the actor from being liable for harm to another which his antecedent negligence is a substantial factor in bringing about.” RESTATEMENT (SECOND) OF TORTS § 440. An intervening force resulting from a third person’s act or failure to act, or a wrongful act of a third person towards the other is an “important consideration in determining whether an intervening force is a superseding cause.” RESTATEMENT (SECOND) OF TORTS § 442.

¹⁴⁵ *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 141.

¹⁴⁶ *Id.* at 140–41.

¹⁴⁷ To streamline the environmental review process, the NRC has examined ninety-two environmental issues common to all nuclear power plants and has resolved sixty nine of them in a Generic EIS. *Id.* at 134. The remaining twenty-three issues are analyzed on a plant-specific basis by the applicant in its Supplemental EIS. *Id.* at 134; *see also* Notice of Intent To Prepare an Environmental Impact Statement for the License Renewal of Nuclear Power Plants and To Conduct Scoping Process, 68 Fed. Reg. 33,209 (June 3, 2003).

¹⁴⁸ *Id.* at 143.

¹⁴⁹ *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143 (discussing the Generic EIS from Oyster Creek’s initial licensing); *see also* 10 C.F.R. pt. 51, subpt. A, app. B (2011).

impossible to quantify but nonetheless [may be characterized] as ‘small.’”¹⁵⁰ Because an EIS, under *Metropolitan Edison*, does not need to consider an impact that is not reasonably foreseeable, such as terrorism (despite the fact that the Oyster Creek generic EIS inherently considered these effects), specific analysis of the environmental impact of a terrorist attack would be meaningless and need not be conducted.¹⁵¹

III. THE RISK OF TERRORISM IS NOT AN ENVIRONMENTAL IMPACT

“The purpose of an EIS is to inform the decision-making agency and the public of a broad range of environmental impacts that will result, with a fair degree of likelihood, from a proposed project”¹⁵² Knowledge of this information allows the agency to make a decision that considers all relevant factors and the effects of its action.¹⁵³ An EIS that contains misleading information does not accomplish these goals. Likewise, information contained in an EIS that diverts the agency’s attention and resources from the reasonably foreseeable effects of its actions to those that are merely speculative and hypothetical does a disservice to the twin aims of NEPA.¹⁵⁴ Such an EIS skews the ability of both the public and the agency to properly evaluate the consequences of the federal action. By requiring nuclear facilities to conduct a detailed environmental analysis in an EIS for an issue as undefined, distracting, and speculative as terrorism, the Ninth Circuit’s holding not only fails to serve the purpose of NEPA, but it also creates public safety risks; violates Supreme Court precedent; and places an inefficient, unmanageable, and unattainable burden upon the NRC and plant operators.

¹⁵⁰ *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143.

¹⁵¹ *Id.* at 144.

¹⁵² *Private Fuel Storage, L.L.C.*, 56 N.R.C. 340, 347 (2002).

¹⁵³ *Id.*

¹⁵⁴ *Cf. Natural Res. Def. Council v. U.S. Forest Serv.*, 421 F. 3d 797, 811 (9th Cir. 2005) (“Inaccurate *economic* information may defeat the purpose of an EIS by “impairing the agency’s consideration of the adverse environmental effects and by skewing the public’s evaluation of the proposed agency action.”) (internal quotations omitted) (emphasis added); *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 235 F. Supp. 2d 1143, 1157 (W.D. Wash. 2002) (“An EIS that relies upon misleading economic information may violate NEPA if the errors subvert NEPA’s purpose of providing decision-makers and the public an accurate assessment upon which to evaluate the proposed project.”).

A. Metropolitan Edison Places the Risk of Terrorism Beyond the Scope of NEPA Review

The Ninth Circuit disregarded precedent established by the Supreme Court in *Metropolitan Edison*. The Supreme Court stressed the importance of proximate cause analysis and established the necessary chain of three events: (1) a major federal action; (2) a change in the physical environment; and (3) an effect. The Ninth Circuit interpreted *Metropolitan Edison* as standing for the principle that the effects of a risk do not produce an environmental impact, but that the mere risk of harm, if the harm occurs, will produce an environmental impact. However, by distinguishing the risk of an event from the occurrence of that event, *Metropolitan Edison* in no way suggested that the causal relationship between an event and an environmental effect, and between the *risk* of an event and an environmental effect, would be any different. On the contrary, in describing the chain with respect to Three Mile Island—the federal action (re-licensing the plant), the physical change (the perceived risk of nuclear accident), and the effect of that change (potential damage to psychological health)—proximate cause analysis was pervasive and pivotal.¹⁵⁵ The mere risk of an accident was so attenuated from the re-licensing of Three Mile Island that the claimed environmental impact—psychological stress—fell well beyond the manageable line of effects of the federal action. The Ninth Circuit’s “quick look” misapplied *Metropolitan Edison*; causation under NEPA must begin with a federal action and end with an environmental effect.¹⁵⁶

Certain other environmental laws do not employ proximate causation to limit the range of effects that the EIS must discuss. Where a statute requires only but-for causation, it states this expressly. Likewise, where no alternative standard to proximate cause is laid out, proximate cause is the rule. Consider, for example, the Clean Air Act.¹⁵⁷ The Environmental Protection Agency (EPA) administers the Clean Air Act, and under EPA regulations, the emissions caused by a federal action are those “that would not otherwise occur *in the absence* of the [f]ederal action.”¹⁵⁸ The Supreme Court in *Public Citizen* stated that this explicit language amounts to a requirement for “but-for” causation.¹⁵⁹ The Third Circuit recognized that in order for a standard other than proximate cause

¹⁵⁵ Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 775 (1983).

¹⁵⁶ 42 U.S.C. § 4332(C) (2006).

¹⁵⁷ 42 U.S.C. §§ 7401–7671q (2006).

¹⁵⁸ 40 C.F.R. § 93.152 (2011) (emphasis added).

¹⁵⁹ Dep’t of Trans. v. Pub. Citizen, 541 U.S. 752, 772 (2006).

to apply, the law must establish that alternative standard.¹⁶⁰ NEPA establishes no alternative standard of causation; thus *Metropolitan Edison* requires proximate cause analysis.¹⁶¹

In *Mothers for Peace* the Ninth Circuit also ignores the legislative intent discussed in *Metropolitan Edison*.¹⁶² NEPA requires an assessment of the impacts of future events; it “does not create a remedial scheme for past federal actions.”¹⁶³ *Metropolitan Edison* developed its EIS “in the wake of a traumatic nuclear accident,”¹⁶⁴ but no provision of NEPA or regulation promulgated by the Council on Environmental Quality (CEQ) or the NRC allows for the expansion of NEPA’s scope in the wake of any kind of accident. Just as the Supreme Court in 1983 did not allow the events of 1979 to redefine “environmental effect,”¹⁶⁵ the Ninth Circuit should not have allowed the events of 2001 to redefine the same term today. Additionally, Congress nowhere indicated an intent to give the NRC the duty to prepare an EIS for factors beyond its control, as the NRC “cannot be considered a legally relevant ‘cause’” of the criminal acts of terrorists.¹⁶⁶

The Ninth Circuit further erred by applying its own “remote and highly speculative” standard from *No GWEN Alliance*, which essentially paraphrased and restated *Metropolitan Edison*’s “reasonably close causal relationship” standard.¹⁶⁷ *Mothers for Peace*, however, interpreted “remote and highly speculative” as a new causation standard, which it applied in lieu of *Metropolitan Edison*.¹⁶⁸ *Metropolitan Edison* did not leave room in its decision for circuits to apply their own standards due to minor factual differences. By supplanting the judgment of the Supreme Court with its own, the Ninth Circuit violated *Metropolitan Edison*.

¹⁶⁰ N.J. Dep’t of Env’tl. Prot. v. U.S. Nuclear Regulatory Comm’n, 561 F.3d 132, 139 (3d Cir. 2009).

¹⁶¹ *Metro. Edison*, 460 U.S. at 775.

¹⁶² *Id.* at 779.

¹⁶³ *Id.*

¹⁶⁴ *Id.* at 778.

¹⁶⁵ *Id.*

¹⁶⁶ *See* Dep’t of Trans. v. Pub. Citizen, 541 U.S. 752, 770 (2004).

¹⁶⁷ *Compare Metro Edison*, 460 U.S. at 774 (reading section 102 “to include a requirement of a reasonably close causal relationship between a change in the physical environment and the effect at issue. This requirement is like the familiar doctrine of proximate cause from tort law.”), with *No GWEN Alliance of Lane County, Inc. v. Aldridge*, 855 F.2d 1380, 1385–86 (9th Cir. 1988) (“[T]his court has also rejected the notion that every conceivable environmental impact must be discussed in an EIS An impact statement need not discuss remote and highly speculative consequences [T]he nexus between construction of GWEN and nuclear war is too attenuated to require discussion of the environmental impacts of nuclear war in an . . . [EIS].”).

¹⁶⁸ *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm’n*, 449 F.3d 1016, 1030 (9th Cir. 2006).

B. The NRC is not Able to Evaluate the Environmental Impact of Terrorism

After the 2001 attacks on Washington D.C. and New York, the NRC began to review its security protocols and made a number of significant changes to respond to the threat of terrorism.¹⁶⁹ The Commission's administrative decision in *Private Fuel Storage* based its conclusion in part on its scientific and industrial expertise, which deserves great deference.¹⁷⁰ The Third Circuit properly deferred to the expertise of the NRC, while the Ninth Circuit supplanted the agency's judgment with its own. *Mothers for Peace* refused to defer to the expertise of the NRC on the grounds that "the NRC's position that terrorist attacks are 'remote and highly speculative,' as a matter of law, is inconsistent with the government's efforts and expenditures."¹⁷¹ The Ninth Circuit erred. The government undertook certain efforts in order to manage on-site safety, as required by law,¹⁷² but it did not and could not undertake to address an issue as large and complex as terrorism.

The effects of terrorist acts do not fall within the province of the NRC merely because it has taken steps to prevent or mitigate the acts themselves. Terrorism is a global issue within the jurisdiction of particular branches of the government. The NRC is legally and practically suited to address on-site safety and security and direct health hazards, and to mitigate environmental impacts that concern the operation of the plant—terrorism is not within its ambit.¹⁷³ Neither NEPA nor the AEA mandate a counterterrorism mission, nor require the NRC to consider the result of independent third-party terrorist acts. NEPA requires the NRC only to conduct an examination of the effect of the plant or fuel-storage site on the environment, ranging from the minute to the catastrophic, regardless of any superseding or intervening cause.¹⁷⁴ By considering the entire range of possible environmental effects of a nuclear plant in a generic EIS, the NRC fulfilled its

¹⁶⁹ See sources cited *supra* note 3.

¹⁷⁰ *Balt. Gas & Elec. Co v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983) (stating that reviewing courts should defer to the policies and predictions made by agencies within their own special area of expertise).

¹⁷¹ *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n*, 449 F.3d 1016, 1030 (3d Cir. 2006) (mentioning the steps taken by the NRC to combat terrorism and arguing that these efforts indicate an attitude that terrorism should be discussed).

¹⁷² See, e.g., 10 C.F.R. § 73.1 (2011) (outlining the purpose and scope of the NRC's physical protection provisions); 10 C.F.R. § 73.26 (providing for protection of nuclear materials in transit); 10 C.F.R. § 73.46 (providing for protection of nuclear facilities); 10 C.F.R. pt. 73, app. B (establishing detailed requirements and procedures for safety enforcement).

¹⁷³ See sources cited at *Id.*

¹⁷⁴ See 10 C.F.R. pt. 51, subpt. A, app. B (2011).

obligations under NEPA; indeed, in doing so, the NRC inherently contemplated the effects of terrorism. The particular acts of terrorism themselves are best left to agencies with the expertise to analyze this potential threat.

C. A Terrorism Assessment will Endanger the Public

“The public aspect of NEPA processes conflicts with the need to protect certain sensitive information.”¹⁷⁵ The NRC’s responsibilities include “protect[ing] sensitive information from falling into the hands of those with malevolent intentions.”¹⁷⁶ Yet, an EIS that requires disclosure of the environmental impact of a terrorist attack on a nuclear power plant would threaten national security by allowing potential terrorists to access information that could facilitate their malevolent intentions. CEQ regulations require agencies to furnish their EIS to any person who requests it.¹⁷⁷ Contrary to the requirement that NEPA not subject people to risk or undesirable or unintended consequences,¹⁷⁸ “[a] full-scale NEPA process [that considers terrorism] necessarily would require examination of not only how terrorists could cause maximum damage but also of how they might best be thwarted.”¹⁷⁹ The NRC has recognized that keeping this kind of information secret is vital:

[T]he public interest would not be served by inquiries at NRC hearings and public meetings into where and how nuclear facilities are vulnerable, how they are protected and secured, and what consequences would ensue if security measures failed at a particular facility. Such NEPA reviews may well have the perverse effect of assisting terrorists seeking effective means to cause a release of radioactivity with potential health and safety consequences.¹⁸⁰

The AEC, predecessor to the NRC, rejected the requirement that the regulatory hearing process consider the possibility of attack on a plant by the country’s Cold War enemies.¹⁸¹ Without an order from Congress or a

¹⁷⁵ 42 U.S.C. § 2011 (2006) (declaring the policy of the AEA to protect public health, safety, and common defense and security); *see also* *Private Fuel Storage, L.L.C.*, 56 N.R.C. 340, 354 (2002).

¹⁷⁶ *Private Fuel Storage*, 56 N.R.C. at 354.

¹⁷⁷ 40 C.F.R. § 1502.19 (2011).

¹⁷⁸ *See* 42 U.S.C. § 4331(b)(3) (2006).

¹⁷⁹ *Petition for a Writ of Certiorari* at 29, *Pac. Gas & Elec. Co. v. San Luis Obispo Mothers for Peace*, 549 U.S. 1166 (2007) (No. 06-466), 2006 WL 2826275.

¹⁸⁰ *Private Fuel Storage*, 56 N.R.C. at 354–55.

¹⁸¹ *Siegel v. Atomic Energy Comm’n*, 400 F.2d 778, 780–84 (D.C. Cir. 1968) (limiting the participation of an intervener to the licensing proceedings of a nuclear power plant based on fears that it would become a target for attacks by hostile nations,

statement of congressional intent, the AEC refused to bring such issues into the scope of its licensing process,¹⁸² stating that “to impose such a burden would be to stifle utterly the peaceful utilization of atomic energy in the United States.”¹⁸³ NEPA is limited by its own language, which requires implementation only so far as it comports with “other essential considerations of national policy”¹⁸⁴ In this regard, the confidentiality of sensitive information is an “essential consideration of national policy,” as it protects against unintended risks to the public health and safety.”¹⁸⁵ Nowhere does NEPA permit elevating environmental concerns over other important considerations.¹⁸⁶

Not only would disclosure of terrorist considerations in an EIS fail to comply with the purpose of NEPA, but also such disclosure would contradict the safeguard requirements of the AEA.¹⁸⁷ The AEA provides strict guidance and regulations concerning the control of information related to the physical protection of plants and materials¹⁸⁸ for the purpose of protecting “the health and safety of the public and the common defense.”¹⁸⁹ Publication and distribution of information that might endanger the public would compromise the purpose of the AEA and raise NEPA’s environmental concerns above more critical concerns, in violation of Supreme Court precedent.¹⁹⁰

The *Weinberger* decision properly sets the standard for the appropriate scope of the EIS. *No GWEN* and *Mothers for Peace* interpreted *Weinberger* to mean that NEPA provides no national defense exception, and that particular sensitive elements of an EIS may only remain private if specifically exempted under FOIA.¹⁹¹ To some,

because the AEC was required to focus on industrial dangers present to employees and the neighboring public, and a plant’s security against treachery, negligence, or incapacity, not on attacks by a foreign enemy—a threat shared by the entire public, not only those near nuclear facilities).

¹⁸² *Id.* at 784 (“We are unable to find any specific indication, within or without the corners of the statute, that the Commission was commanded to intrude the possibility of an enemy action into the concepts of the common defense and security and the public health and safety.”) (internal quotations omitted).

¹⁸³ *Id.* at 783–84.

¹⁸⁴ 42 U.S.C. § 4331(b) (2006).

¹⁸⁵ *See Private Fuel Storage*, 56 N.R.C. at 355.

¹⁸⁶ *Strykers’ Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227 (1980).

¹⁸⁷ *See* 42 U.S.C. § 2167(a) (2006).

¹⁸⁸ 10 C.F.R. §§ 73.21, 73.22 (2011).

¹⁸⁹ 42 U.S.C. § 2167(a) (2006).

¹⁹⁰ *Strykers’ Bay Neighborhood Council*, 444 U.S. at 227.

¹⁹¹ *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm’n*, 449 F.3d 1016, 1035 (9th Cir. 2006) (interpreting *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 144–45, which addressed two particular exemptions: express statutory exemption and classification by executive order, and allowing parts of an EIS that fall under these exemptions to be withheld from publication); *No GWEN*

Weinberger may provide the ideal compromise: conduct an extensive review of the potential environmental impacts of terrorism, but keep that portion of the EIS confidential. But this compromise fails to satisfy the twin aims of NEPA: to require the government to fully contemplate environmental effects and to assure the public that the government has complied with its administrative requirements. Though an exemption from FOIA disclosure would still permit development of the EIS behind closed doors, it would fail a NEPA goal of informing the public that adequate review has occurred, because the public would have no access to confidential information conveyed during a closed hearing.¹⁹² NEPA is a dialogue between the government and the public that does not occur if the government prohibits the public from accessing the information necessary to participate in this dialogue.

D. A Terrorism Assessment Requirement Would Establish an Unattainable Standard

Requiring a NEPA terrorism analysis would have two obvious effects: (1) it would expand the NRC's NEPA review to a field in which its actions do not precipitate the environmental effect, and (2) it would effectively remove any limit on the scope of considerations which an agency must contemplate as "environmental impacts."

The NRC is the wrong agency to address the terror issue. Power plants must follow safety and security procedures,¹⁹³ just as they must consider environmental impacts.¹⁹⁴ Plant safety and security efforts protect against any threat, regardless of whether the threat is labeled "terrorism." Likewise, the EIS addresses all likely and probable environmental impacts of a federal action regardless of any intervening or superseding incident. A discussion of terrorism in an EIS would serve

Alliance of Lane County, Inc. v. Aldridge, 855 F.2d 1380, 1384 (9th Cir. 1988). See also STEPHEN DYCUS, NATIONAL DEFENSE AND THE ENVIRONMENT 24–25 (1996) ("Congress was well aware, when it enacted NEPA, that some [EISs] would contain classified information, and that the public dissemination of that information might endanger the national security. It addressed that concern by directing that each EIS . . . be made available to the public 'as provided by [FOIA], which makes . . . records available to members of the public for the asking, but which exempts properly classified data from disclosure.'").

¹⁹² 40 C.F.R. § 1507.3(c) (2011) (permitting agencies to safeguard information from the public that has been classified by Executive Order by organizing the classified information as appendices to the EIS). Indeed, the Ninth Circuit, hearing *Mothers for Peace* on remand, agreed that the NRC is not required to hold a closed hearing and held that the Commission may rightly use its discretion to determine whether holding a closed hearing would present unnecessary security risks. *San Louis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n*, 635 F.3d 1109, 1115 (9th Cir. 2011).

¹⁹³ 10 C.F.R. pt. 73 (2011).

¹⁹⁴ 10 C.F.R. pt. 51 (2011).

no purpose because the NRC can do nothing outside of its own local security measures to prevent terrorist acts.¹⁹⁵ Additionally, because the environmental effects that would result from a major accident (including a terrorist attack) are already part of the EIS, specific consideration of these effects when precipitated by a terrorist act would add nothing new to the environmental discussion.

To streamline the review process and use resources efficiently, “[a]gencies are encouraged to tier their environmental impact statements to eliminate repetitive discussion of the same issues and to focus on the actual issues ripe for discussion at each level of environmental review.”¹⁹⁶ The NRC already requires consideration of the release of radioactive material into the environment.¹⁹⁷ Though the law does not require a “worst case” analysis, this consideration represents, in effect, the worst possible case.¹⁹⁸ Consideration of the release of radioactive material as a result of an airplane crash would be superfluous. The Second Circuit illustrated this premise in a 2009 decision, holding that an EIS that considered the risk of fire at a spent-fuel pool inherently contemplated acts of terrorism.¹⁹⁹ An additional, terrorism-specific requirement would be unnecessarily redundant and a waste of limited agency resources.

The requirement that an EIS contemplate the impacts of terrorism would remove the boundary between proximate effects of a federal action and those effects too attenuated to be properly attributed to that action, due to the ambiguity of the term “terrorism.” Absent *Metropolitan Edison’s* “manageable line,” the scope of the NRC’s NEPA process is virtually limitless, “subject only to the ingenuity of those claiming that the agency must evaluate this or that potential adverse

¹⁹⁵ See *Riverkeeper Inc. v. Collins*, 359 F.3d 156, 161 (2d Cir. 2004); *Glass Packaging v. Regan*, 737 F.2d 1083, 1091–92 (D.C. Cir. 1984).

¹⁹⁶ 40 C.F.R. § 1502.20 (2011). EISs are prepared in two stages. First, the implementing agency prepares a Draft EIS, which it circulates to other federal agencies that have jurisdiction or that request to comment, states, Indian tribes, and any interested private parties. 40 C.F.R. § 1503.1. The implementing agency must then address the issues raised by these parties in the Final EIS. 40 C.F.R. § 1502.9. A Supplemental EIS may be required when the agency changes the action, new circumstances or information arise, or the purpose of NEPA will be facilitated by doing so. *Id.*

¹⁹⁷ 10 C.F.R. pt. 51, subpt. A, app. B (2011).

¹⁹⁸ *Private Fuel Storage, L.L.C.*, 56 N.R.C. 340, 351 (2002); RICHARD RHODES, *NUCLEAR RENEWAL: COMMON SENSE ABOUT ENERGY* 92 (1993) (“Three Mile Island and Chernobyl represent extreme instances of the problem that seems to trouble the American public more than any other about commercial nuclear power: its apparent danger.”).

¹⁹⁹ *New York v. U.S. Nuclear Regulatory Comm’n*, 589 F.3d 551, 554, n.1 (2d Cir. 2009) (stating that the studies on the risk of fires “(including those conducted since September 2001) consider the risk of fire precipitated by a terrorist attack, and classify that risk as low.”).

effect, no matter how indirect its connection to agency action.”²⁰⁰ No governmental body can ever completely and properly contemplate the entire breadth of a factor as vague as terrorism, which has so many varying definitions and manifestations.²⁰¹ As more threats are perceived, the requirement to evaluate the risk and impact of terrorism will grow larger. Subsequently, the terrorism review will evolve from an analysis of reasonably foreseeable impacts into an analysis of imaginable risks and hypothetical effects. *Metropolitan Edison* and *Weinberger* expressly proscribe such analyses.²⁰²

E. Possible Compromises

Neither NEPA nor the AEA require or provide an effective legal mechanism for a terrorism review that would serve the purposes of either act. The lack of a requirement to consider the threat of terrorism does not necessarily mean that the NRC should do nothing with respect to the effect of a terrorist act. Unless the Supreme Court resolves the question of whether and how NEPA review is to address terrorism, there are several possibilities that Congress or the NRC might consider in order to bring the Ninth Circuit and the rest of the country under a common rule of law.

1. Revive “Worst Case” Scenario Analysis

As an option for addressing terrorism, the NRC could consider reviving a modified “worst case” scenario analysis. In 1986, the CEQ removed the requirement that plants consider a “worst case” scenario from its regulations because “in certain circumstances [it had] been the impetus for judicial decisions which require federal agencies to go beyond the ‘rule of reason’ in their analysis of potentially severe impacts.”²⁰³ The CEQ replaced it with the current rule, which requires an evaluation of reasonably foreseeable impacts based on relevant scientific evidence and within the rule of reason.²⁰⁴ The NRC does not perceive a terrorist attack as falling within the rule of reason. Thus, no

²⁰⁰ *Private Fuel Storage*, 56 N.R.C. at 350.

²⁰¹ See e.g., Nicolas J. Perry, *The Numerous Federal Legal Definitions of Terrorism: The Problem of Too Many Grails*, 30 J. LEGIS. 249, 255 (2004) (stating that federal law provides at least nineteen distinct definitions of the term “terrorism”).

²⁰² *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774–76 (1983); *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 140 (1981).

²⁰³ 50 Fed. Reg. 32,234 (proposed Aug. 9, 1985) (to be codified at 40 C.F.R. § 1502.22).

²⁰⁴ National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618 (Apr. 15, 1986) (codified at 40 C.F.R. § 1502.22).

requirement to address the possible environmental impact of terrorism within an EIS exists.²⁰⁵

Despite this rule, a limited revival of “worst case” analysis—based on the actual effects of recent terrorist attacks—might appease both sides. An outside party, such as Homeland Security or Congress, could identify from time to time the current worst case threat to nuclear facilities.²⁰⁶ Based on this independent determination, the NRC would then require all new licenses going forward, and perhaps even current licensed facilities, to analyze the impact on the environment if that possibility were to occur. This option could also solve, or at least mitigate, the problems arising due to the many definitions and forms of terrorism.²⁰⁷ The requirement to analyze the environmental impact of a pre-determined worst case would free the NRC from the burden of trying to account for an issue as ambiguous as terrorism as well as from the shortcomings of analyzing only one specific type of terrorism. Establishing a worst case scenario that would logically encompass other events of lesser magnitude would serve as a reasonable compromise of these two extremes.

2. Entrust the Issue of Terrorism Exclusively to Homeland Security

Another problem with an NRC-based terrorism review is the NRC’s lack of legal authority to combat threats to its facilities beyond those facilities’ physical boundaries. Numerous actions can potentially affect nuclear facilities; however, statutes other than NEPA govern these actions. Merely building a structure that might appeal to a terrorist as a target does not itself create an environmental effect. NRC safety and security regulations specifically provide for measures of protection around facilities, including the number of armed guards and their weapons training, vehicle stand-off distances, construction of physical barriers, etc.²⁰⁸ Though the regulations do not require that the structures be able to withstand sabotage or attacks by enemies of the United States,²⁰⁹ a recently created rule requires power plants to take every step

²⁰⁵ See 40 C.F.R. § 1502.22(b) (2011). The exception to this rule, of course, is that those nuclear plants in the Ninth Circuit are under the obligation to address terrorism.

²⁰⁶ Cf., *Threat Assessment*, U.S. NUCLEAR REGULATORY COMM’N, <http://www.nrc.gov/security/domestic/phys-protect/threat.html#Annual> (last visited Oct. 27, 2010).

²⁰⁷ Perry, *supra* note 201.

²⁰⁸ See NRC Physical Protection Requirements at Fixed Sites, 10 C.F.R. §§ 73.40–73.56 (2011); General Requirements for Security Personnel, 10 C.F.R. pt. 73 app. B (2011).

²⁰⁹ 10 C.F.R. § 52.10 (2011); Power Reactor Safety Requirements, 74 Fed. Reg. 13,926, 13,957 (codified at 10 C.F.R. pt. 73 and 10 C.F.R. pt. 50) (Mar. 27, 2009) (“The

practicable to avoid or mitigate the effect of an aircraft impact.²¹⁰ Preparing for a factor as a design-based threat, however, does not give the NRC the authority or ability to prevent the attack itself—that power must come from the law.²¹¹

The NRC’s responsibilities arising from its AEA mandate are distinct from what it must contemplate as a “significant environmental impact” under NEPA. The power and responsibility to prevent, protect, and mitigate the effects of terrorism belong to other federal agencies.²¹² The Department of Homeland Security is not only charged with protecting the United States and responding to terrorist attacks, but it also possesses the legal authority to take action to prevent terrorist acts from occurring.²¹³ Under the proximate causation standard described in *Metropolitan Edison*, and *Public Citizen*’s rule that an EIS need not address effects which lie beyond the agency’s control,²¹⁴ the issue of terrorism falls decidedly outside the purview of the NRC, and more appropriately, within that of Homeland Security. Charging the NRC with the duty of a thorough terrorism review would not only give it a task outside its delegated authority and practical ability, but also would encroach on the duties legally charged to Homeland Security and other agencies.

3. Institute a Homeland Security Impact Statement

Just as NEPA requires federal agencies to consider the effects of their actions on the human environment and assure the public that all significant environmental impacts have been considered,²¹⁵ a similar

impact of a large aircraft on [a] nuclear power plant is regarded as a beyond-design basis event.”).

²¹⁰ Power Reactor Safety Requirements, 74 Fed. Reg. 13,926 (Mar. 27, 2009) (codified at 10 C.F.R. pt. 73 and 10 C.F.R. pt. 50) (amending the requirements for nuclear plant protection against design-based threats, including the effect of an airliner impact and requirements for post-impact emergency response; also stating that the NRC’s aircraft impact rule and the aircraft threat mitigation procedures focus on enhancing a plant’s ability to withstand commercial aircraft impacts and that the plant operator will be prepared to combat the fires caused by such an impact); *see also Reactor Rule Made with 9/11 in Mind*, THE WASHINGTON POST, Feb. 18, 2009, at A05.

²¹¹ *See e.g.*, Homeland Security Act, 6 U.S.C. § 111 (2006) (expressly establishing the primary mission of the Department of Homeland Security, which includes “prevent[ing] terrorist attacks within the United States.”).

²¹² *See id.*

²¹³ 6 U.S.C. § 111(b)(1)(C) (2006).

²¹⁴ *Dep’t of Transp. v. Public Citizen*, 541 U.S. 752, 763 (2004); *Riverkeeper Inc v. Collins*, 359 F.3d 156, 169–70 (2d Cir. 2004); 40 C.F.R. § 1508.18 (2011).

²¹⁵ *Weinberger v Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 143 (1981); *Vt. Yankee Nuclear Power Corp. v. Natural Resources Def. Council*, 435 U.S. 519, 553 (1978).

requirement that agencies consider the effect of their actions on national security—taking the form of a Homeland Security Impact Statement (“HSIS”)—may be in order.²¹⁶ Even though the consideration of a terrorist attack on a power plant would not discuss any environmental effect that an EIS does not already contemplate,²¹⁷ the public has a valid interest in the potentially harmful effects that a nuclear plant could cause to the security of the nation. Though Congress and the implementing agency would determine the specific requirements of an HSIS, the HSIS would theoretically follow a similar procedural formula as an EIS. For any major federal action, the implementing agency—or Homeland Security—would determine whether the action, if completed, poses a risk to national security. The HSIS would examine these risks and advise the agency and the government on subsequent steps.

Differences between an EIS and the proposed HSIS will likely arise. Unlike NEPA, Homeland Security does not have a public disclosure requirement, so it could—and likely would—classify the HSIS in order to prevent the dissemination of sensitive information. The HSIS would inform the government, not the public, that the government has properly considered the terror threat. This non-public process would force the agency to take a “hard look” at the consequences of its actions while confining sensitive matters of national security to the appropriate forum. Such a process would also serve the first aim of NEPA (ensuring thorough agency review) and may serve the second (public assurance of thorough agency deliberation) through disclosure to a congressional committee or an independent government body with security clearance.

An HSIS, like an EIS, would not discuss the possible effect of terrorism on the environment. The NRC would retain its duty to contemplate the environmental impact of its nuclear facilities. The terror-prevention duty would clearly vest in another federal agency, freeing the NRC of any burden to review potential terror threats and contemplate a multitude of conduct-specific impacts. The duty to evaluate the wide range of reasonably foreseeable environmental impacts, regardless of their independent causes, would therefore remain.

²¹⁶ See Michael S. Munson, Comment, *Averting Nuclear 9/11: The Need to Move Beyond NEPA and Transition to a Homeland Security-Administered Infrastructure Security Statement*, 35 WM. & MARY ENVTL. L. & POL’Y REV. 335, 364–66 (2010) (advocating a nuclear plant security regime managed by the Department of Homeland Security); Joseph Farris, Comment, *Mothers for Peace and the Need to Develop Classified NEPA Procedures*, 34 ECOLOGY L.Q. 955, 973–74 (2007) (proposing a NEPA terrorism review through *in camera* judicial proceedings with a congressional committee serving as a proxy for the public).

²¹⁷ N.J. Dep’t of Env’tl. Prot. v. U.S. Nuclear Regulatory Comm’n., 561 F.3d 132, 143; 10 C.F.R. pt. 51, subpt. A, app. B (2011).

4. Broaden the NRC's Authority and Obligations

A final option, independent of “worst case” analysis or the HSIS, relates to *Public Citizen's* rule that an EIS need not consider effects which lie outside an agency's control.²¹⁸ The NRC does not contemplate terrorism because it lacks the power to prevent certain large-scale acts that occur beyond its own premises. Although the NRC is authorized and equipped to protect the immediate area of its facilities,²¹⁹ it relies on the Department of Defense and the Federal Aviation Administration to protect the airspace surrounding these facilities.²²⁰ To some, a radar tower, no-fly zone, and missile battery may represent reasonable safeguards that a nuclear facility should employ to protect itself. Such efforts, however, would exceed the line between the permissible use of force to stop a criminal act and the excessive use of force to regulate and intrude upon civilian life far beyond the boundaries of the plant.²²¹

Without the ability to prevent or influence a cause that would produce a certain environmental effect, that effect cannot be considered an impact of the construction, licensing, and operation of a power plant. An extension of the NRC's authority—to permit it to protect the airspace surrounding its facilities—could subsequently bring the environmental effect of terrorist actions into the purview of the NRC. Such an extension of authority, however, could also transform the NRC into a paramilitary force. As the law reads today, the extent of the NRC's regulatory power does not reach so far; the environmental impacts of terrorist attacks fall outside the NRC's reach.

IV. CONCLUSION

Until this problem is resolved, the Ninth Circuit will continue to impose its distinct requirement that EIS statements contain provisions for the environmental effects of terrorism upon nuclear generating stations and fuel storage facilities within its jurisdiction. Such a regime will allow a handful of special interest groups to thwart the efforts of the NRC, the CEQ, and Congress to provide peaceful and prosperous uses of nuclear energy. The Supreme Court has the ability to resolve this split, and should do so by affirming the Third Circuit's ruling in *New Jersey Department of Environmental Protection*.

²¹⁸ See *supra* note 214 and accompanying text.

²¹⁹ See sources cited *supra* note 172.

²²⁰ See *Riverkeeper, Inc. v. Collins*, 359 F.3d 156, 169 (2d Cir. 2004) (denying *Riverkeeper, Inc.*'s petition to establish a no-fly zone around the Indian Point nuclear plant near New York City and a security system capable of defending that zone).

²²¹ *Id.*

Barring intervention by the Supreme Court, Congress has the ability to closely consider the public interest and implement a variety of mechanisms to address this issue. First, a limited revival of “worst case” analysis could provide a vehicle for a terrorism review. Second, Congress could free the NRC of this burden by entrusting terrorism analysis exclusively to Homeland Security. Third, Congress could require the agencies or Homeland Security to publish a Homeland Security Impact Statement. Finally, Congress could broaden the scope of the NRC’s defensive capabilities and jurisdiction, and expressly charge it with the duty to evaluate the threat of terrorism. Until either Congress or the Supreme Court acts, the NRC will continue to enforce its statutory duty as per its discretion in a manner best serving the nation, while the Ninth Circuit exposes its energy industry to ambiguous and unattainable disclosure demands, and its citizens to unnecessary threats.