

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3)
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UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION
 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
 ENTERGY NUCLEAR OPERATIONS, INC.) Docket Nos. 50-247-LR/ 50-286-LR
)
 (Indian Point Nuclear Generating)
 Units 2 and 3))

NRC STAFF'S INITIAL STATEMENT OF POSITION ON
 CONTENTION NYS-9, NYS-33 AND NYS-37 (ALTERNATIVES) (CORRECTED)

Pursuant to 10 C.F.R. §§ 2.1207(a)(1) and 2.337(g)(2), Scheduling Order (July 1, 2010) (unpublished) at 14, Order (Clarifications of Procedures for Evidentiary Filings) (Oct. 18, 2011) (unpublished) at 2-3, and Order (Granting NRC Staff's Unopposed Time Extension Motion and Directing Filing of Status Updates) (February 16, 2012) (unpublished) at 1, the Staff of the U.S. Nuclear Regulatory Commission ("Staff" or "NRC Staff") submits its initial written statement of position and written testimony with supporting affidavit and exhibits on New York State's ("NYS") Contentions NYS-9, 33, and 37 ("NYS-37") regarding the analysis of alternatives to license renewal in the Environmental Report filed by Entergy Nuclear Operations, Inc. ("Entergy") in its license renewal application for Indian Point Nuclear Generating Units 2 and 3 ("Indian Point"), the Draft Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 ("DSEIS"), and the Final Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 ("FSEIS"). Appended to this filing is the "NRC Staff's Testimony of Andrew L. Stuyvenberg Concerning Contention NYS-9, NYS-33 and NYS-37 (Alternatives, Consolidated)" ("ALS Testimony") and eleven (11) Staff Exhibits. For the

reasons set forth below and in the testimony filed herewith, the staff of the U.S. Nuclear Regulatory Commission (“Staff”) submits that, contrary to the claims of New York State (“NYS”), the FSEIS and DSEIS provide meaningful analyses of alternatives to the proposed action, including the no-action alternative and energy conservation and energy efficiency and the FSEIS responds to the comments submitted by NYS on the DSEIS. Accordingly, NYS’s challenge to Entergy’s application for renewal of the Indian Point operating license cannot be sustained.

BACKGROUND

On November 30, 2007, NYS filed Contention NYS-9 alleging that the Applicant's Environmental Report failed to evaluate energy conservation as an alternative that could displace the energy production of one or both of the Indian Point reactors and thus failed to carry out its obligations under 10C.F.R. § 51.53(c)(2).¹ On July 31, 2008, in its Memorandum and Order ruling on the petitioners’ standing to intervene and the admissibility of their contentions,² the Board found, *inter alia*, that the portion of NYS-9 related to the alternatives analysis was inadmissible, but the portion relating to the "no-action" alternative was admissible.³ As admitted, NYS-9 reads: “Entergy in its ER has not evaluated energy conservation as part of its ‘no action’ alternative analysis.” *Id.* at 226.

On December 22, 2008, the NRC issued its Draft SEIS concerning the Indian Point LRA. On February 27, 2009, New York filed New and Amended Contentions, including New

¹ See “New York State Notice of Intention to Participate and Petition to Intervene” (“2007 New York Petition” or “2007 Petition”), filed November 30, 2007 at 106.

² *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, 68 NRC 43 (2008).

³ LBP-08-13, slip op. at 45-51 (NYS-9).

Contention 33, in which the State presented numerous arguments raising issues with respect to the DSEIS's discussion of energy conservation and efficiency, renewable energy resources, energy transmission capacity and possible combinations of different energy sources in the "no action alternative". On June 16, 2009, the Board admitted NYS-33 based on its determination that the data and conclusions in the Draft SEIS differed from those in the ER.⁴ The Board consolidated NYS-9 with NYS-33 based upon the similarities of issues dealing with the "no-action" alternative.⁵ NYS-33 asserts:

The DSEIS discussion of energy alternatives (Chapter 8) violated NEPA because it ignores significant new information and fails to provide a rigorous analysis of the costs, benefits, and feasibility of energy conservation and other measures under the "No-Action" alternative in violation of 10 C.F.R. §§ 51.53(c)(3)(iv), 51.71 (a) and (d), and 51.95, 10 C.F.R. Part 51, Subpart A, Appendix B; and 40 C.F.R. §§ 1502.14 and 1502.9.

On December 3, 2010, the Staff issued the FSEIS for the Indian Point LRA. On February 3, 2011, the State filed its Motion and Petition for new Contention 37, which the State characterized as updating NYS-9 and NYS-33 to refer to the FSEIS. NYS-37 asserts:

The FSEIS discussion of energy alternatives (Chapter 8) fails to provide a meaningful analysis of energy alternatives or responses to criticism of the DSEIS, in violation of the requirements of 42 U.S.C. §§ 4331 and 4332; 10 C.F.R. §§ 51.91(A)(1) and (c), 51.92(c)(4) and Part 51, Subpart A, Appendix A and Appendix B; 40 C.F.R. §§ 1052.1, 1052.2(G), 1502.9, and 1502.14; and 5 U.S.C. § 551 et seq.

The Board admitted NYS-37 to the extent that it updates and supersedes NYS-9 and NYS-33.⁶ The Board pointed out that it was also admitting NYS-3 to the extent that it alleged that

⁴ Order (Ruling on New York State's New and Amended Contentions), *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), (June 16, 2009)(unpublished) at 11.

⁵ Order (Ruling on New York State's New and Amended Contentions), *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), (June 16, 2009)(unpublished) at 13.

⁶ Order (Ruling on Pending Motions for Leave to File New and Amended Contentions) at 34, 71 (July 6, 2011) (unpublished) at 34.

the FSEIS was deficient for failing to address information published after the issuance of the DSEIS regarding the no-action alternative and for failing to address comments on the DSEIS.⁷ The Board cautioned, however, that “we are not authorizing a broad-ranging inquiry into alternative scenarios and the need for power, which would be precluded by Commission regulations, and which we have previously excluded” and that admission of the contention was still limited to the adequacy of the Staff’s evaluation of the no action alternative and that admission of NYS-37 did not materially expand the scope of the contention.⁸

Subsequently, Entergy filed a Motion in Limine to exclude portions of NYS’ pre-filed testimony and exhibits on Contention NYS-37 on the grounds that they pertained to need for power and the related issue of the need for reactive power to support grid stability and reliability.⁹ The Board denied the motion but again cautioned that inquiry into need for power was prohibited by the regulations and again pointed out that NYS could “dispute the accuracy and adequacy of the NRC Staff’s evaluation of the no-action alternative.”¹⁰ The Board closed the matter, stating that it would “give all evidence its appropriate weight at evidentiary hearing in the context of evaluating the specific issue before us.”¹¹

DISCUSSION

I. LEGAL AND REGULATORY REQUIREMENTS

⁷ *Id.*

⁸ *Id.* at 35 (internal footnote omitted).

⁹ Entergy’s Motion in Limine to Exclude Portions of Pre-Filed Testimony and Exhibits for Contention NYS-37 (Energy Alternatives) (January 30, 2012).

¹⁰ Order (Granting in Part and Denying in Part Applicant’s Motions in Limine) (March 6, 2012) (unpublished) at 19.

¹¹ *Id.* at 20.

A. NEPA

Contention NYS-17 (Consolidated) arises under the National Environmental Policy Act of 1969, as amended (NEPA), and the NRC's regulations that implement this statute. 42 U.S.C. §§ 4321 *et seq*; 10 C.F.R. Part 51. Under NEPA, the NRC is required to take a "hard look" at the environmental impacts of a proposed action, as well as reasonable alternatives to that action. See *Louisiana Energy Servs., L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998). This "hard look" is tempered by a "rule of reason" that requires agencies to address only impacts that are reasonably foreseeable – not remote and speculative. See, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973). "NEPA does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts." *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005) (emphasis in original). Neither does it call for the impossible. The Supreme Court observed that where it is not possible for an agency to analyze environmental consequences for a proposed action or alternatives to it, requiring such analysis would have "no factual predicate" and held that under those circumstances an EIS was not required. *Kleppe v. Sierra Club*, 427 U.S. 390, 401-02 (1976).

Further, "NEPA gives agencies broad discretion to keep their inquiries within appropriate and manageable boundaries." *Louisiana Energy Servs., L.P.*, CLI-98-3, 47 NRC at 103 (citation omitted). As the Commission recently observed, "NEPA requires consideration of 'reasonable' alternatives, not all conceivable ones." *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-05, ___ NRC ___ (March 8, 2012) slip op at 48. There, the Commission stated:

We also have held that our Staff EISs "need only discuss those alternatives that . . . 'will bring about the ends of the proposed action" – a principle equally applicable to Environmental Reports. We give "substantial

weight to the preferences of the applicant and/or sponsor.” NextEra’s stated purpose for the Seabrook license renewal, as reflected in its application, is baseload power generation. Thus, although NextEra in its Environmental Report briefly examines wind energy as a potential alternative to a license renewal, NextEra rejected that option on the ground that wind power, at least in its current state, is incapable of producing baseload power.

Id. at 49-50.

Ultimately, the test is whether an EIS “contains a reasonably thorough discussion of the significant aspects of the probable environmental consequences . . . and a rational connection between the facts found and the choice made”. *Save the Peaks Coalition v. U.S. Forest Service*, 669 F.3d 1025, ____ (9th Cir. 2012) (internal citations and quotation marks omitted). Where a brief statement of the issue will suffice to address an issue, no more is required. “The agency may limit its discussion of environmental impact to a brief statement, when that is the case, that the alternative course involves no effect on the environment, or that their effect, briefly described, is simply not significant.” *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972). Similarly, “[w]hen alternatives are rejected from consideration in an EIS, there is no duty to perform in-depth analyses of these alternatives.... Appellees had no duty to conduct an in-depth analysis of those rejected alternatives in the FEIS.” *Citizens for Smart Growth v. Secretary of Department of Transportation*, 669 F.3d 1203, ____ (11th Cir. 2012).

Generally, an Applicant has the burden of proof in a licensing proceeding. 10 C.F.R. § 2.325. In cases involving NEPA contentions, however, the burden shifts to the NRC, because the NRC, not the Applicant, has the burden of complying with NEPA. *See, e.g., Duke Power Co. (Catawba Nuclear Station, Units 1 & 2)*, CLI-83-19, 17 NRC 1041, 1049 (1983). However, because “the Staff, as a practical matter, relies heavily upon the Applicant’s ER in preparing the environmental impact statement (“EIS”), should the Applicant become a proponent of a particular challenged position set forth in the EIS, the Applicant, as such a

proponent, also has the burden on that matter.” *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 339 (1996), *rev’d on other grounds by Louisiana Energy Services, L.P.* (Claiborne Enrichment Center) CLI-97-15, 46 NRC 294 (1997) (citing *Pub. Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978)).

B. Need for Power

NYS raises a number of issues regarding the need for the power Indian Point produces. NYS asserts that the DSEIS and the FSEIS are deficient because they do not address data and arguments NYS has proffered regarding need for power.¹² Need for power was rejected by this Board in its July 6, 2011 ruling on the admissibility of NYS-37. The Board stated that an inquiry into need for power is “precluded by Commission regulations.”¹³ The regulation in 10 C.F.R. § 51.95(c)(2),¹⁴ provides:

The supplemental environmental impact statement for license renewal is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation.

Because NYS-33 and NYS-37 continue to raise the issue of need for power, a review of the history of the regulation is appropriate here. It will explain why need for power is not discussed in the environmental review for license renewal and thus why the DSEIS and

¹² State of New York, Initial Statement of Position, Contention NYS-9/33/37 (“NYS-27”), filed Dec. 14, 2011 (“NYS SOP”) (NYS000045) at (inter alia) 2, 3, 8, 24, 32.

¹³ Memorandum and Order (Ruling on Pending Motions for Leave to File New and Amended Contentions) at 35 (July 6, 2011) (unpublished) (ADAMS Accession No. ML111870344).

¹⁴ The regulation in 10 C.F.R. § 51.95(c)(2) applies to the FSEIS. Similar regulations in 10 C.F.R. §§ 51.53(c)(2) and 51.71(d) provide identical language applicable to the ER and DSEIS.

FSEIS, which do not discuss need for power, are adequate and why the numerous and varied criticisms NYS raises that are based on need for power are immaterial.

The history of the regulations governing the NRC's environmental review for license renewal reveals, ironically, that these regulations were drafted to accommodate NYS. When the regulations were being crafted NYS argued that the Staff should defer to State determinations of need for power and should not perform need for power analyses.¹⁵ NYS asserted that to allow the Staff to address need for power in its environmental impact statements would "intrude adversely on traditional State regulatory authority over these matters."¹⁶ As the regulatory history will show, it was because of NYS opposition that the NRC removed the analysis of need for power from the license renewal environmental review.¹⁷

In 1991, when the NRC proposed to amend its regulations governing the environmental review for license renewal, it proposed to address need for power as a Category 1 generic impact.¹⁸ Category 1 impacts were defined as impacts "that applie[d] to all affected plants."¹⁹ The NRC proposed to address need for power generically in the GEIS based on projections showing a need for the power that would result from license renewal.

Projections of the demand for electric power from 1991 to 2030 in each of

¹⁵ Environmental Review for Renewal of Operating Licenses, Supplemental Proposed Rulemaking, 59 Fed. Reg. 37724, 37725 (July 25, 1994).

¹⁶ *Id.* at 37724.

¹⁷ Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Final Rule, 61 Fed. Reg. 28467, 28468 (June 5, 1996).

¹⁸ Environmental Review for Renewal of Operating Licenses, Proposed Rule, 56 Fed. Reg. 47016, 47020 (September 17, 1991).

¹⁹ *Id.* at 47019.

the 11 Department of Energy regions indicate that a need will exist for the generating capacity represented by license renewal of plants in all 11 regions. The projection included demands for both individual and utility service areas, which showed that the generating capacity of each nuclear power plant would be needed to meet the nation's electric power demand.²⁰

In response to an advance notice for this proposed rulemaking, the Wisconsin Public Service Commission ("WPSC") suggested that the NRC should defer to the States regarding need for power. The WPSC asked, "Regarding the need for generating capacity, whether the NRC should defer to the relevant State agency's determination of need for generating capacity."²¹ In light of the WPSC's suggestion that the NRC defer to State determinations of need for power, the NRC "encourage[d] State agencies to review analyses in the FEIS for consistency with their own analyses and to comment on any significant disagreement between them."²²

NYS submitted a proposal, responding to the proposed rule. NYS proposed that the regulation include a statement that the NRC's need for power and alternative energy source findings were "only intended to assist the NRC in meeting its NEPA obligations and do not preclude the States from making their own determinations", that the determinations should be approached on a site-specific, rather than a generic basis, and that the NRC's EIS should refer "to State determinations on the issues of need for generating capacity and alternative energy sources, and should defer to and be guided by those State determinations to the maximum degree possible pursuant to NEPA."²³

²⁰ *Id.* at 47022.

²¹ *Id.* at 47024.

²² *Id.*

²³ Environmental Review for Renewal of Operating Licenses, Supplemental Proposed Rulemaking, 59 Fed. Reg. 37724, 37725 (July 25, 1994).

The NRC proposed to address NYS' concerns by removing need for power from the license renewal review. The NRC proposed to do this by redefining the purpose and need for the license renewal "as preserving continued operation of a nuclear power plant as a safe option that State regulators and utility officials may consider in their future energy planning decisions."²⁴ The NRC explained:

In formulating this proposed purpose and need statement, the NRC staff has attempted to consider the perspective of State regulators, the needs of license renewal applicants, the nature of the applications at issue, and the function that the NRC plays in the decisional process. This proposed definition does not indicate an endorsement by the NRC of nuclear power operation as a preferred energy source. Instead, the proposed definition is intended to convey that, absent findings in the Atomic Energy Act safety review or in the NEPA environmental analysis that would lead the NRC to reject a license renewal application, the NRC will not interfere with the energy planning decisions of state regulators and utility officials.²⁵

Thus, the final rule provides that the Staff's EIS "is not required to include discussion of need for power". 10 C.F.R. § 51.95(c)(2). When it issued the final rule, the NRC explained that it removed need for power from the license renewal environmental review because NYS and other states had argued that NRC involvement was inappropriate and intruded into areas of energy planning covered by state regulation.

With respect to the States' concerns regarding need for generating capacity analysis, the NRC will neither perform analyses of the need for power nor draw any conclusions about the need for generating capacity in a license renewal review. This definition of purpose and need reflects the Commission's recognition that . . . the NRC has no role in the energy planning decisions of State regulators and utility officials. ²⁶

Thus, the regulatory history shows that need for power was not intended to be addressed in

²⁴ *Id.*

²⁵ *Id.*

²⁶ Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Final Rule, 61 Fed. Reg. 28467, 28472 (June 5, 1996).

the DSEIS or the FSEIS. NYS' arguments on need for power are fundamentally misplaced; its continued focus on the issue is in contravention of this Board's prior order and the plain language of the regulation; and its expert testimony on need for power is immaterial.

Nevertheless NYS asserts that the DSEIS and FSEIS are deficient for not evaluating what NYS asserts is "new and significant information" regarding the current energy needs of the state – that, in short, the DSEIS and FSEIS assume "a need for too much power".²⁷ As NYS' witness, Peter Bradley testified, the deficiencies NYS claims "overstate the need for the relicensing" of Indian Point.²⁸ NYS points to its experts' testimony that demand for electricity is lower, that there has been an increase in energy efficiency, conservation, renewable energy generation and transmission resources, that there is more energy generation in downstate New York, and that natural gas is cheaper and more plentiful. But all of these claims are, at base, arguments over need for power and thus all of them are contrary to 10 C.F.R. § 51.95(c)(2) and beyond the scope of the admitted contention.

NYS also misreads 10 C.F.R. § 51.95(c)(2) when it asserts that the regulation supports analysis of need for power in the analysis of alternatives. The regulation states that the FSEIS is not required to analyze the need for power or the economic costs and benefits of license renewal or alternatives to license renewal "except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation." 10 C.F.R. § 51.95(c)(2) (emphasis added). NYS misapplies this regulatory language when it argues that various aspects of need for power should be discussed for purposes of determining "the inclusion of alternatives

²⁷ NYS SOP at 36.

²⁸ Bradford Testimony at 34.

considered or relevant.” NYS SOP at 35. The determination of which alternatives to include in the EIS’ analysis is based on economic benefits and costs – not need for power. This is supported by the plain language of the regulation: the “except insofar as” language covers only “benefits and costs.” In addition, the regulatory history shows that the “except insofar as” language only attaches to economic benefits and costs, and not to need for power.

The statement that the use of economic costs will be eliminated in this approach refers to the ultimate NEPA decision regarding the comparison of alternatives and the proposed action. This approach does not preclude a consideration of economic costs if these costs are essential to a determination regarding the inclusion of an alternative in the range of alternatives considered (i.e., an alternative’s exorbitant cost could render it nonviable and unworthy of further consideration) or relevant to mitigation of environmental impacts.²⁹

Accordingly, NYS is incorrect when it claims that 10 C.F.R. § 51.95(c)(2) supports a need for power analysis of alternatives.

II. STAFF WITNESS

The Staff witness on Contention NYS-17B is Andrew L. Stuyvenberg. He is a project manager in the Division of License Renewal, Office of Nuclear Reactor Regulation, NRC. He has performed, overseen or reviewed analyses of alternatives to the proposed NRC action in nineteen NRC staff environmental impact statements that have either been published or are currently in progress. He has provided environmental expertise to agency processes, including the update of the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, issues identified by the Fukushima Site Team, and proposed actions by the Japan Lessons-Learned Directorate. He has worked with other NRC staff members to develop guidance on how to address greenhouse gas impacts in agency environmental impact statements, how to consider terrorism in reviews of projects located in the 9th Circuit,

²⁹ 61 Fed. Reg. at 28472.

and how to address Severe Accident Mitigation Alternatives (SAMA) reviews at the license-renewal stage for facilities that have completed a design-stage SAMA review. He oversaw the need-for-power analysis for the proposed operation of Watts Bar Unit 2.

He managed the environmental review for the proposed license renewal of Indian Point, coordinating the preparation and publication of the DSEIS and FSEIS. From April 2007 until the FSEIS was published in December of 2010, he was responsible for the EISs discussion of alternatives to license renewal. He also was responsible for the analysis of greenhouse gas emissions in Chapter 6 of the Indian Point FSEIS.

Prior to joining the NRC staff, he worked for the North Carolina Sustainable Energy Association (NCSEA) – a 501(c)(3) clean-energy advocacy organization – where he coordinated the organization’s intervention in an electric-utility integrated-planning process, in which the NCSEA alleged that that North Carolina’s utilities had inadequately considered demand-side management approaches to reducing power demand and had unreasonably excluded renewable energy from their plans. While working for NCSEA, he also initiated a new proceeding at the North Carolina Utilities Commission in which NCSEA alleged that one utility was unreasonably pursuing new baseload coal capacity when less-expensive demand-side resources were available.

Mr. Stuyvenberg holds a Masters Degree in Environmental Management in Environmental Economics and Policy. His coursework included environmental and natural resource economics, statistical methods for surveys, econometrics, and land-use policy.

III. PURPOSE OF TESTIMONY

The purpose of Mr. Stuyvenberg’s testimony is to present the Staff’s views with respect to Contention 17B and to explain the analysis the Staff presented in its DSEIS and FSEIS, to explain why the analysis is adequate, why the analysis is reasonable, why it meets regulatory requirements and constitutes a reasonable consideration of the environmental

impacts of alternatives to license renewal.³⁰

IV. DIRECT TESTIMONY

Mr. Stuyvenberg testifies that Entergy in its Environmental Report (“ER”) and the Staff in its DSEIS and FSEIS are not required to analyze conservation as an alternative to license renewal. ALS Testimony at 6 - 7. He explains the purpose of license renewal is to provide an option that allows for power generation capability and because conservation is not a power generation source, it is not among the reasonable set of alternatives the Staff is required to analyze. *Id.* at 7. As the Commission recently observed, “NEPA requires consideration of ‘reasonable’ alternatives, not all conceivable ones.” *Seabrook*, CLI-12-05, 75 NRC ____, slip op at 48.

Nevertheless, the Staff did analyze energy conservation and energy efficiency in the FSEIS as portions of alternatives to license renewal. *Id.* at 8 - 9. In Chapter 8, at FSEIS p. 8-73, NRC staff determined that the impacts of energy conservation “are generally lower than those from other alternatives, including the proposed action.” *Id.* In the FSEIS, the Staff accepted New York State’s assertions about the adequacy of energy conservation and energy efficiency to serve as a replacement for the Indian Point Units. The NRC staff relied heavily on these comments in determining that energy conservation and energy efficiency was a reasonable alternative, and in determining the contents of the Staff’s combination alternatives. In fact, New York State’s 2009 comments on the DSEIS were the primary drivers of Staff’s

³⁰ While the Staff recognizes that the Board’s rulings have limited Contention NYS-17B to an inquiry regarding the Staff’s evaluation of the no-action alternative, NYS in its Statement of Position on Contention NYS-17B, and testimony and exhibits, continues to allege deficiencies in the Staff’s evaluation of other alternatives besides the no-action alternative. In an abundance of caution, therefore, Mr. Stuyvenberg will address the Staff’s analysis of alternatives to the proposed action, i.e., he will address the Staff’s analysis of the no-action alternative as well as the Staff’s analysis of other alternatives.

inclusion of a conservation/energy efficiency alternative, and these comments also strongly influenced the Staff's combination alternatives, which included substantial quantities of energy efficiency and conservation. *Id.* at 8 - 14.

Regarding the Staff's consideration of a stand-alone energy conservation and energy efficiency alternative in Section 8.3.3 of the FSEIS, the Staff did so based on comments that the New York State Office of the Attorney General submitted during the DSEIS comment period, on March 18, 2009. The Staff elected to do so even though energy conservation and energy efficiency does not constitute a single, discrete source of electric power generation as determined in the GEIS. *Id.* at 10.

In many instances, the Staff structured its analysis to address issues raised by NYS or the Staff adopted an approach NYS put forward in the first instance. Ironically, NYS subsequently asserted that the analysis or approach was deficient. The two combination alternatives the Staff analyzed were based on combinations alternatives proffered by NYS. *Id.* at 12 - 14. The NRC combination alternative that includes the operation of one Indian Point unit was developed in response to a comment by NYS. *Id.* at 13-14. The Staff dismissed new coal generation as a stand-alone alternative in large part due to NYS' comments on the DSEIS. *Id.* at 15, 21, 41. The Staff considered repowering as an alternative in response to DSEIS comments from NYS. *Id.* at 13, 16.

With respect to the no-action alternative, the Staff fully addressed the no-action alternative in Chapter 8 of the FSEIS. *Id.* at 21-23. NYS asserts that the Staff's analysis is deficient because it does not include an analysis of replacement power options. NYS SOP at 10-11. As NYS readily acknowledges, the Staff analyzes replacement power options in Section 8.3 of the FSEIS. *Id.* at 23. In the FSEIS, the Staff explained that it would address replacement power options in Section 8.3 because those options can be alternatives to license renewal and can constitute potential consequences of the no-action alternative. *Id.* at

22 – 23. Instead of being analyzed under the heading “No-Action Alternative”, these replacement options or alternatives were analyzed under the heading “Alternative Energy Sources.” *Id.* at 23. When asked whether the analysis would be substantially different if were placed in the No-Action Alternative section rather than the Alternative Energy Sources section, Mr. Stuyvenberg stated that they would have been substantially the same regardless where they appeared. *Id.* Ironically, the determination to place the replacement options or alternatives in the Alternative Energy Sources section was in response to NYS comments during the license renewal rulemaking. *Id.* at 24 - 25. Surely this is an instance where NEPA’s grant of broad discretion to agencies should apply to allow the Staff to determine the organization of its analysis. *Louisiana Energy Services, L.P.*, CLI-98-3, 47 NRC at 339.

V. REBUTTAL TESTIMONY

In the FSEIS, the Staff addressed all comments submitted by NYS on the DSEIS. ALS Testimony at 25 - 28. The Staff did not address the Synapse Report, the 2007 Bradford Declaration or the 2009 Schlissel Declaration in the FSEIS because none of these documents was submitted as a comment on the DSEIS. *Id.* at 29 - 29.

Similarly, the NRC did not address the Synapse Report or the 2007 Bradford Declaration in the DSEIS because neither document was submitted as a scoping comment. *Id.* at 29.

With respect to NYS’ complaint that the FSEIS does not analyze the need for power produced by Indian Point, the Staff responds on two levels. First, the regulations explicitly state that the FSEIS “is not required to include [a]discussion of need for power”. 10 C.F.R. § 51.95(c)(2). ALS Testimony at 31-33. Second, as discussed above, *supra* at 7-13, NYS argued for this very regulatory provision during the rulemaking process. *Id.* at 31 - 32.

NYS related criticism that the Staff’s no-action alternative analysis does not include a discussion of the likelihood and extent of measures to be taken if license renewal is denied is

also a result that NYS itself sought in the license renewal rulemaking. Instead of making conclusions about the likelihood or extent of measures to be taken if license renewal is denied, the NRC defers to state and utility decisionmakers. *Id.* at 32 - 33.

In his testimony, Mr. Stuyvenberg also addresses NYS criticism regarding transmission issues, grid stability and reliability issues, the need for reactive power and the use of Indian Point generators as synchronous condensers. *Id.* at 34 - 38.

He addresses the criticisms of Staff EIS's in the Bradford Testimony. *Id.* at 38 - 43.

NYS' witness, Mr. David Schlissel, disagrees with the Staff's determination that wind power by itself is not suitable for large baseload capacity. Schlissel Testimony at 29-31 (NYS 000046). In his testimony, Mr. Stuyvenberg explains the basis for the Staff's determination and also explains the deficiencies in Mr. Schlissel's analysis. *Id.* at 43-55. As the Commission recently observed, an alternative that is incapable of producing baseload power may be rejected. *Seabrook*, CLI-12-05, 75 NRC ____, slip op. at 48.

CONCLUSION

For the reasons set forth above, the Staff submits that the FSEIS and DSEIS provide meaningful analyses of alternatives to the proposed action, including the no-action alternative and energy conservation and energy efficiency and the FSEIS responds to the comments submitted by NYS on the DSEIS. Accordingly, NYS's challenge to Entergy's application for renewal of the Indian Point operating license cannot be sustained.

Respectfully submitted,

/Signed electronically by/

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Dated at Rockville, Maryland
This 2nd day of April 2012

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
ENTERGY NUCLEAR OPERATIONS, INC.) Docket Nos. 50-247/286-LR
)
(Indian Point Nuclear Generating)
Units 2 and 3))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing NRC STAFF'S INITIAL STATEMENT OF POSITION ON CONTENTION NYS-8, NYS-33 AND NYS-37 (ALTERNATIVES) (CORRECTED), dated April 2, 2012, in the above-captioned proceeding have been served on the following by Electronic Information Exchange this 2nd day of April, 2012.

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