

# The Limits of NEPA: Consideration of the Impacts of Terrorism in Environmental Impact Statements for Nuclear Facilities

Ben Schiffman\*

Introduction .....	373
I. The National Environmental Policy Act and Causality.....	376
A. The National Environmental Policy Act.....	376
B. Effects Considered in an Environmental Impact Statement.....	380
1. <i>Metropolitan Edison Co. v. People Against Nuclear Energy</i> .....	382
2. <i>No GWEN Alliance of Lane County, Inc. v. Aldridge</i> .....	383
3. <i>Department of Transportation v. Public Citizen</i> .....	384
II. The Circuit Split Regarding Evaluation of Terrorism Impacts .....	387
A. <i>San Luis Obispo Mothers for Peace v. NRC</i> .....	387
B. <i>New Jersey Department of Environmental Protection v. NRC</i> .....	389
III. Potential Impacts of Terrorism Should be Included in EISs .....	393
A. <i>Metropolitan Edison's Test Is Not Appropriate for This Scenario</i> .....	393
B. <i>Metropolitan Edison Requires Consideration of Terrorism</i> .....	397
C. Inclusion of Terrorist Risks is Consistent with NEPA's Intent and Policy Goals.....	400
D. Public Policy, "Little NEPAs," and NRC Consistency .....	402
IV. Conclusion.....	404

## INTRODUCTION

As Mohamed Atta—the hijacker piloting the first plane to strike the World Trade Center—flew over the New York area on a familiarization flight, he noticed a nuclear power plant. Atta and the other hijackers discussed attacking this plant, a target they referred to as “electrical engineering.”<sup>1</sup> However, because Osama

\*J.D. Candidate 2011, Columbia Law School; Winner, 2010 Columbia Journal of Environmental Law Notes Competition. The Author would like to thank Professor Michael Gerrard for helpful feedback, and Katherine Regan, Kelly Cataldo, and the members of the Columbia Journal of Environmental Law for their comments and editorial work.

1. NAT'L COMM'N ON TERRORIST ATTACKS UPON THE U.S., THE 9/11 COMM'N REPORT: FINAL REPORT OF THE NAT'L COMM'N ON TERRORIST ATTACKS UPON THE UNITED STATES 245 (2007), available at <http://www.gpoaccess.gov/911/index.html>.

bin Laden and other senior Al Qaeda leaders had not approved the idea, Atta and the other hijackers targeted the World Trade Center, Pentagon, and White House instead.<sup>2</sup>

Existing nuclear power plants were designed to withstand natural disasters, such as earthquakes, but not deliberate attacks such as those that took place on September 11, 2001.<sup>3</sup> Such an aircraft strike on a nuclear plant could cause a core meltdown, releasing hundreds of times the radioactivity of the Hiroshima and Nagasaki atomic bombs.<sup>4</sup> Even if it did not affect the reactor, the effects of an attack on only the fuel stored at a plant could be “catastrophic.”<sup>5</sup> Even a smaller-scale attack, such as one using a truck bomb, could inflict severe damage.<sup>6</sup> An attack on a facility near a major metropolitan area, such as the Indian Point reactor near New York City, could result in massive environmental devastation as well as up to 44,000 near-term deaths and as many as 518,000 long-term deaths.<sup>7</sup>

2. *Id.* Other groups have also planned attacks on nuclear facilities. *See, e.g.*, United States v. Yousef, 327 F.3d 56, 120 (2d Cir. 2003) (quoting (in translation) a letter found on a laptop belonging to Ramzi Yousef, one of the planners of the 1993 World Trade Center bombing, which claimed that “[s]ome of our operations will include attacks against American nuclear targets”).

3. U.S. Nuclear Regulatory Comm’n, *NRC Reacts To Terrorist Attacks*, NRC NEWS, Sept. 21, 2001, <http://www.nrc.gov/reading-rm/doc-collections/news/2001/01-112.html> (“[T]he NRC did not specifically contemplate attacks by aircraft such as Boeing 757s or 767s and nuclear power plants were not designed to withstand such crashes.”); *see* MARK HOLT & ANTHONY ANDREWS, CONGRESSIONAL RESEARCH SERVICE, *NUCLEAR POWER PLANT SECURITY AND VULNERABILITIES* (2009); *see also* Matthew L. Wald, *Agency Considers A-Plants’ Vulnerability*, N.Y. TIMES, Nov. 9, 2006, at A28.

4. GRAHAM T. ALLISON, *NUCLEAR TERRORISM: THE ULTIMATE PREVENTABLE CATASTROPHE* 6–8 (2004); *see also* TILMAN RUFF, ENERGYSCIENCE.ORG.AU, *NUCLEAR TERRORISM* 4–6 (2006), *available at* <http://www.energyscience.org.au/FS10%20Nuclear%20Terrorism.pdf>. *See generally* UNION OF CONCERNED SCIENTISTS, *ON THE AERIAL THREAT TO NUCLEAR POWER PLANTS* (2003), *available at* [http://www.ucsusa.org/assets/documents/nuclear\\_power/20030408-ucs-aircraft-hazard-analysis.pdf](http://www.ucsusa.org/assets/documents/nuclear_power/20030408-ucs-aircraft-hazard-analysis.pdf).

5. NUCLEAR REGULATORY COMM’N, *TECHNICAL STUDY OF SPENT FUEL POOL ACCIDENT RISK AT DECOMMISSIONING NUCLEAR POWER PLANTS* 3–23 (2001); *see also* NAT’L ACAD. OF SCIENTISTS, *SAFETY AND SECURITY OF COMMERCIAL SPENT NUCLEAR FUEL STORAGE* (2006) (assessing the security risks of spent nuclear fuel stored in cooling pools and dry casks at nuclear power plants and finding that terrorist attacks on spent fuel pools are possible and could result in a release of large amounts of radioactive material).

6. *Protection Against Malevolent Use of Vehicles at Nuclear Power Plants*, 59 Fed. Reg. 38,889, 38,891 (Aug. 1, 1994) (to be codified at 10 C.F.R. pt. 73) (stating that truck bombs’ “contribution to [nuclear] core damage frequency could be high.”).

7. EDWIN S. LYMAN, UNION OF CONCERNED SCIENTISTS, *CHERNOBYL ON THE HUDSON? THE HEALTH AND ECONOMIC IMPACTS OF A TERRORIST ATTACK AT THE INDIAN POINT NUCLEAR PLANT* 4 (2004), *available at* [http://www.ucsusa.org/assets/documents/nuclear\\_power/indianpointhealthstudy.pdf](http://www.ucsusa.org/assets/documents/nuclear_power/indianpointhealthstudy.pdf).

Despite these and other concerns, there has been a recent resurgence of interest in and government support for nuclear power, including the proposed construction of the first new reactors in America since the 1970s.<sup>8</sup> This new push has faced criticism, however, and there is little doubt that plant relicensing and new-plant construction will continue to face legal challenges.<sup>9</sup>

It is likely that legal challenges to these plants will arise under the National Environmental Policy Act (“NEPA”).<sup>10</sup> NEPA requires preparation of an Environmental Impact Statement (“EIS”) discussing the “reasonably foreseeable” environmental impacts<sup>11</sup> of “major federal actions significantly affecting the quality of the human environment.”<sup>12</sup> The Nuclear Regulatory Commission (“NRC”) prepares EISs for the relicensing and construction of nuclear facilities.<sup>13</sup> Despite the well documented potential of a terrorist attack on these facilities, the NRC has declined to consider the effects of such an attack when preparing EISs.<sup>14</sup> Further, courts have not provided consistent guidance and circuits are split as to whether such analysis is required.<sup>15</sup>

8. Matthew L. Wald, *U.S. Supports New Nuclear Reactors in Georgia*, N.Y. TIMES, Feb. 16, 2010, at B1. See generally Matthew L. Wald, *Obama Acts to Ease Way to Construct Reactors*, N.Y. TIMES, Jan. 29, 2010, at A13; *Unexpected Reaction*, ECONOMIST, Feb. 4, 2010 (“The president pledged to build a ‘new generation of safe, clean nuclear power plants.’ On February 1st he followed that up in his proposed budget for 2011 by tripling to \$54 billion the value of loans for new nuclear plants the government is offering to guarantee.”).

9. See, e.g., *Anti-Nuclear Activists Mobilize to Oppose Obama-Funded Construction of Georgia Nuke Plants* (Democracy Now! broadcast Feb. 24, 2010), available at [http://www.democracynow.org/2010/2/24/anti\\_nuclear\\_activists\\_mobilize\\_to\\_oppose](http://www.democracynow.org/2010/2/24/anti_nuclear_activists_mobilize_to_oppose).

10. NEPA has historically been a means of challenging nuclear facilities and is still used for such challenges today: six of the fourteen currently open cases before the NRC deal with NEPA. See NUCLEAR REGULATORY COMM’N, LITIGATION STATUS REPORT (2010) (summarizing active cases in which the NRA is a party as of Jan. 29, 2010), available at <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2010/secy2010-0012/enclosure.pdf>.

11. 40 C.F.R. § 1508.8 (2009). A “reasonably foreseeable” impact is usually defined as one that is sufficiently likely to occur so that a person of ordinary prudence would take it into account when reaching a decision. See *Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996), cert. denied, 521 U.S. 1119 (1997) (defining “reasonably foreseeable” impact).

12. 42 U.S.C. § 4332(C) (2009).

13. 10 C.F.R. § 51.20–51.97 (2010).

14. See, e.g., *In re Private Fuel Storage L.L.C.*, 56 N.R.C. 340, 348 (2002). Compare *In re GE-Hitachi Global Laser Enrichment L.L.C. (GLE Commercial Facility)*, 75 Fed. Reg. 1819, 1828 (Jan. 13, 2010) (Jaczko, Chairman, writing separately) (stating that the NRC should address terrorist impacts under NEPA in all circuits).

15. See discussion *infra* Part II. Compare *N.J. Dep’t of Env’tl. Prot. v. U.S. NRC*, 561 F.3d 132, 139–40 (3d Cir. 2009) (holding that the causal chain linking an aircraft terrorist attack to a nuclear plant is too attenuated to require considerations of these effects in an EIS) with *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1031 (9th Cir. 2006) (holding

In licensing a nuclear facility, does the NRC “cause” the environmental damage that could result from a terrorist attack on the facility? An affirmative conclusion defies intuition but invites another query: in the wake of September 11th, are terrorist attacks so unforeseeable that the NRC should categorically exclude them from an evaluation of reasonably foreseeable environmental impacts?

This Note argues that under NEPA, the environmental impacts of a terrorist attack on a nuclear power plant are not too attenuated from federal action and must be considered in an EIS. In Part I, this Note discusses the background and history of NEPA, and how courts have interpreted NEPA’s causality requirement. In Part II, this Note examines the recent circuit split in detail. In Part III, this Note argues that the best reading of NEPA requires inclusion of the possible effects of a terrorist attack in an EIS, and concludes that this outcome is consistent with legal precedent, NEPA’s intent, and public policy considerations.

## I. THE NATIONAL ENVIRONMENTAL POLICY ACT AND CAUSALITY

### A. The National Environmental Policy Act

NEPA was signed into law on January 1, 1970 and is viewed as the inception of the “environmental decade,” during which many of America’s environmental laws were passed.<sup>16</sup> NEPA establishes a “national policy [to] encourage productive and enjoyable harmony between man and his environment.”<sup>17</sup> NEPA does not require substantive results to further these ends; rather, it imposes procedural requirements on federal agencies.<sup>18</sup> In conducting a

that the NRC acted unreasonably when, in an EIS, it categorically refused to consider environmental effects of a terrorist attack on a spent fuel storage facility).

16. See generally *The Environmental Decade, Action Proposals for the 1970's: Hearings Before a Subcomm. of the Comm. on Gov't Operations*, 91st Cong. (1970); LETTIE M. WENNER, *THE ENVIRONMENTAL DECADE IN COURT* (1983).

17. National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (2006).

18. See *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978) (“[NEPA’s] mandate to the agencies is essentially procedural.”); *Strycker’s Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227 (1980) (NEPA establishes “significant substantive goals for the Nation,” but it “imposes upon agencies duties that are ‘essentially procedural’” (quoting *Vt. Yankee*, 435 U.S. at 558)). Though the view that NEPA has substantive requirements has been rejected by courts, scholars have argued that NEPA could—and should—be interpreted to impose such requirements. See, e.g., Philip Weinberg, *It’s Time to Put NEPA Back on Course*, 3 N.Y.U. ENVTL. L.J. 99, 110 (1994); Harvey Bartlett, Comment, *Is NEPA Substantive Review Extinct, or Merely Hibernating? Resurrecting NEPA Section 102(1)*, 13 TUL. ENVTL. L.J. 411, 414

NEPA-mandated environmental review, the agency proposing action must take a “hard look” at the proposed action, its alternatives, and its environmental impacts.<sup>19</sup> But NEPA “does not mandate particular results”; it only requires agencies to follow proper processes.<sup>20</sup> Thus, after properly identifying environmental impacts under NEPA, agencies are free to proceed with the project regardless of its environmental impact. “NEPA merely prohibits uninformed—rather than unwise—agency action.”<sup>21</sup> The lack of substantive requirements does not mean, however, that NEPA has had no meaningful effect on environmental outcomes. The considerations of alternatives and mitigation measures, as well as the publicity generated through the NEPA process and procedural requirements, have led to many environmentally beneficial outcomes.<sup>22</sup>

NEPA’s procedural requirements stem primarily from the “environmental review” mandate found in 42 U.S.C. § 4332(2) (2006). This section mandates that “for proposals for legislation and other major Federal actions significantly affecting the quality of the human environment,” federal agencies must prepare a detailed environmental review discussing:

- (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.<sup>23</sup>

To satisfy these requirements, Council on Environmental Quality (“CEQ”) regulations direct agencies to determine whether their

(2000).

19. *NRDC v. Morton*, 458 F.2d 827, 838 (D.C. Cir. 1972).

20. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

21. *Id.* at 351.

22. See, e.g., *Hearing Before the Task Force on Updating the National Environmental Policy Act of the H. Comm. on Resources*, 109th Cong. 11–13 (2005) [hereinafter *Hearing Before the Task Force*] (statement of Robert G. Dreher, Professor, Georgetown University Law Center), available at <http://scholarship.law.georgetown.edu/cong/103/>; COUNCIL ON ENVTL. QUALITY, THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY-FIVE YEARS 17–20 (1997), available at <http://ceq.hss.doe.gov/nepa/nepa25fn.pdf>. But see Joseph L. Sax, *The (Unhappy) Truth About NEPA*, 26 OKLA. L. REV. 239 (1973) (arguing that NEPA had no observed effect); Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government’s Environmental Performance*, 102 COLUM. L. REV. 903, 905 (2002) (“From the critics’ vantage point, NEPA appears to demand burdensome procedural formalities while accomplishing little or nothing of substance.”).

23. National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C) (2006).

proposed action falls into one of two categories: (1) the type that normally requires an EIS or (2) the type that does not normally require an environmental assessment (“EA”) or EIS.<sup>24</sup> Actions that do not normally require an environmental review can be categorically excluded from the EIS requirement.<sup>25</sup> These categorical exclusions (“CEs”) are a subset of agency actions—established by the agency’s procedures for implementing NEPA—that do not significantly affect the human environment.<sup>26</sup> Examples include landscaping or pavement marking.<sup>27</sup> A CE is concluded once the agency finds that there are no extraordinary circumstances meriting further environmental review and that the agency’s procedures list the proposed action in the category of excluded actions.<sup>28</sup> Because there is no significant effect, no further analysis under NEPA is required.<sup>29</sup> Though a CE represents a determination that further environmental review is not necessary, this determination still must be documented, must not be made after a project has begun, and can be challenged.<sup>30</sup>

Even if an agency action has not been categorically excluded, it may still not require an EIS if it will not have a significant effect on the environment. If any agency is not certain whether its action will have a major effect on the environment, then it can conduct an EA.<sup>31</sup> EAs are conducted to determine whether a finding of no significant impact (“FONSI”) is appropriate or if instead a significant environmental impact exists and therefore a more

24. 40 C.F.R. § 1501.4(a) (2009). For a helpful overview of the NEPA process, see COUNCIL ON ENVTL. QUALITY, EXECUTIVE OFFICE OF THE PRESIDENT, A CITIZEN’S GUIDE TO THE NEPA 10 (2007), available at [http://ceq.hss.doe.gov/nepa/Citizens\\_Guide\\_Dec07.pdf](http://ceq.hss.doe.gov/nepa/Citizens_Guide_Dec07.pdf).

25. 40 C.F.R. § 1501.4(a) (2009). See also 23 C.F.R. § 771.117 (2009); West v. Sec’y of Dep’t of Transp., 206 F.3d 920, 927–30 (9th Cir. 2000) (discussing CE process generally).

26. 40 C.F.R. § 1508.4 (2009).

27. The examples are drawn from the Federal Highway Administration’s NEPA implementation regulations; for more examples, see 23 C.F.R. § 771.117(c) (2009).

28. 40 C.F.R. § 1501.4(a) (2009).

29. 40 C.F.R. § 1508.4 (2009).

30. See *Wilderness Watch v. Mainella*, 375 F.3d 1085, 1094–95 (11th Cir. 2004) (finding that NEPA was violated where the record indicated that U.S. National Park Service invoked categorical exclusion only *after* decision to transport tourists by motor vehicle across wilderness area). For a criticism of the CE process, see Kevin H. Moriarty, *Circumventing the National Environmental Policy Act: Agency Abuse of the Categorical Exclusion*, 79 N.Y.U. L. REV. 2312 (2004).

31. NEPA does not explicitly provide for EAs; instead, the use of EAs has developed through regulation and case law, beginning shortly after NEPA was passed. See *Hanly v. Kleindienst*, 471 F.2d 823, 827–28 (2d Cir. 1972) (requiring preparation of an “Assessment of the Environmental Impact” in order to decide if the environmental impacts of a project warrant an EIS).

detailed review (an EIS) is needed.<sup>32</sup> EAs are intended to be concise, but are required to consider at a minimum the need for the project, the environmental impacts of the project and its alternatives, and a list of the agencies and persons consulted.<sup>33</sup> Only a brief discussion of alternatives is required.<sup>34</sup>

If a FONSI is inappropriate, then an EIS is required. An EIS is the most complete review of a major federal action that may significantly affect the environment required under NEPA.<sup>35</sup> An EIS must discuss a spectrum of proposed alternatives as well as the direct, indirect, and cumulative effects or impacts of each alternative.<sup>36</sup> Regulations and case law appropriately refer to the discussion of alternatives as the “heart of the environmental impact statement.”<sup>37</sup> Accordingly, it must be particularly thorough. In addition to alternatives, an EIS must discuss mitigation measures, though the agency can choose not to adopt them.<sup>38</sup> Satisfactory completion of these requirements is resource intensive: a final EIS can cost millions of dollars and may take years to produce.<sup>39</sup> In addition to informing agency action and forcing consideration of environmental impacts, the NEPA process facilitates and may also encourage public participation. Agencies must make draft versions of an EIS available for public comment before the final EIS is prepared.<sup>40</sup> Further, public hearings are required when there is substantial controversy regarding a project or if there is substantial interest in having a hearing.<sup>41</sup> Agencies and the environment have benefited from NGO and advocacy group comments that suggest novel mitigation strategies or alternatives to the project, or

32. 40 C.F.R. § 1508.9 (2009) (EAs “briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.”); *see, e.g.*, *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717–18 (9th Cir. 1988) (discussing sufficiency of an EA).

33. 40 C.F.R. § 1508.9 (2009).

34. *Id.*

35. *See* 40 C.F.R. § 1501.4 (2009).

36. 40 C.F.R. § 1502.14 (2009); 40 C.F.R. § 1508.8 (2009).

37. 40 C.F.R. § 1502.14 (2009) (The “Alternatives including the proposed action” section of the C.F.R. “is the heart of the environmental impact statement”).

38. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 333 (1989); 40 C.F.R. § 1508.25(b) (2009); *see, e.g.*, 40 C.F.R. § 1508.20 (2009) (listing mitigation measures).

39. *See, e.g.*, *Karkkainen*, *supra* note 22, at 905 (citing examples of expensive EISs and noting, “the typical EIS runs to hundreds of pages in length, and is costly and time consuming to produce.”).

40. *See* 40 C.F.R. § 1501.4(b) (2009); 40 C.F.R. § 1506.6(b) (2009).

41. 40 C.F.R. § 1506.6(c)(1) (2009).

generally inform the agency of previously unconsidered actions.<sup>42</sup> This process also serves to inform the public of agency action and its effect on the environment, in some cases leading to public opposition to environmentally damaging projects, which can indirectly reduce environmental impacts.<sup>43</sup>

## B. Effects Considered in an Environmental Impact Statement

When analyzing whether the effects of a proposed major federal action will significantly affect the quality of the human environment, an agency such as the NRC must make a determination about which effects to consider. A certain degree of speculation about an action's environmental effects is unavoidable; theoretically almost any effect could be considered "caused" by a federal action in the but-for sense of causality.<sup>44</sup> Courts have consistently found that there are limits, however, ruling that some effects are too far removed from the federal action at issue and need not be considered.<sup>45</sup> But courts have not consistently and clearly identified rules for which effects are too unforeseeable,

42. See *Hearing Before the Task Force*, *supra* note 22, at 11–13 (noting success); COUNCIL ON ENVIRONMENTAL QUALITY, *supra* note 22, at 17–20.

43. An illustrative example is the proposed Westway superhighway on the west side of Manhattan, which was abandoned after extensive NEPA-related litigation that exposed previously unknown environmental effects. See generally Daniel Ackman, *Highway to Nowhere: NEPA, Environmental Review and the Westway Case*, 21 COLUM. J.L. & SOC. PROBS. 325 (1988). NEPA's critics query whether the EIS process stops environmentally harmful projects or if instead NEPA is primarily used as a tool of delay or disruption regardless of its environmental effects. See Bradley C. Karkkainen, *Whither NEPA?*, 12 N.Y.U. ENVTL. L.J. 333, 342 (2004) (NEPA skeptics "see it as a tool of unprincipled obstructionism, a roadblock to progress, and a pointless and burdensome paperwork exercise that leads to delays and adds to project costs." (footnote omitted)).

44. See, e.g., *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004) (rejecting "unyielding" but-for causation). See generally Guido Calabresi, *Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr.*, 43 U. CHI. L. REV. 69, 71–73 (1975) (discussing but-for causation and proximate cause generally and noting "obviously there are an infinite number of acts or activities that are causally linked to every injury." *Id.* at 71).

45. See *Pub. Citizen*, 541 U.S. at 767; *Custer County Action Ass'n v. Garvey*, 256 F.3d 1024, 1039 (10th Cir. 2001) (NEPA does not require consideration of consequences "too remote, speculative, or . . . impractical or ineffective." (quoting *Colorado Env'tl. Coalition v. Dombeck*, 185 F.3d 1162, 1171–72 (10th Cir.1999))); *EDF v. Corps of Engineers*, 348 F. Supp. 916, 933 (N.D. Miss. 1972), ("[A] § 102 statement must thoroughly discuss the significant aspects of the probable environmental impact of the proposed agency action. . . . [T]his excludes . . . insignificant matters, such as those without import, or remote effects, such as mere possibilities unlikely to occur as a result of the proposed activity."), *aff'd*, 492 F.2d 1123 (5th Cir. 1974); *Sierra Club v. Watkins*, 808 F. Supp. 852, 868 (1991) ("The Department need not include falling meteors in its assessment, but it does need to include the entire set of consequences that might occur from an accident.").

speculative, or attenuated from agency action to require consideration in an EIS.<sup>46</sup>

By its text, NEPA requires an EIS to consider “the environmental impact of the proposed action” and “any adverse environmental effects which cannot be avoided should the proposal be implemented.”<sup>47</sup> “Effects” that must be included in an EIS include direct, indirect, and cumulative effects.<sup>48</sup> Direct effects are “caused by the action and occur at the same time and place” and must be included in an EIS, whether detrimental or beneficial to the environment.<sup>49</sup> Indirect effects are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”<sup>50</sup> A “reasonably foreseeable” impact is one that is sufficiently likely to occur that a person of ordinary prudence would take it into account when reaching a decision.<sup>51</sup> Cumulative effects (also called cumulative impacts) “result[] from the

46. *See, e.g.*, *Concerned About Trident v. Rumsfeld*, 555 F.2d 817, 829 (D.C. Cir. 1977) (“NEPA does not mandate that every conceivable possibility which someone might dream up must be explored in an EIS.”); *No GWEN Alliance of Lane County v. Aldridge*, 855 F.2d 1380, 1386 (9th Cir. 1988) (NEPA does not require the consideration of an “increase [in] the probability of nuclear war” that was “merely speculative”); *Ground Zero Ctr. for Non-Violent Action v. U.S. Dep’t of the Navy*, 383 F.3d 1082, 1090 (9th Cir. 2004) (NEPA does not require consideration of an accidental explosion where the “infinitesimal” risk is estimated to be “between one in 100 million and one in one trillion”); *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 153–54 (D.C. Cir. 1985) (requiring consideration of the effects of bacteria escape which the agency acknowledges “is possible”); *Scientists’ Inst. for Pub. Info., Inc. v. AEC*, 481 F.2d 1079, 1092 (D.C. Cir. 1973) (agency “need not foresee the unforeseeable”). *Compare* *N.J. Dep’t of Env’tl. Prot. v. NRC*, 561 F.3d 132, 139–40 (3d Cir. 2009) (causal chain linking an aircraft terrorist attack to a nuclear plant is too attenuated to require considerations of these effects in an EIS) *with* *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1031 (9th Cir. 2006) (NRC acted unreasonably when, in an EIS, it categorically refused to consider environmental effects of a terrorist attack on a spent fuel storage facility).

47. 42 U.S.C. § 4332(C) (2006).

48. 40 C.F.R. § 1508.8 (2009).

49. *Id.*; *see also* *Env’tl. Def. Fund v. Marsh*, 651 F.2d 983, 993 (5th Cir. 1981) (noting “a beneficial impact must nevertheless be discussed in an EIS, so long as it is significant. NEPA is concerned with all significant environmental effects, not merely adverse ones.”). *Accord* *Catron County Bd. of Comm’rs v. U.S. Fish & Wildlife Serv.*, 75 F.3d 1429 (10th Cir. 1996) (finding that beneficial effects require evaluation by NEPA). *But see* *Friends of Fiery Gizzard v. Farmers Home Admin.*, 61 F.3d 501 (6th Cir. 1995) (preparing full EIS not required because project would have only a beneficial impact).

50. 40 C.F.R. § 1508.8 (2009).

51. *See* *Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997) (defining “reasonably foreseeable” impact); *see also* *Gulf Restoration Network v. U.S. Dep’t of Transp.*, 452 F.3d 362, 368 (5th Cir. 2006) (reiterating the definition of a reasonably foreseeable impact as one that a “person of ordinary prudence” would consider); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003).

incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.”<sup>52</sup> These definitions provide some guidance, but courts still struggle to impose consistent limits on the type and extent of effects that must be considered in an EIS.

A review of the cases that have directly addressed this issue reveals the scope of these regulations and NEPA’s causality requirement. This subsection will discuss several significant cases which have addressed the causality requirement of NEPA. These cases form the basis for the circuit split identified in Part II. Three key cases—*Metropolitan Edison Co. v. People Against Nuclear Energy*, *No GWEN Alliance of Lane County, Inc. v. Aldridge*, and *Department of Transportation v. Public Citizen*—demonstrate how different courts approach the challenge of defining NEPA’s causality requirement.

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

*Metropolitan Edison Co. v. People Against Nuclear Energy* (*Metropolitan Edison*) was an important early case that limited the potential effects that must be considered in an EIS.<sup>53</sup> After the meltdown of a reactor at Three Mile Island (“TMI”), People Against Nuclear Energy (“PANE”) sought judicial review of NRC’s decision not to consider in its EIS the psychological health effects from re-opening one of the TMI reactors.<sup>54</sup> The Court held that NEPA did not require the NRC to consider the psychological health effects resulting from the risk of nuclear accident because this impact was too attenuated from the federal action of re-opening the TMI reactor.<sup>55</sup> Specifically, the Court held that:

[A] risk of an accident is not an effect on the physical world. . . . In a causal chain from renewed operation of . . . [the nuclear reactor] to psychological health damage, the element of risk and its perception by PANE’s members are necessary middle links. . . . [T]he element of risk lengthens the causal chain beyond the reach of NEPA.<sup>56</sup>

In so holding, the Court found that “[s]ome effects that are ‘caused by’ a change in the physical environment in the sense of ‘but for’ causation, will nonetheless not fall within § 102 because the causal

52. 40 C.F.R. § 1508.7 (2009).

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

54. *Id.* at 768.

55. *Id.* at 775.

56. *Id.*

chain is too attenuated.”<sup>57</sup> The Court reasoned that the terms “environmental effect” and “impact” in NEPA should be read to include a “requirement of a reasonably close causal relationship between a change in the physical environment and the effect at issue.”<sup>58</sup> The Court analogized this relationship to the “the familiar doctrine of proximate cause from tort law.”<sup>59</sup> However, in a footnote the Court cautioned that this analogy was not to be controlling on all future cases—it was not the case that “any cause-effect relation too attenuated to merit damages in a tort suit would also be too attenuated to merit notice in an EIS.”<sup>60</sup> Rather, when interpreting NEPA’s causality requirement, “courts must 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.”<sup>61</sup> Courts apply the *Metropolitan Edison* test when they examine the relationship between a change in the environment and an impact. However, a different situation arose in the Ninth Circuit case *No GWEN Alliance of Lane County, Inc. v. Aldridge (No GWEN)*,<sup>62</sup> which was subsequently followed by other courts developing an approach to the causality requirement of NEPA.<sup>63</sup>

## 2. *No GWEN Alliance of Lane County, Inc. v. Aldridge*

In *No GWEN Alliance of Lane County, Inc. v. Aldridge (No GWEN)*, environmental groups challenged an EA for the construction of radio towers as part of the Ground Wave Emergency Network (“GWEN”), a communications system intended for use by the United States government to facilitate military communications before, during, and after a nuclear explosion.<sup>64</sup> No GWEN Alliance argued that the EA at issue did not properly consider the increased risk of nuclear war that could result from the project.<sup>65</sup> The Ninth

57. *Id.* at 774. NEPA § 102 contains the environmental review requirement. 42 U.S.C. § 4332 (2009).

58. *Metro. Edison*, 460 U.S. at 774.

59. *Id.* (citing WILLIAM PROSSER, LAW OF TORTS ch. 7 (4th ed. 1971)).

60. *Metro. Edison*, 460 U.S. at 774 n.7.

61. *Id.*

62. *No GWEN Alliance of Lane County, Inc. v. Aldridge*, 855 F.2d 1380 (9th Cir. 1988).

63. *See, e.g.*, *Ground Zero Ctr. for Non-Violent Action v. U.S. Dep’t of the Navy*, 383 F.3d 1082, 1089 (9th Cir. 2004); *Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 422 F. Supp. 2d 1115, 1164 (N.D. Cal. 2006); *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1029 (9th Cir. 2006).

64. *No GWEN*, 855 F.2d 1380.

65. *Id.* at 1381.

Circuit held that the nexus between the project and nuclear war was too attenuated to require discussion of environmental impacts of nuclear war in an EA or EIS.<sup>66</sup>

Though the lower court had relied on *Metropolitan Edison*,<sup>67</sup> the Ninth Circuit distinguished *Metropolitan Edison* “because it discusses a different type of causation than that at issue in this case.”<sup>68</sup> The *No GWEN* court noted that *Metropolitan Edison* held: “since ‘fear’ is not an impact on the *physical* environment, there is a link missing in the causal chain that placed that case beyond the reach of NEPA.”<sup>69</sup> *Metropolitan Edison* evaluated effects (such as fear and other psychological distress) that resulted from a *risk* which in turn arose from agency action.<sup>70</sup> In contrast, *No GWEN* dealt with “the relationship between an agency action and a potential impact on the environment.”<sup>71</sup> Relying on Ninth Circuit precedent, the court found the increased risk of nuclear war resulting from the construction of GWEN to be too “remote and highly speculative” to warrant inclusion in the environmental review.<sup>72</sup> *No GWEN*, therefore, draws a distinction between the analysis that should cover the causal relationship at issue—that between the agency action and a change in the physical environment—and the analysis that should apply to the relationship between the change in the environment and the effects of this change.<sup>73</sup> This distinction is one of the main analytical differences underlying the circuit split discussed in this Note.<sup>74</sup>

### 3. *Department of Transportation v. Public Citizen*

In *Department of Transportation v. Public Citizen* (*Public Citizen*), environmental groups petitioned for review of the Federal Motor Carrier Safety Administration’s (“FMCSA”) promulgation of regulations relating to the operation of Mexican trucks in the United States. The Supreme Court held that because FMCSA

66. *Id.* at 1386.

67. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766 (1983); *see supra* notes 53–63 and accompanying text.

68. *No GWEN*, 855 F.2d at 1385.

69. *Id.* (citing *Metro. Edison*, 460 U.S. at 775).

70. *Metro. Edison*, 460 U.S. at 772; *see supra* notes 53–63 and accompanying text.

71. *No GWEN*, 855 F.2d at 1385.

72. *Id.* at 1386; *see also* *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1026 (9th Cir. 1980); *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974).

73. *No GWEN*, 855 F.2d at 1385.

74. *See* discussion *infra* Part II.

lacked discretion to prevent the operation of the trucks, no EIS was required by NEPA.<sup>75</sup>

The Court in this case relied on *Metropolitan Edison*<sup>76</sup> to establish the framework for evaluating the proximate-cause relationship required for NEPA.<sup>77</sup> Additionally, the Court discussed the “rule of reason” within NEPA, which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decisionmaking process.<sup>78</sup> Using this framework the Court found that “the underlying policies behind NEPA and Congress’s intent, as informed by the ‘rule of reason,’ make clear that the causal connection between FMCSA’s issuance of the proposed regulations and the entry of the Mexican trucks is insufficient to make FMCSA responsible under NEPA to consider the environmental effects of the entry.”<sup>79</sup> Congress mandated that the FMCSA certify all trucks which meet certain criteria—criteria which the FMCSA did not control.<sup>80</sup> Therefore, the Court reasoned, the proposed regulations could not be the “cause” of the environmental impacts of the trucks, as FMCSA had no ability to prevent these impacts.<sup>81</sup> Consequently, the Court found that FMCSA did not have to prepare an EIS discussing the effects of certification of the trucks at issue. The Court held, narrowly, “where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect.”<sup>82</sup>

To reach this decision the Court reviewed NEPA’s dual purposes: (1) assuring that agencies determine and carefully consider

75. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752 (2004).

76. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766; *see supra* notes 53–63 and accompanying text.

77. *Pub. Citizen*, 541 U.S. at 767 (2004) (rejecting an “unyielding variation of ‘but for’ causation” and reiterating the “‘reasonably close causal relationship’” standard articulated in *Metro. Edison* (quoting 460 U.S. at 774)).

78. *Id.* (citing *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 373–74 (1989)).

79. *Id.* at 768–69 (“[T]he legally relevant cause of the entry of the Mexican trucks is *not* FMCSA’s action, but instead the actions of the President in lifting the moratorium and those of Congress in granting the President this authority while simultaneously limiting FMCSA’s discretion.” *Id.* at 769).

80. *Id.* at 769. FMCSA is bound by statute to grant registration to all domestic or foreign motor carriers “willing and able to comply with” safety, fitness, and financial-responsibility requirements, but FMCSA does not set these criteria and has no statutory authority to impose or enforce emissions controls. 49 U.S.C. § 13902(a)(1) (2008).

81. *Pub. Citizen*, 541 U.S. at 769.

82. *Id.* at 770.

environmental impacts and (2) making this information available to members of the public with a potential interest in the agency's decision.<sup>83</sup> The Court found that neither of these goals would be served by preparation of an EIS in this case: the agency lacked the discretion or authority to benefit from greater information about the impacts of the decision, with or without the input of a more-informed public.<sup>84</sup>

In the cases discussed above, courts wrestled with the range of effects that an agency must consider when preparing an EIS. All courts agreed that there must be some limitation on the degree of effect considered; however, they disagreed as to how this limitation should be determined. In *Metropolitan Edison* the Supreme Court held that when analyzing an impact stemming from a *risk* caused by a change in the environment, NEPA requirements attach only when there is a "reasonably close causal relationship between a change in the physical environment and the effect at issue."<sup>85</sup> The Court compared this relationship to "the familiar doctrine of proximate cause from tort law."<sup>86</sup> The Ninth Circuit in *No GWEN* faced a different causal relationship: the relationship between an agency action and a potential impact on the environment.<sup>87</sup> The Ninth Circuit also limited NEPA's scope, holding that if the effect at issue is "remote and highly speculative" then NEPA's mandate does not include consideration of it.<sup>88</sup> Finally, in *Public Citizen*, the Supreme Court reiterated the standard in *Metropolitan Edison* and used the "rule of reason" that agencies should consider the "usefulness of any new potential information to the decisionmaking process" when undertaking an environmental review.<sup>89</sup> Using this framework the Court then held that where an agency has no ability to prevent the effect at issue, it cannot be said to be the "cause" of this effect for NEPA purposes.<sup>90</sup> The analysis that courts use in this area differs significantly; therefore it is unsurprising that a recent

83. *Id.* at 769; *see also* *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (holding that NEPA requires agencies to take a "hard look" at environmental consequences" and to broadly disseminate the information they find).

84. *Pub. Citizen*, 541 U.S. at 769.

85. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983); *see supra* notes 53–63 and accompanying text.

86. *Metro. Edison*, 460 U.S. at 774.

87. *No GWEN Alliance of Lane County, Inc. v. Aldridge*, 855 F.2d 1380, 1385 (9th Cir. 1988).

88. *Id.*

89. *Pub. Citizen*, 541 U.S. at 769.

90. *Id.*

circuit split has emerged concerning whether the effects of terrorism are too attenuated for consideration in an EIS under NEPA. This circuit split will be addressed in Part II.

## II. THE CIRCUIT SPLIT REGARDING EVALUATION OF TERRORISM IMPACTS

The NRC has long opposed including the effects of terrorism in its EISs for the relicensing, expansion, or construction of nuclear power facilities because it views these effects as too remote for consideration.<sup>91</sup> Yet two similar cases in different circuits have reached opposite conclusions on the question of whether the effects of a terrorist attack must be included in the NRC's NEPA-mandated environmental review of its actions. This Part will discuss each case in detail and analyze the differences in reasoning that led to each circuit's conclusion.

### A. *San Luis Obispo Mothers for Peace v. NRC*

In *San Luis Obispo Mothers for Peace v. NRC* (*Mothers for Peace*),<sup>92</sup> Pacific Gas and Electric Company ("PG&E") filed an application with the NRC for a license to construct and operate an Interim Spent Fuel Storage Installation at PG&E's Diablo Canyon Power Plant in San Luis Obispo, California.<sup>93</sup> The NRC approved the application and a citizen's group, Mothers for Peace, petitioned for review. The Ninth Circuit held that NRC's categorical refusal to consider the environmental effects of a terrorist attack was not reasonable.<sup>94</sup> In making this determination, the court's analysis of NEPA's causality requirement was critical. The court concluded that the proximate cause analogy from *Metropolitan Edison*<sup>95</sup> was inapplicable and instead held that *No GWEN's* approach represented the appropriate causality analysis.<sup>96</sup>

In order to determine whether to apply *Metropolitan Edison*, the

91. See, e.g., *In re Private Fuel Storage L.L.C.*, 56 N.R.C. 340, 348 (2002); N.J. Dep't of Env'tl. Prot. v. NRC, 561 F.3d 132 (3rd Cir. 2009).

92. *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).

93. See 10 C.F.R. § 72 (2010) (establishing licensing requirements and procedures for the storage of spent nuclear fuel, high-level radioactive waste, and reactor-related waste).

94. *Mothers for Peace*, 449 F.3d at 1030.

95. See *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983); see also *supra* notes 53–63 and accompanying text.

96. *Mothers for Peace*, 449 F.3d at 1029–30.

court parsed the relationship between the federal action and the impacts on the environment into three events: (1) a major federal action, (2) a change in the physical environment, and (3) an effect.<sup>97</sup> *Metropolitan Edison* was concerned with the relationship between events (2) and (3), and not events (1) and (2) (the federal action and the change in the environment).<sup>98</sup> Indeed, the *Mothers for Peace* court found that *Metropolitan Edison*:

[E]xplicitly distinguished the case where the disputed relationship is between events 1 and 2: “we emphasize that in this case we are considering effects caused by the risk of accident. The situation where an agency is asked to consider effects that will occur if a risk is realized, for example, if an accident occurs . . . is an entirely different case.”<sup>99</sup>

Because the court in *Mothers for Peace* decided that *Metropolitan Edison* did not apply, it relied on *No GWEN*, which dealt with the relationship between (1) the federal action (allowing the construction of communication towers) and (2) the change in the environment (risk of nuclear war resulting from the construction).<sup>100</sup> As in *No GWEN*, the *Mothers for Peace* court held that the appropriate inquiry is whether the risks associated with terrorism at issue were so “remote and highly speculative” that NEPA’s mandate does not include consideration of their potential environmental effects.<sup>101</sup> In determining whether a terrorist attack was “remote and highly speculative” the court looked to the actions of the agency itself. The NRC undertook many actions to guard against the threat of terrorism, including a “top to bottom” security review against this threat.<sup>102</sup> Based on the extensive precautions that the NRC took against the risk of a terrorist attack, the court concluded that this effect was not “remote and highly speculative.”<sup>103</sup>

In addition to arguing that the possibility of a terrorist attack is too removed from the natural or expected consequences of agency

97. *Id.* at 1029.

98. Event 2 was a change in the environment: the opening of the nuclear reactor at Three Mile Island and the ensuing increased risk of accident. Event 3 was the effect: the decline in the psychological health of the petitioners and others in the area. *See Metro. Edison*, 460 U.S. at 774; *see also supra* notes 53–63 and accompanying text.

99. *Mothers for Peace*, 449 F.3d at 1029 (quoting *Metro. Edison*, 460 U.S. at 775 n.9).

100. *No GWEN Alliance of Lane County, Inc. v. Aldridge*, 855 F.2d 1380, 1385 (9th Cir. 1988); *see supra* notes 64–73 and accompanying text.

101. *Mothers for Peace*, 449 F.3d at 1030.

102. *Id.*

103. *Id.* at 1031.

action, the NRC also argued: (1) because the risk of a terrorist attack cannot be determined, the analysis is likely to be meaningless,<sup>104</sup> (2) NEPA does not require a “worst-case” analysis,<sup>105</sup> and (3) NEPA’s public process is not an appropriate forum for sensitive security issues.<sup>106</sup> These arguments had prevailed previously in *Private Fuel Storage L.L.C. (PFS)*, which held that “NEPA does not require a terrorism review.”<sup>107</sup> However, the *Mothers for Peace* court rejected these arguments.<sup>108</sup> Because these arguments are beyond the scope of this note, they will not be addressed.<sup>109</sup>

#### B. *New Jersey Department of Environmental Protection v. NRC*

Three years after *Mothers for Peace*, the Third Circuit, in *New Jersey Department of Environmental Protection v. U.S. NRC (NJDEP)*, held that the NRC was not required to prepare an EIS considering the effects of a potential airborne terrorist attack in reviewing a nuclear plant’s relicensing application.<sup>110</sup> The *NJDEP* court was primarily persuaded by two of the NRC’s arguments. First, the court found that NJDEP had not shown that there is a “reasonably close causal relationship” between the relicensing and the environmental effects of a terrorist attack, as required by *Metropolitan Edison*.<sup>111</sup> Second, the court was persuaded that the NRC had already considered the environmental effects of a hypothetical terrorist attack on a nuclear plant and found that these effects would be no worse than those caused by a severe accident.<sup>112</sup> Reviewing

104. *Id.* at 1028.

105. *Id.* at 1029.

106. *Id.* at 1028 (citing *In re Private Fuel Storage L.L.C.*, 56 N.R.C. 340, 348 (2002)).

107. *In re Private Fuel Storage*, 56 N.R.C. at 340.

108. *Mothers for Peace*, 449 F.3d at 1028.

109. For a discussion of these arguments, see Amanda Mott, *Should the Threat of a Terrorist Attack on a Nuclear Power Plant be Considered under NEPA?*, 12 UCLA J. INT’L L. & FOREIGN AFF. 333, 343–55 (2007).

110. *N.J. Dep’t of Env’tl. Prot. v. NRC*, 561 F.3d 132 (3rd Cir. 2009).

111. *Id.* (citing *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 775 (1983)).

112. *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143. This argument goes to the sufficiency of the analysis in the EIS, not whether an EIS must be prepared in the first place; it is therefore outside the scope of this Note. However, it is the view of the Author that if a discussion of the reasonably foreseeable impacts of a potential terrorist attack is required in EISs, the discussion of potential impacts of a terrorist attack in this case was not sufficient. For a discussion of the sufficiency of EISs, see *Sierra Club v. U.S. Army Corps of Eng’rs*, 701 F.2d 1011, 1029–31 (2d Cir. 1983); see also *supra* Part I.B.

*Metropolitan Edison*<sup>113</sup> and *Public Citizen*,<sup>114</sup> the court interpreted NEPA's causality requirement as a mandate to "draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not."<sup>115</sup> The court found this line to be the "limits of an agency's area of control."<sup>116</sup> The court found that in *Metropolitan Edison*, the NRC could control the operation of the Three Mile Island facility but not how individuals perceived the risks of another accident.<sup>117</sup> Similarly, the court found that in *Public Citizen*, the FMCSA controlled the certification process but could not control the admission or volume of Mexican trucks.<sup>118</sup> The court analogized these cases to the current case and reasoned that while the NRC controls whether equipment within a facility is suitable for continued operation or could withstand an accident, it cannot control the airspace above the facilities and therefore has limited ability to address airborne terrorist threats.<sup>119</sup>

The court also found that traditional tort law concepts of causation suggest that a terrorist aircraft attack lengthens the causal chain beyond the "reasonably close causal relationship" required by the case law.<sup>120</sup> Reviewing the *Restatement (Second) of Torts*, the court noted that the petitioners had not demonstrated that the NRC "realized or should have realized the likelihood that [an opportunity for a third person to commit a crime] might be created, and that a third person might avail himself of the opportunity."<sup>121</sup> The court also stated that the failure of other government agencies to stop the attack and the criminal actions of the terrorist themselves represented superseding causes of any environmental damage; therefore, NRC's actions should not be deemed the "cause" of such damage.<sup>122</sup> The court noted that the majority of the factors identified in the *Restatement (Second)* for indicating when an "intervening force" is a "superseding cause" supported the NRC.<sup>123</sup> The court also reasoned that an analysis of

113. See *supra* notes 53–63 and accompanying text.

114. See *supra* notes 75–90 and accompanying text.

115. *N.J. Dep't of Envtl. Prot.*, 561 F.3d at 139 (quoting *Metro. Edison*, 460 U.S. at 774 n.7).

116. *Id.*

117. *Id.*

118. *Id.*; see also *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752 (2004).

119. *N.J. Dep't of Envtl. Prot.*, 561 F.3d at 139.

120. *Id.* at 140.

121. *Id.* (quoting RESTATEMENT (SECOND) OF TORTS § 448 (1965)).

122. *Id.*

123. *N.J. Dep't of Envtl. Prot.*, 561 F.3d at 140–44 (“[1] an attack would certainly be ‘extraordinary,’ as there has never been an airborne attack on a nuclear facility, [2] any

the risks of a terrorist attack under NEPA would be a waste of resources. The court reasoned that such an analysis would result in the NRC spending time and resources assessing security risks “over which it has little control and which would not likely aid its other assigned functions to assure the safety and security of nuclear facilities.”<sup>124</sup>

While explicitly departing from the analysis of the Ninth Circuit in *Mothers for Peace*,<sup>125</sup> the *NJDEP* court did not refute its reasoning. The court distinguished *Mothers for Peace* primarily because it involved construction of a new facility—thus it arguably had a closer causal relationship to a potential terrorist attack than the relicensing of an existing facility.<sup>126</sup> Additionally, in a footnote, the court described the *Mothers for Peace* decision as “unsuccessfully” distinguishing *Metropolitan Edison* based on the relationship between steps in the causal chain leading to the effect on the environment.<sup>127</sup> The court did not explicitly present arguments against the *Mothers for Peace* analysis; it did, however, note that the relevance of other NRC efforts to prevent terrorist attacks was misplaced.<sup>128</sup> Citing Ninth Circuit precedent,<sup>129</sup> the court reasoned that precautionary actions to guard against a particular risk do not alone trigger a duty to perform a NEPA analysis.<sup>130</sup>

Finally, in addition to finding the causal chain between NRC actions and a terrorist attack too attenuated to warrant NEPA review, the *NJDEP* court held that even if NEPA required an assessment of the environmental effects of a terrorist attack on a nuclear plant, the NRC had already made this assessment in its Generic Environmental Impact Statement (“GEIS”) and Supplemental Environmental Impact Statement (“SEIS”).<sup>131</sup> The

terrorist would be operating independently of the NRC, [3] the intervening force would be due to a third-party terrorist, [4] a terrorist attack is wrongful, and [5] the degree of culpability of the terrorist would far exceed that of the NRC.” *Id.* at 140–41).

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

125. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006); *see supra* notes 92–109 and accompanying text.

126. *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 142.

127. *Id.* at 143 n.10; *see supra* notes 94–99 and accompanying text.

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

129. *Ground Zero Ctr. for Non-Violent Action v. Dep’t of the Navy*, 383 F.3d 1082, 1090–91 (9th Cir. 2004) (finding the fact that the Navy took potential Trident missile accident into account when planning base layout did not mean, in and of itself, that Navy had to prepare NEPA review outlining effects of that potential accident).

130. *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143 (2009) (citing *Ground Zero*, 383 F.3d at 1090–91).

131. *N.J. Dep’t of Env’tl. Prot.*, 561 F.3d at 143–44.

court concluded that the petitioners failed to explain how or why an aircraft attack on the facility would produce impacts that are different from impacts in severe accidents.<sup>132</sup> Last, the court was not persuaded that the petitioners had demonstrated that the NRC could engage in a meaningful analysis of the risks of an attack.<sup>133</sup>

Both *Mothers for Peace* and *NJDEP* consider whether the impacts of terrorism are too attenuated for consideration in an EIS. However, they adopt different frameworks and consequently reach incompatible conclusions. The *Mothers for Peace* court did not apply *Metropolitan Edison's* framework. Instead, the *Mothers for Peace* court reasoned that *Metropolitan Edison* dealt with a different causal relationship—and, indeed, explicitly distinguished the type of causal relationship at issue from that in *Mothers for Peace*. Accordingly, following *No GWEN*, the *Mothers for Peace* court held that the appropriate inquiry is whether the impacts of a terrorist attack are so “remote and highly speculative” that NEPA’s mandate does not require consideration of their potential environmental effects.<sup>134</sup> Given the extensive preparations that the NRC undertook to prevent terrorism, the court concluded that this impact was not “remote and highly speculative.”<sup>135</sup>

In contrast, the *NJDEP* court—facing a relicensing as opposed to a new facility permit as in *Mothers for Peace*—relied on *Metropolitan Edison*, and adopted its “reasonably close causal relationship” standard and its analogy to tort law.<sup>136</sup> Under this framework, the court held that the NRC need not consider the impacts of a terrorist attack in its EIS as the NRC has limited ability to address terrorist threats and any attack would constitute a “superseding cause” of the environmental impacts.<sup>137</sup> Thus, the two most recent decisions in this area adopt competing frameworks and reach different results. This leaves the NRC with an inconsistent mandate, as it must consider the impacts of terrorism when

132. *Id.*; see also NUCLEAR REGULATORY COMM’N, GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR LICENSE RENEWAL OF NUCLEAR PLANTS: MAIN REPORT 5.3.3.1 (1996) [hereinafter NUCLEAR REGULATORY COMM’N, GEIS], available at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/v1/index.html#toc.v> (noting the effects of a terrorist attack would be “no worse than those expected from internally initiated events.”).

133. *N.J. Dep’t of Envtl. Prot.*, 561 F.3d at 143.

134. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1030 (9th Cir. 2006).

135. *Id.* at 1028.

136. *N.J. Dep’t of Envtl. Prot.*, 561 F.3d at 140.

137. *Id.* at 140–44.

conducting an EIS in some jurisdictions but not in others.<sup>138</sup> The final Part of this Note suggests a resolution to this discrepancy and advocates the *Mothers for Peace* approach. The holding of that case is more faithful to Supreme Court precedent, and its approach is preferential as a policy matter.

### III. POTENTIAL IMPACTS OF TERRORISM SHOULD BE INCLUDED IN EISS

The circuit courts are split as to whether the potential impacts of a terrorist attack should be included in an EIS for a nuclear facility. This Part seeks to resolve this split by advocating the approach of the Ninth Circuit in *Mothers for Peace* as more consistent with both Supreme Court precedent and NEPA's goals. Even under the approach taken by the Third Circuit in *NJDEP*, however, terrorism impacts should be considered, as they are reasonably foreseeable. First, this Part argues that *Metropolitan Edison* does not apply when determining whether the impacts of a terrorist attack on a nuclear facility should be considered in an EIS. Instead, the test adopted in *No GWEN* and *Mothers for Peace* is appropriate. This test is consistent with *Metropolitan Edison*, provides courts with discretion to develop a common-law approach to defining the limits of NEPA's causality considerations, and obviates the need to turn to the *Restatement (Second) of Torts* to resolve NEPA interpretation issues. Next, this Part suggests that even if courts apply reasoning from *Metropolitan Edison* to this question, as the *NJDEP* court did, this test requires the consideration of the environmental impacts of a possible terrorist attack. Finally, this Part concludes that considering the environmental impacts of terrorist attacks in an EIS is consistent with NEPA's goals, would reduce the inconsistency in the way the NRC implements NEPA, and may spur modeling by state "little NEPAs."

#### A. *Metropolitan Edison's* Test Is Not Appropriate for This Scenario

A primary distinction between the analysis in *NJDEP* and *Mothers for Peace* is the application of *Metropolitan Edison's* test to evaluate

138. See, e.g., *In re GE-Hitachi Global Laser Enrichment L.L.C. (GLE Commercial Facility)*, 75 Fed. Reg. 1819, 1828 (Jan. 13, 2010) (Jaczko, Chairman, writing separately) (offering a separate statement supporting the issuance of the notice but expressing his desire to abandon the current jurisdiction-specific policy of considering terrorism only in EISs for facilities which will be located within the Ninth Circuit).

the relationship between a federal action causing a change in the environment and potential effects thereof. The *Mothers for Peace* court did not apply the test established in *Metropolitan Edison* whereas the *NJDEP* court did. A close reading of *Metropolitan Edison* makes clear that the case does not govern an evaluation of whether the impacts of a terrorist attack on a nuclear facility should be considered in an EIS. Instead, the *Mothers for Peace* test is more conceptually appropriate.

*Metropolitan Edison* addressed a specific relationship: that between the change in the environment resulting from a federal action and the effects of that change.<sup>139</sup> The Supreme Court explicitly distinguished its analysis in this case—where it was considering effects caused by the *risk* of an accident itself—from a case where an agency is asked to consider environmental impacts that will occur if a risk is *realized*.<sup>140</sup> The environmental impacts of a terrorist attack are unequivocally in the latter category of realized risk.

Consider, for example, how an EIS for a nuclear facility must address the issue of a nuclear reactor meltdown, the extremely unlikely—though possible—event that occurred at Three Mile Island.<sup>141</sup> The EIS must include a discussion of the “reasonably foreseeable” environmental impacts of a severe accident such as a meltdown.<sup>142</sup> These impacts are those that result if a risk is realized. *Metropolitan Edison* holds only that the EIS must not address impacts which stem from the *risk itself*, such as psychological harm from worrying about the risk of meltdown.<sup>143</sup> The consideration of a nuclear reactor meltdown is analogous to the consideration of terrorism impacts: the environmental impacts of both are quite

139. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 775 (1983). Specifically, the Court was evaluating the relationship between the major federal action of re-opening a nuclear reactor at Three Mile Island, the resulting risk of meltdown, and the effect of this risk on the psychological health of nearby residents. See *supra* notes 53–63 and accompanying text.

140. *Metro. Edison*, 460 U.S. at 775 n.9.

141. See generally NUCLEAR REGULATORY COMM’N, GEIS, *supra* note 132 (discussing prior accidents such as that at Three Mile Island and the health effects thereof). For a general discussion of low probability, high magnitude events and how courts should evaluate these in the context of an EIS, see *Sierra Club v. Watkins*, 808 F. Supp. 852, 867–68 (D.D.C. 1991).

142. See NUCLEAR REGULATORY COMM’N, GEIS, *supra* note 132, at 5.3.3; see also *Limerick Ecology Action, Inc. v. U.S. Nuclear Regulatory Comm’n*, 869 F.2d 719, 741 (3d Cir. 1989) (“[A]fter Three Mile Island, it would be irrational for the NRC to maintain that severe accident risks are too remote to require consideration. . .”).

143. *Metro. Edison*, 460 U.S. at 775; see *supra* notes 53–63 and accompanying text.

unlikely to occur, yet nevertheless reasonably foreseeable.<sup>144</sup> Moreover, the impacts stemming from the *risk itself* do not require discussion as do the impacts if a risk is realized. Or, to use the shorthand of the *Mothers for Peace* court, three events exist: (1) a major federal action, (2) a change in the physical environment, and (3) an effect.<sup>145</sup> *Metropolitan Edison* was concerned with the causal relationship between events (2) and (3)<sup>146</sup> whereas an analysis of the impacts of a terrorist attack is an inquiry into the relationship between events (1) and (2).<sup>147</sup> Therefore, *Metropolitan Edison's* approach should not apply to the question of whether to prepare an EIS that considers the environmental impacts of an attack on a nuclear facility.

A preferable approach to determining whether an impact is too attenuated to be properly included in an EIS was adopted in *No GWEN*<sup>148</sup> and *Mothers for Peace*.<sup>149</sup> In both cases, the test was whether the effect was “remote and highly speculative.”<sup>150</sup> This test is more useful when analyzing the likelihood an effect will occur rather than the impact of an effect on the public. In addition to conforming to the Supreme Court’s distinction between causal relationships in *Metropolitan Edison*, this approach has several other beneficial features.

First, the exclusion of only those impacts that are both “remote” and “highly speculative” properly includes most impacts. Drawing the line so that more, rather than fewer, impacts are considered is

144. Recall the usual definition of a “reasonably foreseeable” impact is one that is sufficiently likely to occur such that a person of ordinary prudence would take it into account when reaching a decision. See *Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997) (defining “reasonably foreseeable” impact). NEPA regulations specifically contemplate a situation where there is uncertainty regarding a potentially catastrophic impact, and provide that “reasonably foreseeable” impacts include those “which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.” 40 C.F.R. § 1502.22 (2009). See NUCLEAR REGULATORY COMM’N, GEIS, *supra* note 132, at 5.3.3 (discussing environmental impacts resulting from unlikely, though possible, accidents).

145. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1029 (9th Cir. 2006).

146. See *supra* notes 53–63 and accompanying text.

147. The terrorism inquiry would be a question of whether a major federal action (e.g., licensing a nuclear facility) created a change in the environment (e.g., an increased risk of terrorist attack), as opposed to a question of whether the change in the environment (risk of attack) created an effect on the environment.

148. *No GWEN Alliance v. Aldridge*, 855 F.2d 1380, 1386 (9th Cir. 1988).

149. *Mothers for Peace*, 449 F.3d at 1029.

150. *No GWEN*, 855 F.2d at 1386; *Mothers for Peace*, 449 F.3d at 1016.

consistent with the broad scope of NEPA.<sup>151</sup> The *NJDEP* proximate cause test excludes too much: many impacts that were historically—and properly—included in EISs might have been excluded if the NRC had used the *NJDEP* proximate cause test.<sup>152</sup> In contrast, the impacts excluded under the “remote” and “highly speculative” test are much narrower.<sup>153</sup> Further, this test allows federal courts to develop a common-law standard for defining the scope of NEPA’s causality requirement. Such a standard is appropriate in this case because of the wide variety of environmental impacts that can arise in the NEPA process.<sup>154</sup> Finally, the test adopted by *Mothers for Peace* is a preferable basis for developing this legal framework, as it avoids the unsatisfying application of the *Restatement (Second) of Torts* (as was suggested in *Metropolitan Edison* and executed by the *NJDEP* court).<sup>155</sup>

The *Restatement (Second) of Torts* is representative of an entirely different area of law which does not lend itself to clear resolution of issues under NEPA. For instance, the requirement to act under NEPA is not the same as a duty owed under tort law. Further, the arbitrary and capricious standard of review for NEPA is vastly

151. See *Scientists’ Inst. for Pub. Information, Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1088 (D.C. Cir.1973) (“The statutory phrase ‘actions significantly affecting the quality of the environment’ is intentionally broad, reflecting the Act’s attempt to promote an across-the-board adjustment in federal agency decision making so as to make the quality of the environment a concern of every federal agency.”); see also *infra* Part III.C.

152. Consider the line of cases requiring an EIS to consider new growth and development occurring as a result of a federally permitted development such as a highways and whether these impacts could survive a proximate cause challenge. *E.g.*, *City of Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975). Accord *Colorado River Indian Tribes v. Marsh*, 605 F. Supp. 1425 (C.D. Cal. 1985); see also *Runway 27 Coalition, Inc. v. Engen*, 679 F. Supp. 95 (D. Mass. 1987). Further, consider the case of climate change impacts which are beginning to be included in EISs—would such impacts survive a proximate cause analysis? See *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 508 F.3d 508 (9th Cir. 2007).

153. *Cf. Ground Zero Ctr. For Non-Violent Action v. United States Dep’t of the Navy*, 383 F.3d 1082, 1090 (9th Cir. 2004) (NEPA does not require consideration of an accidental explosion where the “infinitesimal” risk is estimated to be “between one in 100 million and one in one trillion”); *No GWEN*, 855 F.2d at 1386 (NEPA does not require the consideration of an “increase [in] the probability of nuclear war” that was “merely speculative”).

154. See Pierre Schlag, *Rules and Standards*, 33 UCLA L. REV. 379, 403 (1985) (noting when flexibility, individualization, open-endedness, and dynamism are important, standards are the more suitable choice). See generally Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557 (1992) (discussing rules and standards generally and noting how in settings that vary substantially, designing a rule that accounts for every contingency would be wasteful, and thus a standard is preferable).

155. See *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983) (citing PROSSER, *supra* note 59); *N.J. Dep’t of Env’t. Prot., v. NRC*, 561 F.3d 132 at 140–44 (applying the analogy to proximate cause analysis from tort law).

different from a negligence standard of review applicable in tort law. Additionally, the concerns of limiting liability and efficient allocation or risk<sup>156</sup> that commonly justify the proximate cause limitation in tort law are not present in the NEPA context. Because of these significant differences between the two areas of law, developing law specific to the question of which impacts should be considered under NEPA is preferable to an approach which borrows from the “square peg” of tort law. Even under the less preferable framework of *Metropolitan Edison*, however, an EIS for a nuclear facility should include the reasonably foreseeable risks of a terrorist attack.

#### B. *Metropolitan Edison* Requires Consideration of Terrorism

The environmental consequences of a terrorist attack should be considered in an EIS even under the interpretation of NEPA advanced by the *NJDEP* court (relying on *Metropolitan Edison* and *Public Citizen*).<sup>157</sup> Though other federal agencies undoubtedly bear some responsibility for preventing an attack, this does not—and should not—excuse the NRC from considering such effects as they are at least partially within the limits of NRC control. Further, the analogy to tort law advanced by *Metropolitan Edison* and *NJDEP* reveals that while a terrorist attack is undoubtedly an intervening criminal act, it is nonetheless reasonably foreseeable. Indeed, the NRC has foreseen this act and taken steps to prevent it. Therefore, the effects of a terrorist attack should be included in any EIS the NRC prepares for a nuclear facility.

For an effect to be included in an EIS under *Metropolitan Edison*'s approach, there must be a “reasonably close causal relationship between a change in the physical environment and the effect at issue,” analogous to “the familiar doctrine of proximate cause from tort law.”<sup>158</sup> This relationship is intended to “draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not.”<sup>159</sup> The *NJDEP* court articulated this line as the “limits of an agency’s area of

156. See, e.g., Calabresi, *supra* note 44, at 74–91 (discussing common justifications for proximate cause doctrine in tort law such as compensation, cost spreading, and deterrence).

157. *N.J. Dep’t of Envtl. Prot., v. NRC*, 561 F.3d 132 (3d Cir. 2009); *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766 (1983); *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752 (2004).

158. *Metro. Edison*, 460 U.S. at 774 (citing PROSSER, *supra* note 59).

159. *N.J. Dep’t of Envtl. Prot.*, 561 F.3d at 140 (quoting *Metro. Edison*, 460 U.S. at 774 n.7).

control.”<sup>160</sup>

The environmental effects of terrorism directed at nuclear plants are sufficiently within NRC control to be considered in the Agency's EISs. The situation is not like that of *Public Citizen* where the FMCSA had “no option” but to certify trucks that met given criteria and hence rightly deemed not to be the agency responsible for the environmental consequences of such certification.<sup>161</sup> Because the NRC controls important variables such as the security characteristics of nuclear power plants, it has much greater control over the environmental impacts of a potential terrorist attack. Regardless of whether the NRC's actions alone are dispositive, they certainly indicate some ability to limit the success of a hypothetical terrorist attack.<sup>162</sup> For instance, the NRC has required licensees to “develop specific plans and strategies to respond to a wide range of threats, including the impact of an aircraft attack,” and has required nuclear plant licensees to participate with NRC staff in “mock exercises to practice imminent air attack responses.”<sup>163</sup> The NRC has also determined that it is “prudent” to require some new power plants to consider the potential effects of a large commercial aircraft collision.<sup>164</sup> These actions demonstrate that factors that directly determine the environmental impacts of a potential terrorist attack on an NRC-licensed facility are within the “limits of an agency's area of control,” and hence these impacts should be

160. *Id.* at 139.

161. *Pub. Citizen*, 541 U.S. 752 (“where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect.”); *see also* *Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 104 at 104–05 (D.D.C. 2006) (“The holding in *Public Citizen* extends only to those situations where an agency has ‘no ability’ because of lack of ‘statutory authority’ to address the impact” or “to take actions that could lessen the environmental impacts of concern to the plaintiffs.”); *see supra* notes 75–90 and accompanying text.

162. *See, e.g.*, *Ground Zero Ctr. for Non-Violent Action v. Dep't of the Navy*, 383 F.3d 1082, 1090–91 (9th Cir. 2004) (that the Navy took potential Trident missile accident into account when planning base layout did not mean, in and of itself, that Navy had to prepare NEPA review outlining effects of that potential accident). *But see* *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 740 (3d Cir. 1989) (“As the NRC itself has indicated with regard to emergency planning, these ‘regulations are premised on the assumption that a serious accident might occur.’”); *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 153–54 (D.C. Cir. 1985) (requiring consideration of the effects of bacteria escape which the agency acknowledges “is possible”).

163. Design Basis Threat, 72 Fed. Reg. 12,705, 12,710 (Mar. 19, 2007) (discussing Interim Compensatory Measures).

164. Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs, 72 Fed. Reg. 56,286, 56,288 (Oct. 3, 2007).

considered in an environmental review of the agency's actions.<sup>165</sup>

In addition, the analogy to “the familiar doctrine of proximate cause from tort law”<sup>166</sup> advanced in *Metropolitan Edison* supports the contention that the NRC should be deemed to have proximately caused the environmental damage resulting from a hypothetical terrorist attack, despite the obvious intervening criminal act. The NRC should—and does<sup>167</sup>—anticipate the possibility of third-party criminal conduct such as a terrorist attack, and therefore such an attack is not a superseding cause of resulting environmental damage. As a result, even if *Metropolitan Edison's* analysis is applied, the required “reasonably close causal relationship” exists between the NRC's actions of licensing a nuclear facility and the environmental damage resulting from a potential terrorist attack.

The *Restatement (Second) of Torts* provides that normally the act of a third party in committing a crime is a superseding cause which breaks the chain of causality; this is not the case, however, where the actor “realized or should have realized the likelihood that such a situation might be created, and that a third person might avail himself of the opportunity to commit such a tort or crime.”<sup>168</sup> The *Restatement's* comments clarify the circumstances in which an actor should anticipate third-party criminal conduct, specifically situations “created at a place where persons of peculiarly vicious type are likely to be” who might yield to the temptation, even though the average individual would not.<sup>169</sup>

There can be little doubt that the NRC both realizes and should

165. Even if some types of attacks are deemed entirely outside the agency's control or excluded because they are perpetrated by “enemies of the United States,” such as by the military of another country, that does not justify categorically excluding consideration of all terrorism impacts. See 10 C.F.R. § 50.13 (2009) (nuclear facilities do not need to protect against attacks from “enemies of the United States”). See generally *Siegel v. Atomic Energy Comm'n*, 400 F.2d 778, 780 (D.C. Cir. 1968) (finding that when issuing licenses to build power plants, the Commission may disregard the possibility of enemy attacks—despite neighbor's concern that a Florida facility “might be affected by intentional attempts to harm the reactors, such as a bombing attack against them from Cuba.”). Cf. Energy Policy Act of 2005, 42 U.S.C. § 2210e (2006) (directing the NRC to consider air- and water-based attacks on nuclear facilities).

166. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983) (citing PROSSER, *supra* note 59).

167. See, e.g., *Pub. Citizen v. NRC*, 573 F.3d 916, 916–29 (9th Cir. 2009) (discussing extensive precautions taken against terrorist threats); *Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs*, 72 Fed. Reg. 56,287, 56,288 (Oct. 3, 2007); see also Energy Policy Act of 2005 § 651(a)(1), 42 U.S.C. § 2210e (2006) (directing the NRC consider air- and water-based attacks on nuclear facilities).

168. RESTATEMENT (SECOND) OF TORTS § 448 (1965) (emphasis added).

169. *Id.* § 448 cmt. b.

realize that terrorists—clearly persons of a “peculiarly vicious type”—might avail themselves of the opportunity to attack a nuclear power facility.<sup>170</sup> Some of the most obvious examples of NRC awareness of this risk include internally generated alerts: on January 31, 2002, the NRC released its alert issued to the country’s nuclear power plants that warned of the potential for an attack by terrorists who planned to crash a hijacked airliner into a nuclear facility. The alert said that “the attack was already planned” by three suspected Al Qaeda operatives “already on the ground.”<sup>171</sup>

Therefore, because the NRC should—and does—anticipate third-party criminal conduct, such as a terrorist attack, an attack is not a superseding cause of the resulting environmental damage. The proximate cause analogy imported from tort law supports the contention that the environmental damage resulting from a terrorist is within the bounds of the effects that should be considered in an EIS. Unlike tort law, the EIS consideration does not concern the *ex post* application of liability. Rather, EIS context requires an *ex ante* evaluation of whether consideration of these impacts before an attack happens may improve agency decisionmaking, inform the public, or serve NEPA’s other policy goals.

### C. Inclusion of Terrorist Risks is Consistent with NEPA’s Intent and Policy Goals

In *Metropolitan Edison*, the Court urged lower courts to interpret NEPA’s causality requirement with an eye 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.”<sup>172</sup> This responsibility is different from tort liability: it is a question of what is foreseeable and what an agency can do to address an identified effect. Therefore, including a discussion of the impact of a terrorist attack in an EIS will support the underlying policy rationale and legislative intent of NEPA—information generation and

170. See, e.g., Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs, 72 Fed. Reg. 56,287, 56,288 (Oct. 3, 2007) (to be codified at 10 C.F.R. pt. 52).

171. Kenneth R. Bazinet & Richard Sisk, *N-Plant Attacks Feared*, N.Y. DAILY NEWS, Feb. 1, 2002, at 5. One day earlier, Defense Secretary Rumsfeld warned that the U.S. Armed Forces must prepare for attacks that could be “vastly more deadly than those we suffered on September 11, 2001.” Tricia McDermott, *Rumsfeld: Greater Threats Ahead*, CBS NEWS, Jan. 31, 2002, <http://www.cbsnews.com/stories/2002/02/20/terror/main501779.shtml>.

172. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 n.7 (1983).

consideration of environmental effects, as opposed to the post hoc assignment of blame.

The NEPA process has two primary purposes. First, it “ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts.”<sup>173</sup> Second, it “guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.”<sup>174</sup> Related to these considerations is the justification for the EIS process, which serves to “giv[e] the public the assurance that the agency has indeed considered environmental concerns in its decisionmaking process, and, perhaps more significantly, provides a springboard for public comment” in the agency decisionmaking process itself.<sup>175</sup>

Failing to discuss the environmental impacts of a terrorist attack is inconsistent with these policy considerations. First, without the detailed discussion required by an EIS of the impacts of a terrorist attack, it is possible that the NRC will either be unaware of or not carefully consider such impacts. Secondly, absent such considerations in an EIS, an opportunity for the public to comment may not be as available. Given the NRC’s extensive consideration of terrorist impacts, however, the second concern is likely more serious.<sup>176</sup> Without the inclusion of these impacts in an EIS, the public lacks a forum to question whether the impacts of a terrorist attack for a specific site are adequately and completely addressed, whether sufficient alternatives and mitigation measures are proposed, and whether significant facts are excluded. Similarly—even assuming the public were to find no fault in the EIS’s discussion of terrorism impacts—the public may not be assured that the NRC considered the impacts of a terror attack unless it has an opportunity to comment. This public assurance is as legitimate an underlying policy concern as any other.<sup>177</sup>

173. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349–50 (1989).

174. *Id.* at 350.

175. *Id.*

176. *See* Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs, 72 Fed. Reg. 56,287, 56,288 (Oct. 3, 2007); *Pub. Citizen v. Nuclear Regulatory Comm’n*, 573 F.3d 916, 916–29 (2009) (discussing extensive precautions taken against terrorist threats); *supra* notes 162–65 and accompanying text; *see also* Energy Policy Act of 2005, 42 U.S.C. § 2210e (2006) (directing the NRC to consider air- and water-based attacks on nuclear facilities).

177. *Methow Valley*, 490 U.S. at 349–50.

The *NJDEP* court suggested that one method of distinguishing its case from *Mothers for Peace* was that *Mothers for Peace* dealt with a license for a new nuclear facility, as opposed to a relicensing. As a policy matter it is equally important to consider impacts on the environment when relicensing nuclear facilities. Conditions may change; perhaps a formerly remote area is now near millions of people, or perhaps when the plant was initially sited terrorism was not a contemplated risk. In cases such as these, consideration of the impacts of a terrorist attack should still be included in the EIS for the relicensing of a nuclear plant to ensure that the impacts are properly considered, including the evaluation of potential mitigation efforts, alternatives, and the benefits and costs of operating the facility. In addition to affecting federal policy, this approach would have beneficial results for state versions of NEPA (“little NEPAs”) and NRC proceedings.

#### D. Public Policy, “Little NEPAs,” and NRC Consistency

Adopting the approach advocated in this Note would garner additional public policy benefits by encouraging state-level modeling, which would lead to better planning and consistency across jurisdictions regarding NRC policymaking.

Fifteen states have enacted Acts modeled after NEPA, collectively referred to as “little NEPAs” or State Environmental Policy Acts (“SEPAs”).<sup>178</sup> While these acts are generally modeled after NEPA, there is nevertheless significant variability between SEPAs on issues that include, *inter alia*, whether to include substantive mandates, what triggers the EIS requirement, and what standards govern the determination of an EIS’s sufficiency.<sup>179</sup> Given these differences, it is unsurprising that SEPAs do not uniformly require consideration of the impacts of terrorism in EIS equivalents.<sup>180</sup> Despite this variation, SEPAs largely remain modeled on the federal NEPA; if the federal government takes the approach advocated in this Note, states may follow suit. State adoption would further accelerate the public policy benefits of increased transparency and greater

178. David Sive & Mark A. Chertok, “Little NEPAs” and Their Environmental Impact Assessment Processes, 3 A.L.I.-A.B.A. COURSE OF STUDY: ENVTL. LITIG. 967, 969 (2009).

179. *Id.*

180. *Compare* *Allen v. Boston Redevelopment Auth.*, 450 Mass. 242 (2007), with *Develop Don’t Destroy (Brooklyn) v. Urban Dev. Corp.*, 874 N.Y.S.2d 414, 418 (N.Y. App. Div. 2009). See generally Michael B. Gerrard, *Considering Terrorism Risks in Environmental Impact Reviews*, N.Y. L.J., July 28, 2006, at col.1 (surveying New York cases).

consideration of environmental impacts in the siting of nuclear facilities.

Further, legal scholars have identified NEPA as a powerful tool for environmental planning, specifically noting terrorism mitigation as a fruitful result of the NEPA process.<sup>181</sup> Some modifications to NEPA procedures—such as limiting certain sensitive data—may have to be adopted before NEPA can be widely used in this regard.<sup>182</sup> Scholars argue, however, that NEPA generally remains an underused resource that could contribute to our country's ability to evaluate, mitigate, and respond to terrorist threats.<sup>183</sup>

Finally, mandating inclusion of the impacts of a potential terrorist attack in an EIS would have the beneficial effect of contributing to a consistent, nationwide approach to NEPA in NRC and Department of Energy (“DOE”) regulations and policy. DOE has issued guidance requiring consideration of potential environmental impacts of terrorism in all EISs and EAs—whether for nuclear or non-nuclear facilities.<sup>184</sup> Currently, however, the NRC provides information about impacts of a potential terrorist attack to the public only in the Ninth Circuit, even though that circuit and DOE's experiences have demonstrated that these impacts can be analyzed and partially disclosed without negative consequence.<sup>185</sup> As a result, in the current legal regime the “public is selectively and arbitrarily denied information on a matter of this

181. CHARLES H. ECCLESTON, NEPA, TERRORISM, AND ENVIRONMENTAL PLANNING: TOOLS, TECHNIQUES, AND APPROACHES FOR PRACTITIONERS 273–79 (2008). *See also* Charles H. Eccleston, *How NEPA Can Be Used to Counter Terrorism*, 5 ENVTL. PRAC. 302, 307 (2003) (NEPA provides an “indispensable tool for identifying, evaluating, and mitigating the impacts of potential terrorist attacks.”).

182. *See* Roland M. Frye, Jr., *The Nuclear Regulatory Commission Is Not Required by Statute to Release Terrorism-Related Portions of Environmental Impact Statements*, 55 ADMIN. L. REV. 643 (2003); *Weinberger v. Catholic Action of Hawaii/Peace Educ. Project*, 454 U.S. 139, 147–49 (1981) (Blackmun, J., concurring) (noting the government's duty to prepare an EIS regardless of whether all portions of the EIS are released to the public). *See generally* Stephen Dycus, *NEPA Secrets*, 2 N.Y.U. ENVTL. L.J. 300 (1993).

183. *See* Eccleston, *How NEPA Can Be Used to Counter Terrorism*, *supra* note 181.

184. CAROL BORGSTROM, OFFICE OF NEPA POLICY AND COMPLIANCE, NEED TO CONSIDER INTENTIONAL DESTRUCTIVE ACTS IN NEPA DOCUMENTS (2006), *available at* [http://www.gc.energy.gov/NEPA/documents/terrorism—interim\\_nepa\\_guidance.pdf](http://www.gc.energy.gov/NEPA/documents/terrorism—interim_nepa_guidance.pdf); OFFICE OF NEPA POLICY AND COMPLIANCE, U.S. DEP'T OF ENERGY, RECOMMENDATIONS FOR ANALYZING ACCIDENTS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 20–26 (2002), *available at* [http://gc.energy.gov/NEPA/nepa\\_documents/TOOLS/GUIDANCE/Volume2/2-8-accidents.pdf](http://gc.energy.gov/NEPA/nepa_documents/TOOLS/GUIDANCE/Volume2/2-8-accidents.pdf).

185. OFFICE OF NEPA POLICY AND COMPLIANCE, *supra* note 184.

importance to health and safety.”<sup>186</sup> This is troubling even to NRC commissioners, one of whom has noted: “[a]s a policy matter, I believe that the Commission’s commitment to transparency should no longer be compromised, particularly now that we know that the environmental impacts of terrorism can be analyzed and disclosed meaningfully to the public, while appropriately protecting classified information.”<sup>187</sup>

#### IV. CONCLUSION

An EIS is intended to allow for consideration of environmental impacts, and better planning and decisionmaking in major federal actions. It is an informative document, designed to incorporate as much information regarding the potential impacts of a project as is feasible. While outlandish or bizarre impacts can be eliminated as unworthy of consideration, unfortunately the possibility of a terrorist attack on an American nuclear power plant is not so remote. Given the vast potential for damage to the human environment and the demonstrated willingness of terrorists to target nuclear facilities, impacts of such an attack are reasonable and necessary inclusions in an environmental impact statement governing the construction or relicensing of a nuclear facility. The current circuit split regarding whether the effects of terrorism are too attenuated to warrant inclusion in an environmental review mandated by NEPA should be resolved in favor of inclusion. It is clear that the best reading of NEPA requires inclusion of the effects of a terrorist attack in an EIS, an outcome consistent with Supreme Court precedent, NEPA’s broad intent, and the public policy considerations that underlie it.

186. See, e.g., *In re GE-Hitachi Global Laser Enrichment L.L.C. (GLE Commercial Facility)*, 75 Fed. Reg. 1819, 1828 (Jan. 13, 2010) (Jaczko, Chairman, writing separately).

187. *Id.*

