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Alexander B. Grannis
Commissioner

October 31, 2007

Via E-mail and Overnight Courier
Mr. Bo Pham
Environmental Project Manager
Division of License Renewal
U.S. Nuclear Regulatory Commission
Mail Route 0-7B1
11555 Rockville Pike
Rockville, Maryland, 20852-2738

Re: New York State Executive Agencies and the Department of Law
Scoping Comments on the License Renewal of Indian Point Units 2 and 3

Dear Mr. Pham:

The New York State Department of Environmental Conservation submits to the United States Nuclear Regulatory Commission, on behalf of all New York State Executive Agencies and the New York State Department of Law (collectively "the State"), the following comments related to the scope of the Supplemental Environmental Impact Statement for the license renewal of the Indian Point Units 2 and 3.

The State will also be submitting a Request for Hearing and Petition to Intervene in the license renewal proceeding. These comments and those future documents further supplement the public comments provided by this Department and the Attorney General's Office at the recent public hearing on September 19, 2007, regarding the license renewal application for Indian Point.

The State appreciates the opportunity to provide scoping comments to the NRC and to their acceptance into the public record in this matter. If NRC staff requires any additional information or clarification regarding any of the above referenced issues please contact either of the undersigned.

Respectfully submitted,

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Encl.

NEW YORK STATE EXECUTIVE AGENCIES AND THE DEPARTMENT OF LAW SCOPING COMMENTS ON THE LICENSE RENEWAL OF INDIAN POINTS UNITS 2 AND 3, BUCHANAN, NEW YORK

submitted to the United States Nuclear Regulatory Commission

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Entergy Nuclear Operations, Inc. submitted a license renewal application on April 30, 2007, to the United States Nuclear Regulatory Commission ("NRC") requesting a 20-year extension of the existing licenses for Units 2 and 3. The license renewal application was submitted pursuant to the federal Atomic Energy Act and NRC regulations. Among other requirements of these provisions, the NRC must conduct an environmental review and consider the adverse environmental impacts of the renewal application, with public review and comment. Existing National Environmental Policy Act ("NEPA") and NRC rules require that a supplemental review document be developed to complement the generic review for all future nuclear plant license renewals undertaken by NRC in 1996. The express requirements of NEPA, the facts of this case, and the unique location of Indian Point in such close proximity to one of the world's largest cities, however, require that a full and comprehensive environmental review of all adverse impacts -- even those addressed in 1996 -- be undertaken specifically for this facility. Simply stated, this case necessitates a *de novo* review, and New York State requests that this review be undertaken by the NRC in accord with these scoping comments.

Background

The Indian Point Nuclear Generating Facility ("Indian Point"), consisting of three units, is located along the eastern shore of the Hudson River in the Village of Buchanan, Westchester County, approximately 24 miles north of the New York City line. It is owned and operated by Entergy Nuclear Operations, Inc. ("Entergy").

In 1962, the Atomic Energy Commission ("AEC") issued Consolidated Edison Company of New York ("Con Ed") a provisional 18-month Facility Operating License for Unit 1. The plant became fully operational in 1963 and continued to operate under its provisional license for the next 12 years. After a series of problems, the AEC ordered Unit 1 shut down on October 31, 1974, and on June 19, 1980, the NRC revoked the provisional operating license for Unit 1.

In 1973, the AEC granted Con Ed a 40-year operating license for Unit 2, which currently generates approximately 1,078 MWe. In 1975, the NRC granted the Power Authority of the State of New York ("PASNY") a 40-year operating license for Unit 3, which currently generates approximately 1,080 MWe.

Both Units 2 and 3 consist of pressurized water reactors with containment structures, turbine buildings, spent fuel pools, cooling water intake structures, and a discharge canal. Each unit has its own intake structure, but they share a common discharge canal. In addition, although the Unit 1 reactor has been in "storage" since the 1970s, the Indian Point facility continues to use various Unit 1 components, including its spent fuel pool and water intake structure. Entergy has decided to remove some spent fuel from the spent fuel pools and place them into dry cask storage systems. These dry casks will also be stored on-site.

In 2000 and 2001, Entergy acquired the three Indian Point Units. The current operating licenses for Unit 2 and Unit 3 expire in 2013 and 2015, respectively. Entergy seeks NRC authorization to operate each unit for an additional 20 years -- until 2033 and 2035.

I. A FULL ENVIRONMENTAL REVIEW OF THE INDIAN POINT LICENSE RENEWAL APPLICATION MUST BE REQUIRED.

A. *National Environmental Policy Act Requirements for the NRC's Review of License Renewal Applications.*

The National Environmental Policy Act of 1969 ("NEPA") "places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action," and "ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Counsel, Inc.*, 462 U.S. 87, 97 (1983). NEPA requires that federal agencies take a "hard look" at the environmental impacts of proposed actions, specifically

> (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 if the proposed action should be implemented.

42 U.S.C. § 4332. Federal agencies must prepare an Environmental Impact Statement ("EIS") for "all major Federal actions significantly affecting the . . . environment." 42 U.S.C. § 4332(2)(C). The requirements of NEPA are mandatory and apply to the NRC. *Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109 (D.C. Cir. 1971)(holding that NEPA applies to NRC's predecessor). In addition, "significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts" must be reviewed by the agency in a Supplemental EIS. *40 C.F.R. § 1502.9 (c)(1)(ii).* Given the NRC's regulations, 10 CFR Part 51, a Supplemental Environmental Impact Statement ("Supplemental EIS") is required as part of this license renewal proceeding. Of particular relevance to the NEPA review of NRC license renewal applications is federal guidance stating that the content of an EIS should be reviewed every five years to determine if a Supplemental EIS is necessary. *Forty Most Asked Question Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,036.* As demonstrated below, the NRC has more than doubled this five-year period for review of the EIS governing nuclear power plant license renewal matters, with particular and alarming consequences for Indian Point.

B. *The Generic Environmental Impact Statement for the License Renewal of Nuclear Plants.*

In May 1996, the NRC produced a Generic Environmental Impact Statement ("Generic EIS") for License Renewal of Nuclear Plants. *See NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants"* (May 1996); *see also* 61 Fed. Reg. 28,469 (June 5, 1996); 61 Fed. Reg. 66,546 (Dec. 18, 1996). In this process, the NRC categorized impacts as either Category 1 or Category 2. In the Generic EIS, the NRC characterized Category 1 impacts in the following manner:

> (1) The environmental impacts associated with the issue have been determined to apply either to all plants, or for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic;
>
> (2) A single significance level (i.e., small, moderate, or large) has been assigned to the impacts (except for collective off site radiological impacts from the fuel cycle and from high level waste and spent fuel disposal); and
>
> (3) Mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation is likely not to be sufficiently beneficial to warrant implementation.

Footnote 2, 10 CFR Part 51, Subpt. A, App. B. The generic analysis of particular issues "may be adopted in each plant-specific review." *Id.* For Category 2 issues, the Generic EIS analysis "has shown that one or more of the criteria of Category 1 cannot be met, and therefore, additional plant-specific review is required." *Id.* These Category 2 issues include, among other issues, impacts on aquatic ecology from the once-through cooling system, impacts on groundwater use and quality, socio-economic impacts, impacts on threatened and endangered species, impacts on historic resources, and aesthetic impacts.

As demonstrated below, the NRC's bifurcation of the analysis of environmental impacts into Category 1 and Category 2 does not comply with NEPA, particularly as the NRC has applied those requirements to the Indian Point license renewal application.

C. *The Generic EIS for Re-licensing Should Be Rejected by NRC, and an Indian Point Specific EIS Must Be Required.*

In 1996, the NRC conducted a review and issued a Generic EIS for nuclear power plant license renewal. The world, and our understanding of it, has changed considerably since then. A tacit acknowledgement of such change appears in the NRC's own regulations. As the regulations note, "on a 10-year cycle, the Commission intends to review the material in this appendix and update it if necessary." *Footnote 2, 10 CFR Part 51, Subpt. A, App. B at 47.* Based upon the Generic EIS review and the regulations, a number of critical Category 1 issues are fully excluded from review in the Supplemental EIS for license renewal applications. In addition, Council on Environmental Quality ("CEQ") and NRC regulations require that the Commission's NEPA review examine new and significant information. 40 C.F.R. § 1502.9(c)(1)(ii); 10 C.F.R. §§ 51.92(a), 51.95(c)(3).

1. *Indian Point Unit 1 Was Never Subject to NEPA Review.*

The Nuclear Regulatory Commission must now prepare a complete EIS of Indian Point Unit 1's ongoing and future operations because Unit 1 was never subjected to NEPA when the AEC authorized its construction or operation. In 1956, the AEC issued Con Ed a construction permit to build Unit 1. At that time, the AEC had not promulgated substantive siting or seismic regulations, and the facility was not subjected to an environmental impact review since NEPA would not be enacted for over a decade. In 1962, the AEC issued Con Ed a provisional 18-month Facility Operating License for Unit 1. Although Entergy's license renewal application ostensibly does not include Unit 1, the fact remains that Entergy will continue to use various Unit 1 systems should the NRC grant the license renewal application.

Entergy's omission of this crucial reality from its license renewal application must result in the NRC abrogating its legal responsibilities under NEPA. For example, Entergy uses (1) Unit 1's water intake system (which diverts water from the Hudson River), (2) its unlined and leaking spent fuel pool, and (3) its low level radioactive waste system. Indeed, Indian Point may be the only facility in the country where a SAFSTOR unit remains physically conjoined and provides integral daily support to an operating unit. Since neither the AEC nor the NRC has examined the environmental impacts of Unit 1's operation pursuant to NEPA, the NRC must now conduct an analysis of Unit 1's continued operation that meets all legal requirements.

2. *The Generic EIS Deprived the Public of Substantive and Procedural Due Process.*

In 1996, it was unclear whether Indian Point Units 2 and 3 would operate for their full 40-year terms, let alone request license renewals. Thus, it was highly unlikely that all concerned residents of New York, Connecticut, New Jersey, or Pennsylvania would have participated in the Part 51 Appendix B regulatory rulemaking process, as is their right under NEPA. The public has the right to both procedural and substantive due process in such rights. Whether renewals for Indian Point would be requested, or when, if ever, that date would arrive, was neither planned nor foreseeable 11 years ago, which means that the public had no real motivation to participate. In short, the public in the vicinity of Indian Point was effectively denied the right to participate in the 1996 Generic EIS process.

3. *The Generic EIS, Which Has Not Been Updated in over 11 Years, Is Legally Stale, and Is Therefore Void.*

NRC regulations limit the issues to be addressed in the Supplemental EIS to those issues that it has denoted as Category 2 issues. The Generic EIS is now over 11 years old, and the information on which many of its conclusions were drawn is now dated. Therefore, the NRC should expand the scope of its environmental review for the Indian Point license renewal and consider issues beyond those identified as Category 2.

The guidance statement in the NRC regulations makes clear that the regulator views the 10-year window in the Generic EIS as appropriate for review. It has been 11 years, however, since the Generic EIS has been updated. The intervening years have seen a number of changes -- ranging from increased knowledge of environmental issues and sciences, the availability of energy alternatives and conservation strategies to terrorist attacks and threats, emergency planning

failures, groundwater degradation, and long-term on-site storage of nuclear waste. The failure of the NRC to update the Generic EIS in light of these developments renders it legally void under NEPA's requirement that "every significant aspect of environmental impact" be considered. *Baltimore* Gas, 462 U.S. 87.

Further underscoring New York's concern is that the NRC has been "considering" Generic EIS revisions for at least three years, but has not yet released a proposed revised Generic EIS. By way of comparison, the entire proposed time frame for the Indian Point license renewal Supplemental EIS and application is less than three years (if no hearing is conducted) and only a few months more than that if a hearing is conducted. This apparent incongruity of timelines does not justify precluding New York and other members of the public from meaningful and legally relevant comment on the Generic EIS. The NRC must prepare an Indian Point-specific Supplemental EIS that examines all the environmental impacts occasioned by a 20-year renewal of the facility. As part of that review, the NRC should expand the scope of its review and consider issues beyond those that were identified as Category 2 issues back in 1996 and commence a full NEPA EIS review of the Indian Point license renewal application. As it now stands, the NRC has formalistically, and without due consideration to Indian Point's peculiarities, determined that a number of critical issues cannot even be looked at in the environmental review.

II. THE SUPPLEMENTAL EIS MUST ANALYZE ALL ENVIRONMENTAL IMPACTS AS REQUIRED BY NEPA.

Separate and apart from New York's request that the NRC prepare a thorough Indian Point-specific EIS, the Supplemental EIS that the NRC is required to prepare must account for a number of environmental impacts specific to Indian Point. These include impacts on aquatic ecology from the once-through cooling system, impacts on groundwater use and quality, socio-economic impacts, impacts on threatened and endangered species, impacts on historic resources, and aesthetic impacts. Each one of these Category 2 impacts is discussed in more detail below.

A. Aquatic Ecology Impacts Must Be Analyzed in the Supplemental EIS.

1. Entrainment and Impingement of Fish and Shellfish

The historic and persistent use of once-through cooling for the initial 40-year license at Indian Point has wreaked havoc on the fish in the Hudson River. For the reasons provided below, another 20 years of once-through cooling at Indian Point would result in continued significant impingement and entrainment, and thus significant adverse impacts and continued environmental injury to the Hudson River.

As the NRC is aware, the New York State Department of Environmental Conservation ("NYSDEC") has been engaged in an ongoing Clean Water Act State Pollutant Discharge Elimination System ("SPDES") permit renewal process for Indian Point and other Hudson River power plants. Part of this effort lead to an agreement known as the Hudson River Settlement Agreement ("HRSA"). The HRSA required a thorough investigation of the ecology of the River for purposes of future technical decisionmaking on the SPDES permit application for Indian

Point Units 2 and 3 and other Hudson River power plants. The process that followed the HRSA resulted in two Draft EIS's prepared by the Hudson River power plant generators and a Final EIS prepared by DEC. The Final EIS prepared by the NYSDEC in 2003 is the final environmental review document required by State law. The NYSDEC's Final EIS contradicts the industry-prepared second Draft EIS in important ways. This means that as to those points, as a matter of law, the Final EIS supersedes the Draft EIS. Thus, any reliance on the Draft EIS by the applicant in this environmental review is misplaced as a matter of fact and as a matter of law.

Some key facts and conclusions that can be drawn from the HRSA Final EIS are as follows:

- The data show changes in fish species abundance with low species diversity because most of the River's fish production is concentrated in a few species, demonstrating that the "Hudson River estuary is far from equilibrium."
- Long-term trends show declining abundance of common and once abundant species including tomcod, Atlantic sturgeon, bluefish, weakfish, rainbow smelt, white perch, and white catfish.
- For the species that breed in the Hudson River estuary and whose young are vulnerable to entrainment, the estimated impacts from power plant mortality rate are sufficient to cause a substantial reduction in adult numbers.
- The tomcod, a key species to study with regard to power plant impacts, has seen a long-term decline in population, and entrainment losses are likely a factor in their decline.
- Indian Point accounts for more than half of the entrainment from the three plants -- an estimated annual entrainment of 1.2 *billion* fish eggs and larvae.

The New York State Water Quality 2004 report states that tens to hundreds of million of eggs, larvae, and juvenile fishes are killed per year by the large volume, once-through users on the Hudson River. The report indicates that based on the data collected, the September 1 young of year (YOY) fish populations have been reduced as much as 25-79% for spottail shiner (1977), 27-63% for striped bass (1986), 52-60% for American Shad (1992), 44-53% for Atlantic tomcod (1985), 39-45% for alewife and blueback herring combined (1992), 30-44% for whit perch (1983), and 33% for bay anchovy (1990). (The higher number assumes no through-plant survival; the lower number incorporates power company estimates of through-plant survival.)

Based on the above analysis, the impacts of the operation of once-through cooling at Indian Point for an additional 20 years will continue to have a significant impact on the aquatic resources of the Hudson River. The NRC should require Entergy to employ additional mitigation measures to minimize impacts on the resource. In particular, the NRC should conclude, as the NYSDEC already has, that closed-cycle cooling would be the most appropriate option considering the level of impacts.

Entergy's reliance on a statement in the second Draft EIS -- that the "fish community in the system (Hudson River) remains healthy and robust"-- is misplaced. The Draft EIS further stated that any observed changes in the population are attributable to causes other than the operation of the power plants. These statements, however, are belied by the HRSA data and are contradicted by the Final EIS, which is the final review of environmental impacts from Indian Point operations.

Other reports demonstrate further adverse impacts to the Hudson River fishery. Of particular note is the American Shad Assessment Report that was released in August 2007 by the Atlantic States Marine Fisheries Commission. Volume II of the report contains the assessment of the American Shad population in the Hudson River and notes that the adult population of American Shad in the Hudson River has seen a decline over the last twenty years. While the report notes that commercial fishing is the main reason for the mortality to adult shad, it also concludes that "total losses have declined over the past few years as one fossil fuel plant was retrofitted with closed cycle cooling," further supporting the NYSDEC's position that closed-cycle cooling is warranted at Indian Point. Thus, the Supplemental EIS should review the impacts from the once-through cooling operation at both units.

Finally, the NYSDEC noted in the HRSA Final EIS that "Declines in the abundances of several species and changes in species composition raises concerns and questions regarding the health of the River's fish community." Data show that several fish species, such as American shad, white perch, and Atlantic tomcod are declining in abundance and one species, rainbow smelt, has been lost from the Hudson River. John R. Waldman, et al., *Biodiversity and Zoogeography of the Fishes of the Hudson River Watershed and Estuary*, American Fisheries Society Symposium, 51:129-150 (2006). In addition, while the number of different fish has increased over time, diversity of fish, which includes the number *and* relative abundance of fish, has declined over time. *Id.*

Thirty-five years ago, as a result of its NEPA review of the operating license for Indian Point Unit 2, the AEC required closed cycle cooling to protect various aquatic species in the Hudson River. *Consolidated Edison Co. of New York (Indian Point Station Unit No. 2)*, LBP-73-33, 6 AEC 751 (1973). The initial determination regarding closed cycle cooling made by federal agencies ultimately led to the HRSA, additional study, and the NYSDEC draft SPDES permit issued in 2003. The 30 years that have passed have resulted in the same conclusion - the dramatic intake and use of Hudson River water has significant adverse environmental impacts and must be mitigated. New York has concluded in its draft permit that closed cycle cooling shall be required if the license renewal request is granted. The NRC must fully study and analyze this issue as part of the Supplemental EIS undertaking to determine if that renewal license is to be granted. The NRC must not allow the NEPA process in 2007 to avoid a full analysis and study of the environmental benefits of closed cycle cooling at Indian Point.

2. ***Heat Shock/Thermal Impacts Must Be Analyzed in the Supplemental EIS.***

The issue of heat shock from the operation of Indian Point must be addressed in the Supplemental EIS. The NYSDEC strongly suggests that NRC staff review the information contained within the Response to Comments section of the HRSA Final EIS, in particular, the section titled, "Fish Population - 5: Thermal Analyses needs to be updated to reflect recent,

more extreme conditions," where the NYSDEC stated its position on the thermal discharge issue.

The HRSA Final EIS concludes that "thermal discharges were inadequately addressed in the DEIS." The Draft EIS indicated that the three facilities examined did not have an impact because the "surface water orientation of the plume allows a zone of passage in the lower portions of the water column, the preferred habitat of the indigenous species." This claim was made without any supporting documentation. The NYSDEC's position, as stated in the Final EIS, is that the available data demonstrates otherwise. *See FEIS at 74, 75.*

Indian Point currently has an administratively extended SPDES permit. NRC regulation 10 CFR Part 51 requires the applicant to present a current Clean Water Act § 316(b) determination or, if necessary, a § 316(a) variance in accordance 40 CFR Part 125. This permit, while technically "current," however, does not address the actual significant environmental impacts from once-through cooling and is in the process of being revised. The NYSDEC issued a draft SPDES permit in 2003 and required closed cycle cooling. Thus, to base a conclusion with regard to the significance of the thermal impact from Indian Point on the existing SPDES permit, while possibly consistent with the technical requirements of the NRC's regulations in 10 CFR Part 51, is contrary to the spirit of Part 51 and the legal requirements of NEPA. Further, given the 2003 draft permit, any claim that the effectively outdated, but "administratively" extended, permit will remain valid for the next 20 years is simply inaccurate. Such a claim does not meet the basic intent of NEPA because it does not reflect actual environmental conditions, and reliance on it would not promote or reflect a full and necessary environmental review.

New York State has a water quality standard for thermal discharges, which provides that "all thermal discharges to the waters of the State shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife and on the body of water." 6 NYCRR § 704.1(a). New York has also adopted criteria to ensure that the water quality standards are met.

The available data -- generated from the applicant and the other Hudson River power plant generators as part of the HRSA -- regarding the thermal discharge at Indian Point demonstrates that state water quality criteria are *not* being met. Specifically, 6 NYCRR Part 704 (Criteria Governing Thermal Discharges) requires that a minimum of one-third of the surface as measured from water edge to water edge at any stage of the tide, shall not be raised to more than 4 degrees Fahrenheit over the temperature that existed before the addition of heat of artificial origin. 6 NYCRR § 704.2(b)(5). The generator's own data indicates that these criteria are not met under flood and ebb tidal conditions.

Thus, the NRC's Supplemental EIS should provide a thorough analysis of the impacts of license renewal on the Hudson River in the context of the State's water quality standard and criteria for thermal discharges - to minimize impacts so as to support a "balanced and indigenous" fish population. These are the requirements of the Clean Water Act. A thorough analysis of thermal impacts would also provide information needed to assess effects on coastal resources and Significant Habitats as described under the New York Coastal Management Plan ("Coastal Program"), discussed in II.C. below.

B. Groundwater Impacts Must Be Analyzed in the Supplemental EIS.

Another Category 2 issue required to be addressed in the Supplemental EIS is groundwater impacts. Radioactive material has been leaking from the spent fuel pools at both Unit 1 and Unit 2 at Indian Point. Neither the applicant nor the NRC know when the leaks began. This leaking radioactive material includes strontium 90, tritium, and cesium, known collectively as "radionuclides." In addition, the State is aware of recent reports confirming leaks in the transfer canal between Unit 2's reactor and spent fuel pool as well as in a pipe running between Unit 2 and Unit 3. Entergy's license renewal application recognizes that the plumes of tritium and strontium leaking from the plant's spent fuel pools have reached the Hudson River. *See* Environmental Report, at 4-87. These radionuclides can present a number of public health concerns. For example, strontium 90 has been linked to bone cancer, cancer in soft tissues near bone, and leukemia.

The NRC and various New York State agencies have been engaged in an ongoing groundwater investigation of these leaks. This investigation required drilling a number of test wells, which generated new information regarding the geology and groundwater resources of the site. While the Final Environmental Statement prepared for the original licenses for Units 2 and 3 indicated that groundwater flow was from north to south, the groundwater investigation has determined that groundwater flow is actually east to west -- toward the Hudson River. The Supplemental EIS should thus provide greater detail regarding the consequence of this newly understood parameter for evaluating the broader impacts to the site, and to the River, of groundwater contamination emanating from Indian Point.

Specifically, the following information of groundwater contamination by radionuclides should be included in the Supplemental EIS:

1) the extent of the contamination;
2) the chronology of events associated with the contamination;
3) the anticipated flow of the plume;
4) ongoing monitoring activities and results;
5) a discussion of the probable source of the leaks; and
6) the environmental impacts caused by the leaks.

In addition, the Supplemental EIS should fully discuss how license renewal could lead to continued or additional future leaks or discharges from operations or storage of spent fuel in the spent fuel pools. Of particular importance is the possibility of exceeding groundwater and surface water standards for these pollutants at some point during the 20 year license extension.

C. Socio-economic Impacts Must Be Analyzed in the Supplemental EIS.

Because the license renewal application must be consistent with the New York Coastal Management Program ("Coastal Program") authorized under the federal Coastal Zone Management Act, the Supplemental EIS must address the underlying policies relevant to Indian Point. The Coastal Program, administered by the New York State Department of State (NYSDOS), incorporates a comprehensive set of objectives reflected in forty-four coastal policies, many of which cross-cut socio-economic issues. Thus, not only must the NRC's review

of the license renewal application be consistent with the federal and state Coastal Program requirements and analyses, but the policies inherent in those analyses also form the basis of a coastal socio-economic analysis, which is a Category 2 issue required to be examined by the NRC's regulations for nuclear power plant license renewals.

Some of the coastal policies include waterfront redevelopment, water dependent uses, port and harbor management, growth management, significant habitats, commercial and recreational fisheries, flooding and erosion hazards, public access and recreation, agriculture, historic resources, scenic quality, water quality, air quality, and wetlands. The nearby City of Peekskill and the Town of Stony Point have approved Local Waterfront Revitalization Programs ("Local Waterfront Plans") that tailor the Coastal Program to their unique local conditions.

Based on the above, the Supplemental EIS should include an analysis that assesses the reasonably foreseeable adverse effects of the license renewals and mitigation measures on State coastal resources and uses. The Supplemental EIS should examine if approving the license renewal request and its environmental impacts would be consistent with the enforceable policies of the Coastal Program and of applicable Local Waterfront Plans. The analysis should consider how the license renewal will have continuing and possibly new effects on resources and uses of the Hudson River and upland coastal areas, including economic and other effects far afield of the facility.

D. Endangered Species Impacts Must Be Analyzed in the Supplemental EIS.

Another Category 2 issue that the NRC must consider in Indian Point's license renewal application is the impact of an additional 20 years of operation on threatened or endangered species. Under the Federal Endangered Species Act ("ESA"), it is unlawful to "take" a threatened or endangered species. 16 U.S.C. § 1538(a)(1)B). The ESA broadly defines "take "as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect." 16 U.S.C. § 1532(19). However, a party does not violate the ESA if he or she has an "incidental take" permit, also granted pursuant to the ESA. 16 U.S.C. § 1539(a)(1)B). Here, the applicant is taking threatened or endangered species by operation of the intake structures at Indian Point. Specifically, Hudson River shortnose sturgeon, a species protected as "endangered" under the ESA, are impinged on the intake screens at Indian Point. Impingement of fish on screens at power plants harasses, harms, wounds, kills, traps, captures, and collects fish and thus qualifies as an activity that can "take" an endangered species. Entergy has no incidental take permit. Thus, Entergy is in violation of the ESA.

On November 20, 2000, the National Marine Fisheries Service ("NMFS") issued a Biological Opinion Report for the review of the Incidental Take permit (copy enclosed) sought not by the operator of Indian Point, but by the operators of two other Hudson River power plants, Roseton and Danskammer. This Opinion is nonetheless relevant. Specifically, the Biological Opinion

- referenced the shortnose sturgeon recovery plan (National Marine Fisheries Service Final Recovery Plan for the Shortnose Sturgeon, December 1998) that identifies habitat degradation and mortality as principal threats to the species survival. Identified impingement of shortnose sturgeon on the screens covering cooling water intake structures as a prime reason for mortality (Page 16).

- reached the above conclusion even though it noted that entrainment sampling was not conducted for each year for each Hudson River power plant. In fact, as indicated in Table 1 of the Opinion, there has not been any entrainment sampling at Indian Point Units 2 & 3 since 1987.[1]

- stated that while levels of entrainment and impingement for shortnose sturgeon at the power plants on the Hudson River "are relatively small...the fact remains that these (and other plants) have previously impinged shortnose sturgeon and may have impacted the Hudson River population."

The Biological Opinion concluded that the issuance of the Incidental Take permit to the two upstream power plants, Roseton and Danskammer, would not have a significant impact on the shortnose sturgeon population in the Hudson River. However, the Biological Opinion also included a discussion of the mitigation measures employed at these two facilities, which of course, it could not have included for the Indian Point mitigation measures. Further, the Incidental Take permits issued to the other two plants include an adaptive management clause that allows the NMFS to require additional mitigation if the impact to the shortnose sturgeon population in the Hudson River from the facilities is greater than anticipated. This currently is not an option at Indian Point Units 2 and 3 because Entergy does not have an incidental take permit for the shortnose sturgeon. Thus, as a matter of law, *any* impingement violates the Endangered Species Act.

E. Historic Resources Impacts Must Be Analyzed in the Supplemental EIS.

Impacts on historic resources is a Category 2 issue under the NRC's NEPA regulations and must be considered in its NEPA review of the Indian Point license renewal. As demonstrated below, several scenic resources are located in proximity to the plant and they should be described in the Supplemental EIS.

Moreover, the Coastal Zone Management Program -- which postdated the original licenses granted to the Indian Point nuclear plant operators -- provides for the protection of unique visual resources in the coastal region through the designation of Scenic Areas of Statewide Significance (SASS), and protection, restoration, or enhancement of the overall scenic quality of the coastal area outside of designated SASS's. Indian Point is outside of, but adjacent to, the southern part of the Hudson Highlands SASS -- a highly scenic and valued region of the Hudson River Valley, rich in natural beauty and cultural and historic features.

Indian Point is nearest to the Jones Point subunit (HH-14) of the Hudson Highlands SASS. The Jones Point subunit is located on the west bank of the Hudson River at the base of Dunderberg Mountain and extends to the mean high tide line on the eastern shorelands. It is located in the Town of Stony Point, Rockland County and the City of Peekskill, Town of Cortlandt, and Village of Buchanan, Westchester County. This subunit is composed of a narrow, gently rising bank of the Hudson River to the south of Jones Point, adjacent to the steep wooded hillside of Dunderberg Mountain. The Hudson River adjacent to the subunit is nearly one mile wide.

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[1] Nor, apparently, has such sampling examined the Indian Point Unit 1 water intake structure.

Jones Point is a landmark on the Hudson River and, along with Dunderberg Mountain, forms part of the southern gateway to the Hudson Highlands.

The Jones Point subunit narrative briefly discusses the Indian Point plant: "Extensive industrial development to the south and east of the subunit, including the Indian Point nuclear plant across the Hudson River, is a discordant feature and detracts significantly from the high scenic quality surrounding the subunit." The narrative continues: "Views from the subunit are contained by the bends in the Hudson River and are directed across the river to the City of Peekskill and the villages of Buchanan and Verplanck. The incongruent structures of industrial development on the eastern shorelands of the Hudson River dominate the views from the subunit, providing negative focal points."

In addition to the Jones Point subunit, the plant can be viewed from the Bear Mountain State Park subunit (HH-11) and from Anthony's Nose subunit (HH-16) on the eastern side of the Hudson. These subunits form the southern gateway to the Hudson Highlands SASS.

The proposed license renewal of Indian Point and any potential mitigation measures, including the use of cooling towers (discussed in the next section), should be considered in the context of the NYCMP for the preservation of these visually important areas.

F. Aesthetic Impacts Must Be Analyzed in the Supplemental EIS.

The State recommends that the Supplemental EIS include a visual impact analysis to determine the significance of the impacts from cooling towers. Cooling towers do not present an all or nothing proposition, sacrificing aesthetics for promoting a healthier fishery. Both interests can be accommodated, as reflected in various cooling tower designs.

Moreover, the analysis in the Supplemental EIS could, for example, include a visual analysis consistent with New York State protocol for addressing these impacts under the State Environmental Quality Review Act ("SEQRA"): *Assessing and Mitigating Visual Impacts, DEP-00-2* ("DEC Visual Policy"). This visual impact analysis should also include a discussion on the impact to visual resources described under the NYSDOS designated SASS locations. The impacts analysis must also comply with the U.S. Army Corps of Engineers *"Instruction Report EL-88-1: Visual Resources Assessment Procedure for U.S. Army Corps of Engineers,"* March 1988.

III. CATEGORY 1 ISSUES MUST BE ADDRESSED IN THE NEPA EIS FOR THE INDIAN POINT LICENSE RENEWALS.

The NRC's rigid adherence to its Category 1 and Category 2 impacts for license renewal applications does not adequately account for site-specific impacts and new and significant information available since the initial license. In other words, the artificial and arbitrary bifurcation of the environmental review thwarts a full and fluid environmental review that adapts to new information and changing circumstances at Indian Point, as NEPA requires. Several issues fall within this environmental "no man's land" of Category 1 issues that the NRC, via regulation, denies New York State from participating in for Indian Point by refusing to consider in the environmental review of license extension, including (1) seismic/earthquake hazards, (2) terrorist attacks on the facility, particularly the spent fuel pools, (3) accidental

release/emergency response and evacuation, (4) radionuclide air dispersion, (5) appropriate "no action" altenatives, and (6) on-site long-term storage of spent fuel.

A. Seismic/Earthquake Hazards Must Be Analyzed in the Supplemental EIS.

The NRC's Supplemental EIS must analyze the current state of knowledge about seismic/earthquake hazards at Indian Point. A substantial amount of new seismic information has been gathered in the vicinity of Indian Point since the initial seismic evaluations were done in permitting IP 1, IP 2, and IP 3. In addition, there have been substantial improvements in our understanding of earthquakes, especially in the central and eastern United States, their relationship to geologic environments, and their impacts upon industrial and residential buildings. Entergy's Environmental Report and Updated Final Safety Analysis Reports ("UFSARs") do not reflect seismic information developed after the early 1980s. Thus, with respect to seismic information, the three FSARs cannot be said to be "updated," and the NRC should require Entergy to revise those documents as well as the ER.

One particular area where there is a far greater understanding today is the difference between seismic activity at the plate margins and intraplate areas - directly relevant to the Indian Point location. Under the old paradigm, the area surrounding Indian Point was considered stable because it did not exhibit the type of geologic activity present at interplate margins such as the San Andreas Fault in California, which is known for frequent earthquakes with relatively short time periods between major quakes. In addition, the faults impacted by plate margin quakes often exhibit clear evidence of recent movement.

By contrast, intraplate areas are now known to have fairly frequent low magnitude earthquake activity, often concentrated in identifiable zones of weakness. But impacted faults typically show little or no visible evidence of recent activity. Data gathered subsequent to the initial permitting of Indian Point 2 and 3 clearly shows this type of earthquake activity in the vicinity of Indian Point.

The UFSAR does not include a significant amount of recent data obtained from seismic monitoring points specifically installed to gather additional seismic information in the vicinity of Indian Point. The older data set does not include the magnitude 4, Ardsley, New York, shock in 1985. It also does not include the recent data mentioned above, which shows a significant number of small earthquakes in a northwest-southeast-oriented band running from Stamford, Connecticut to Peekskill, New York. This band intersects a band of similar earthquakes concentrated beneath the surface trace of the Ramapo Fault, just a few miles north of Indian Point.

Another troubling aspect of the intraplate model of seismic activity, is the potential for earthquakes at depth, which may be of a larger magnitude than those seen in the recent past. The fact that they have not been seen but are still considered possible, is because the time between these quakes can be dramatically longer than the relatively short period for which we have data. Given this possibility, it is imperative that the current data be included in a revised evaluation of seismic hazard using the intraplate model as well as applying recent developments in the field of earthquake engineering as part of the license renewal process.

Thus, the ER and the "Updated" FSAR -- and the Supplemental EIS -- must either (1) assess the probability of a severe earthquake occurring during the 20 years of operation authorized by any renewed license and consequences of an earthquake-induced severe accident and calculate new economic costs or (2) explain the technical and scientific bases upon which Entergy relies for rejecting the implications of this new information. Indeed, the ER, UFSAR, and Supplemental EIS should examine such issues for the entire term of any renewed operating license. These costs must then be used to better evaluate alternatives to mitigate or eliminate the consequences of an earthquake induced severe accident.

B. The Possibility of a Terrorist Attack Must Be Analyzed in the Supplemental EIS.

Much has changed since the completion of the Generic EIS in 1996. As the world knows, on September 11, 2001, terrorists hijacked four jet airliners and crashed three of them into their intended targets. The impact of the fuel-laden planes caused explosions and large, long-lasting fires. Those explosions and fires destroyed a portion of the Pentagon in northern Virginia and caused the collapse of the World Trade Center towers and nearby buildings in New York City. *See Nat'l Comm'n on Terrorist Attacks Upon the U.S.* ("9/11 Commission"), *The 9/11 Commission Report* (2004).

Two of the hijacked planes flew over or near Indian Point. *Id.* at 32. As late as July 2001, the terrorists were considering attacking a specific nuclear facility in New York, which one of the pilots "had seen during familiarization flights near New York." *Id.* at 245. This was most likely Indian Point.

Since then, government decision makers have recognized the risks to nuclear power facilities. Based on this information, it is imperative that the Supplemental EIS analyze the potential environmental impacts of a terrorist attack on Indian Point. A number of publicly known examples establish the need for this analysis. In his 2002 State of the Union address, President Bush stated that "diagrams of American nuclear power plants" had been found in Afghanistan, suggesting that Al-Qaeda may have been planning attacks on those facilities. *The President's State of the Union Address* (Jan. 29, 2002).[2] On September 4, 2003, the United States General Accounting Office ("GAO") issued a report noting that the nation's commercial nuclear power plants are possible terrorist targets and criticizing the NRC's oversight and regulation of nuclear power plant security. GAO, *Nuclear Regulatory Commission: Oversight of Security at Commercial Nuclear Power Plants Needs to Be Strengthened*, GAO-03-752 (2003); *see also* GAO, Testimony Before the Subcomm. on Nat'l Security, Emerging Threats, & Int'l Relations, House Comm. on Gov't Reform, *Nuclear Power Plants Have Upgraded Security, But the NRC Needs to Improve Its Process for Revising the DBT*, GAO-06-555T, at 1 (2006) [hereinafter "*2006 GAO Testimony*"]. Five major airports are located within a few minutes flying time of Indian Point. The Federal Emergency Management Agency ("FEMA"), a federal agency responsible for assessing terrorist threats and for assuring the safety and security of the public, has taken actions signifying that it considers an aircraft attack on a nuclear power plant to be a credible threat. For instance, during a June 2004 exercise to assess emergency preparedness at Indian Point, the agency simulated a suicide attack by a large cargo jet. Fed. Emergency Mgmt. Agency, *Final Exercise Report: Indian Point Energy Center*, at 101-02 (Oct. 25, 2004).

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[2] *available at* http://www.whitehouse.gov/news/releases/2002/01/20020129-11.html.

Based on this information, it is imperative that the NRC's Supplemental EIS analyze the potential environmental impacts of a terrorist attack on Indian Point. Of particular concern are the potential widespread environmental impacts if a terrorist attack damaged the reactor core, spent fuel pools, the storage casks, or other areas. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), *cert. denied*, 127 S. Ct. 1124 (2007). The NRC has implicitly recognized the gravity of the consequences of a terrorist air attack by requiring applicants for certain new nuclear reactors to consider such attacks. *See, e.g.*, 72 Fed Reg. 56,287 (October 3, 2007). This concern over the damage that could be caused by an aircraft impact is reflected in other NRC documents as well. *See* NRC, *Evaluation of Aircraft Crash Hazards Analyses for Nuclear Power Plants*, NUREG/CR-2859 (1982); NRC, *Relay Chatter & Operator Response After a Large Earthquake*, NUREG/CR-4910 (1987); NRC, *Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants*, NUREG-1738, at § 3.5.2 (2001); *NRC: Nuclear Power Plants Not Protected Against Air Crashes*, Associated Press (Mar. 28, 2002).

Other studies identify the threat as a significant issue. Ian B. Wall, *Probabilistic Assessment of Aircraft Risk for Nuclear Power Plants*, 15 Nuclear Safety 276 (1974); Power Auth. of the State of N.Y. & Consol. Edison Co., *Indian Point Probabilistic Safety Study*, at 7.6-3 to 7.6-6 (1982). In 2005, the National Academy of Sciences released a report from a study it conducted at the request of Congress, with the sponsorship of the NRC and the Department of Homeland Security, of the security risks posed by the storage of spent fuel at nuclear plant sites. *See* Nat'l Acad. of Scis., *Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report* (2006). Based upon information provided by the NRC, the National Academy of Sciences judged that "attacks with civilian aircraft remain a credible threat." *Id.* at 30; *see also* German Reactor Safety Org., *Protection of German Nuclear Power Plants Against the Background of the Terrorist Attacks in the U.S. on Sept. 11, 2001* (Nov. 27, 2002). Accordingly, New York State requests that the NRC analyze the environmental impacts of such a terror attack at Indian Point.

C. *Accidental Release/Emergency Response and Evacuation Must Be Analyzed in the Supplemental EIS.*

A significant release of radiation into the environment from a nuclear power plant – whether through a sudden event like a terrorist attack or through slow leakage because of chronic conditions like structural deterioration – could have disasterous environmental and public health consequences. *See, e.g., Edwin Lyman, Chernobyl on the Hudson? The Health & Economic Impacts of a Terrorist Attack at the Indian Point Nuclear Plant*, 19-20, Union of Concerned Scientists (2004).[3] Because of such risks, and following the 1979 accident at the Three Mile Island nuclear power station, owners of nuclear power plants must demonstrate that nearby residents can be safely and quickly evacuated.

New and significant information demonstrates that such prompt and effective evacuation is not possible for the communities surrounding Indian Point. For example, a 2003 report prepared by the consulting firm headed by James Lee Witt -- former director of FEMA, the agency to which the NRC delegates primary responsibility for reviewing the adequacy of such plans -- concluded that safe evacuation of the area surrounding Indian Point is highly unlikely, if not impossible. James Lee Witt Associates, *Review of Emergency Preparedness of Areas Adjacent to*

[3] This report is available at http://www.ucsusa.org/assets/documents/global_security/ IndianPointHealthStudy.pdf.

Indian Point and Millstone, viii (2003) ("Witt Report"). The Witt Report found that the NRC-approved Indian Point plan fails to consider (1) that many essential personnel will take care of their families rather than focus on their response activities, (2) the possible ramifications of a terrorist-caused event, and (3) the likelihood and effects of spontaneous or "shadow" evacuation. *Id. at vi.* The Witt Report also observed that it is questionable whether those at risk will have as much warning as the NRC assumes and that the narrow roads and hilly terrain within the ten-mile Emergency Planning Zone ("EPZ") would make safe evacuation highly unlikely, if not impossible.

The Witt Report's conclusions are bolstered by a 2003 traffic study by KLD Associates, which concluded that evacuation times for the EPZ around Indian Point had doubled since 1994 and could take up to 9.25 hours in good weather conditions and 12 hours in snow conditions. KLD Associates, Inc., *Indian Point Energy Center Evacuation Time Estimate,* Table 7-1D, at 7-14 (2003) ("KLD Traffic Study"). Due in large part to the inadequacies identified in the Witt Report and the information contained in the *KLD Traffic Study,* three out of the four county governments with territory in the ten-mile EPZ for Indian Point – Westchester, Orange, and Rockland – have refused to cooperate with updating the Indian Point evacuation plan or participating in exercises to test the plan.

The emergency planning and evacuation failures experienced during Hurricanes Ivan, Katrina, and Rita further demonstrate the real world inadequacies of Indian Point's evacuation plan. *See generally* Cooper and Block, *Disaster, Hurricane Katrina and the Failure of Homeland Security,* Times Books (2006); *A Failure of Initiative, Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina,* Report No. 109-377 (2006). NEPA requires that any NRC Supplemental EIS prepared as part of the current license renewal proceeding must also examine these inadequacies.

D. NRC's Supplemental EIS Must Examine the Radionuclide Air Dispersion Model and Relevant Meteorological Data As Part of the NEPA and SAMA Analysis.

Pursuant to NEPA, the NRC must examine up-to-date and facility-specific information regarding meteorological plume behavior. Entergy's model for atmospheric dispersion of a point release of radionuclides does not take into account variable meteorological conditions such as wind speed and direction changes, Hudson Valley topography, and coastal breezes. Such omissions are of critical concern, and this data must be fully analyzed. The scope of a NEPA review should include whether the plume model is sufficiently accurate for use in computing the health and safety consequences of an accident, as an *environmental issue.*

E. The Alternatives of Not Renewing the License for Either Unit 2 or Unit 3 Must Be Analyzed in the Supplemental EIS.

The license renewal application's analysis of alternatives ignores the possibility that one license renewal might be approved and the other rejected. Such an analysis might impact on the feasibility of alternative technologies, such as wind, solar, biomass, or energy conservation, in terms of their capabilities to meet the need created by not granting the license renewal request. The ER failed to consider which unit might be better shut down and which might be better left

to run an additional twenty years. The alternatives analysis must consider these varying possibilities to satisfy NEPA.

F. *The Environmental Impacts of Long-term Storage of Spent Fuel at Indian Point Must Be Analyzed in the Supplemental EIS.*

Indian Point's three spent pools were never intended to serve as medium-term or long-term storage facilities for spent radioactive fuel. Rather, the federal government and the nuclear energy industry expected to dispose of spent radioactive fuel at the proposed nuclear waste disposal facility located at Yucca Mountain in Nevada beginning in 1998. However, no long term disposal site yet exists for radioactive spent fuel. *Entergy Nuclear Generating Co. v. U.S.*, 64 Fed. Cl. 336 (2005). Indeed, to date, construction of the facility has not yet even begun. A Department of Energy official has recently stated that, under a very optimistic scenario, the Yucca Mountain disposal site could not begin receiving waste until 2017, and that slippage beyond that date was likely. *See Hearing Before the House Energy and Water Development Appropriations Subcommittee*, (Mar. 28, 2007) (statement of Edward F. Sproat III, Director for Civilian Radioactive Waste Management, DOE). In addition, even if completed in accordance with this delayed schedule, Yucca Mountain cannot accommodate the additional wastes that will be generated by the approximately 45 plants whose licenses have already been extended beyond their initial 40 year operating licenses or any new plants licensed in the future.

Given the significant and on-going delays concerning the Yucca Mountain facility, it appears increasingly likely that spent nuclear fuel will be stored on site for many years at the 103 nuclear power plants located throughout the country. This on-site storage will have significant impacts on present and future land use in the area around the Indian Point plant. Given Yucca Mountain's limited storage capacity and the uncertainty when, or if, it will open, the NRC should examine the environmental impacts on land use of the long-term storage of spent fuel at the Buchanan facility.

IV. ALTERNATIVES TO INDIAN POINT MUST BE ANALYZED IN THE SUPPLEMENTAL EIS.

Numerous studies have demonstrated, particularly since the price of electricity has risen dramatically in the last few years, that saving a MW hour of electricity is far less expensive than generating one. NEPA requires a full assessment of any viable alternative to the proposed action. In particular, such an assessment should be based on the recognition that any alternative to Indian Point generated electricity does not need to be available for at least 6 or 8 years, when the initial operating licenses expire. Thus, there is substantial lead time for such energy conservation strategies and alternative power sources to come on line.

Furthermore, New York State is pursuing various actions to implement additional energy efficiency standards and encourage alternative energy sources within the next few years. For example, in April 2007, Governor Spitzer announced a "15 by 15" Clean Energy Plan to reduce energy consumption in 2015 by 15 percent. Remarks by Governor Eliot Spitzer. *"15 by 15": A Clean Energy Strategy for New York*, (Apr 19, 2007). This reduction is to be achieved by energy

efficiency alone.[4] The energy efficiency that would be achieved under this Plan would more than replace the capacity and energy provided by Indian Point.

In addition, a full and fair assessment of such alternatives also should take into account that such strategies and sources will be in use during Indian Point's proposed 20 additional years of operation beyond 2013 and 2015. Entergy has failed to provide such an analysis and relies, at best, on the current status of energy conservation (and other benign alternatives like wind turbines, solar power, biomass, geothermal, etc.) rather than on the potential for full deployment of these alternatives if, within the next two years, it were determined that Indian Point Unit 2 and/or Unit 3 would cease operation when their current licenses expired in 2013 and 2015. As part of its NEPA review, the NRC's EIS should evaluate the impact of such an incentive on the development and deployment of non-nuclear, carbon-neutral, energy alternatives.

Moreover, the closure of Indian Point would be expected to encourage the creation of additional generating capacity. As explained in the 2005 *Indian Point Options* study by Levitan & Associates, it is reasonable to expect that the retirement of Indian Point would encourage developers to complete various projects that have been approved but have not yet been built:

> Project developers are keenly tuned to market dynamics in New York. They would realize that retiring IP would cause market energy and capacity values to increase across the downstate region. These price signals would be important, given IP's size and location, to encourage the development of new generation and/or transmission projects that would replace the lost capacity. These new generation projects could include decentralized and renewable resource options. If the retirement of IP were announced in advance, developers would be able to calculate the economic feasibility of their projects and pursue those that make financial sense in time to maintain the state's reliability requirement.

Indian Point Retirement Options, Replacement Generation, Decommissioning/Spent Fuel Issues, and Local Economic/Rate Impacts, prepared for the County of Westchester and the County of Westchester Public Utility Service Agency, by Levitan & Associates, Inc., June 9, 2005, at pages 30 and 31.

CONCLUSION

Indian Point Units 2 and 3 were initially granted 40-year operating licenses. The operator now seeks another 20 years to operate these aging facilities. The environmental review requirements of federal law did not fully analyze or review the adverse environmental impacts of operation of these nuclear generating facilities when they were issued the original licenses. Today, NEPA requires a supplemental environmental review to analyze the issues raised in this license renewal application to add to the generic environmental review undertaken for all nuclear

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[4] available at: http://www.state.ny.us/governor/keydocs/0419071_speech.html

generating facilities in 1996. The State of New York requests that the NRC conduct a full and thorough environmental review and will participate in every facet of that process.

Indian Point is a unique facility on the Hudson River located nearby to twenty million people. Full compliance with NEPA requires the NRC to set aside the 1996 generic review, and initiate a new environmental review process that addresses every impact of the license renewal request as they specifically relate to Indian Point. The environmental review must incorporate many things that could not have been incorporated in 1996 - including advancement in understanding of our environment and the realities of a post-9/11 world. Absent a full Indian Point specific environmental review, the NRC must fully and thoroughly analyze all issues set forth in these comments as part of the license renewal process Supplemental EIS.