UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF'S REPLY FINDINGS OF FACT AND CONCLUSIONS OF LAW ON NEW YORK STATE CONTENTIONS NYS-9, NYS-33, AND NYS-37 (NO-ACTION ALTERNATIVE)

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May 3, 2013

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I. INTRODUCTION

In accordance with 10 C.F.R. § 2.1209 and the Atomic Safety and Licensing Board's Orders[1], proposed findings of fact and conclusions of law concerning New York State Contentions NYS-9, NYS-33, and NYS-37 (No-Action Alternative) ("Contention NYS-37") were timely filed by Entergy Nuclear Operations, Inc ("Entergy" or the "Applicant")[2], the State of New York ("New York")[3], and the NRC Staff ("Staff")[4] on March 22, 2013. Pursuant to the Licensing

[1] *See* (1) Scheduling Order (July 1, 2010), at 19; (2) Order (Scheduling Post-Hearing Matters and Ruling on Motions to File Additional Exhibits) (Jan. 15, 2013) at 1; and (3) Order (Granting Parties' Joint Motion for Alteration of Filing Schedule) (Feb. 28, 2013).

[2] Entergy's Proposed Findings of Fact and Conclusions of Law for Contention NYS-37 (Energy Alternatives), dated March 22, 2013 ("Entergy PF" or "Entergy's proposed findings").

[3] State of New York's Proposed Findings of Fact and Conclusions of Law as to Consolidated Contention NYS-37, dated March 22, 2013 ("NYS PF" or "New York's proposed findings").

[4] NRC Staff's Proposed Findings of Fact and Conclusions of Law Part 8: New York State Contentions 9, 33, and 37 (No-Action Alternative), dated March 22, 2013 ("Staff PF" or "Staff's proposed findings").

Board's Order of February 28, 2013, the Staff herewith files its reply to the Applicant's[5] and New York's proposed findings of fact and conclusions of law concerning Contention NYS-37.[6]

II. ISSUES OF BROAD APPLICABILITY

8.84 The State of New York's proposed findings present several cross-cutting issues and inaccurate or mistaken assertions of fact and law: New York misapprehends what the Staff is required to do in the Indian Point Final Supplemental Environmental Impact Statement ("FSEIS")[7]; New York incorrectly asserts that the Staff failed to address conservation and renewable energy production in the FSEIS; New York attempts to raise new issues and expand the scope of its contentions beyond their language and bases; and New York assumes that the regulations issued by the Council on Environmental Quality govern NRC activity. Because these issues and assertions are reflected in multiple paragraphs throughout New York's Proposed Findings, we feel it is appropriate to address them at the outset. Individual paragraphs will then be addressed *seriatim*.

A. The Required Staff Analysis in the FSEIS

8.85 The purpose of the FSEIS is to provide a recommendation "whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable."[8] Accordingly, the Staff is tasked with considering and weighing "the environmental effects of the proposed

[5] The Staff has reviewed Entergy's proposed findings and has determined that a detailed reply thereto is not required. In this regard, the Staff has concluded that the Applicant's proposed findings are not inconsistent with the Staff's findings, and any important substantive differences between the Staff's and Applicant's respective views of the evidence are reflected in their proposed findings of fact and conclusions of law filed on March 22, 2013.

[6] The paragraph numbering system in these Reply Findings follows the numbering utilized in the Staff's Proposed Findings. Thus, Staff Reply Finding ¶ 8.84 should be read to follow ¶ 8.83 in the Staff's Proposed Findings.

[7] "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38 Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Final Report," NUREG-1437, Supplement 38 (Dec. 2010) ("Final SEIS" or "FSEIS") (Ex. NYS000133A-J).

[8] 10 C.F.R. § 51.95(c)(4).

renewal of the operating licenses for IP2 and IP3, the environmental impacts of alternatives to license renewal, and mitigation measures available for avoiding adverse environmental effects."[9]

8.86 The Staff discharged its obligation by analyzing, and presenting in comparative fashion, the environmental impacts of a reasonable set of alternatives to license renewal.[10]

8.87 The Staff was not tasked with predicting what will happen in the future or whether the plant will continue to operate beyond the period of its current license even with a renewed license. The decision whether to allow the plant to continue to operate, once it has a license to do so, is a decision that is made by energy planners, as indeed is the decision as to the choice of replacement power should the plant cease operations.[11] The Staff does not make either choice; the Staff does not choose whether the plant will continue to operate and it does not choose what will take the place of the plant in the event that the plant ceases operations.[12] Accordingly, the regulations provide that, in the FSEIS, the Staff is not required to discuss whether or not there is a need for the power that the plant produces.[13] As we made clear in our decision admitting Contention NYS-33, "we are not authorizing a broad-ranged inquiry into alternative scenarios and the need for power, which would be precluded by Commission regulations, and which we have previously excluded."[14] We did not allow it then and we will not allow it now. As the Staff was not required to perform this analysis, the Staff's analysis cannot be deficient for failing to analyze or predict, or account for the need, lack of need, or change in

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[9] FSEIS (Ex. NYS000133A) at 1-6.

[10] FSEIS (Ex. NYS000133C) at 9-3, 9-9 through 10; *see generally, id.* 9-1 through 10.

[11] Environmental Review for Renewal of Operating Licenses, Supplemental Proposed Rulemaking, 59 Fed. Reg. 23,724, 37,725 (July 25, 1994).

[12] FSEIS (Ex. NYS000133C) at 9-1.

[13] 10 C.F.R. § 51.95(c)(2).

[14] Memorandum and Order, July 6, 2011,at 35.

need, for the power that Indian Point produces.[15] Accordingly, we cannot sustain NYS PF ¶¶ 31, 115, 134, and 173.

B. The Staff's Analysis of Conservation and Renewables Was Adequate

8.88 New York asserts that the Staff's FSEIS is deficient for failing to analyze a combination alternative consisting of conservation and renewable production. NYS PF ¶¶ 20, 27, 123, 124, and 171-175.

8.89 We find, however, that the Staff in the FSEIS addressed the environmental impacts of conservation and the environmental impacts of renewables. We also find that the Staff addressed two combination alternatives that included conservation and renewables. Based on our review of the FSEIS, we find the Staff's analysis adequate.

8.90 In Section 8 of the FSEIS, the Staff discussed the impacts of conservation and the impacts of renewable production, specifically wind power, wood and wood waste, hydropower, solar power, geothermal energy, municipal solid waste, biomass derived fuels, and fuel cells.[16]

8.91 The Staff dismissed renewables from individual consideration because it considered them "to be individually inadequate to serve as alternatives to IP2 and IP3[.]"[17]

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[15] New York's footnote 6 in NYS PF ¶ 134 ignores the regulation in 10 C.F.R. § 51.95(c)(2). Contrary to New York, the Commission's determination to eschew a need for power analysis in license renewal was not just a recognition of the primacy of energy planners. The Commission's determination that it will not intrude into energy planning decisions by state and other federal regulatory bodies is reflected in the language of the regulation itself: "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[.]" 10 C.F.R. § 51.95(c)(2). To the extent that New York is arguing that the Staff must undertake a need for power analysis in order to do a "thorough no-action environmental analysis," New York is mistaken and its position is contrary to our rulings in this matter. Memorandum and Order (Ruling on Pending Motions for Leave to File New and Amended Contentions, (July 6, 2011) (unpublished) at 35; Order (Ruling on New York State's New and Amended Contentions), (June 16, 2009) (unpublished) at 11-13; *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 92-93 (2008).

[16] FSEIS (Ex. NYS000133C) at 8-43 through 48.

[17] *Id.* at 8-43.

Standing alone, not one of these renewable sources can provide the same amount of power as Indian Point, and in several cases, cannot provide the baseload power produced by Indian Point.[18] Nevertheless, the Staff viewed renewables as potential consequences of the No-Action alternative. In other words, if Indian Point's license is not renewed, some combination of those renewables may be part of the mix that replaces Indian Point production. As Staff witness Andrew Stuyvenberg testified,

> All of the alternatives that we have considered in depth could conceivably in our view, take its place. Now, there are some alternatives that we've excluded from in depth consideration because either some kind of resource limitation, because it's not commercially viable, because it's not technologically feasible, there are a variety of reasons to exclude something from detailed consideration. But of those alternatives we considered in a detailed way, we've indicated that any of those certainly could be consequences. It's also possible that some alternatives that maybe we've excluded from direct consideration could also end up as consequences of No Action.[19]

8.92 In addition, the Staff discussed conservation and renewables in two of the combination alternatives it analyzed in the FSEIS.[20]

8.93 As the Commission noted, "An agency need not undertake a 'separate analysis of alternatives which are not significantly distinguishable from alternatives [already] considered, or which have substantially similar consequences.'" *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417,422 (2006) (*quoting Westlands Water District v. United States Dept. of the Interior*, 376 F.3d 853, 871-72 (9th Cir. 2004), *quoting Headwaters, Inc. v. Bureau of Land Management*, 914 F.2d 1174 (9th Cir. 1990); *see also Louisiana Enrichment Services, L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 728 (2005); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003).

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[18] *Id*. at 8-43 through 48.

[19] Tr. at 3105.

[20] *See* Staff PF ¶¶ 8.50 to 61.

8.94 We disagree with New York's claim, in NYS PF ¶ 123, that the "Staff ignored a combination alternative of renewable generation and energy efficiency proposed by New York State witness David Schlissel in his 2007 Synpase Report." We also disagree with New York's suggestion, in NYS PF ¶ 124, that this combination alternative was raised in New York's comments on the DSEIS. We have reviewed the cited material and they do not put forward a combination alternative of renewable generation and energy efficiency. Because the Staff cannot "ignore" something that was never put before it, we reject NYS PF ¶¶ 123 and 124. For the same reason, we reject the claim, in NYS PF ¶ 27, that the Staff "refused to consider a replacement scenario consisting wholly of conservation, energy efficiency and renewable generation."

8.95 New York's proposed findings of fact also incorrectly state and argue, that New York proffered a no-action alternative consisting of conservation and renewable energy generation for the Staff's consideration in Contention NYS-33 and that the proposition is supported by several declarations and a report submitted in support of that contention. NYS PF ¶ 20. New York witness Peter Bradford did assert that the Staff should have considered a conservation and renewables combination alternative.[21] But he did so in support of Contention NYS-37; the issue was not raised prior to that point and was not raised in Contention NYS-33.

8.96 New York only raised its conservation and renewables combination alternative after the FSEIS was published. The FSEIS was published in December 2010. The conservation and renewable combination alternative makes its first appearance in Peter Bradford's supporting declaration for Contention NYS-37, which was filed on December 14, 2011.[22] Mr. Bradford's declaration was thus filed approximately one year after the FSEIS.

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[21] *Id.*

[22] Pre-Filed Written Testimony of Peter A. Bradford Regarding Contention NYS-9-33-37 (Ex. NYS000048) ("NYS Testimony (Bradford)")at 28-31.

Because New York raised this issue after the FSEIS was published, the Staff could not have addressed it in the FSEIS.

8.97 Granted, the Staff could have advanced this alternative on its own initiative, but that would have resulted in little difference in the overall analysis as the Staff was already reviewing both conservation and renewables separately and as parts of two other combination alternatives. *Hydro Resources, Inc.*, CLI-06-29, 64 NRC at 422.

8.98 Based on the Staff's discussion of conservation and renewables as alternatives to license renewal and as components of two combination alternatives, we find that New York's assertion that the FSEIS failed to address conservation and renewables cannot be sustained.

8.99 Accordingly, we reject the proposed findings at NYS PF ¶¶ 20, 27, 123, 124, and 171-175.

C. Issues That Are Beyond the Scope of the Admitted Contentions and Their Bases

8.100 At the hearing and in its proposed findings, New York raises four issues that are beyond the scope of the admitted contentions and their bases: New York asserts that the Staff's analysis was deficient because it was a "static" analysis; New York charges the Staff with overly aggressive and optimistic assumptions regarding the amount of conservation and efficiency available to replace Indian Point; New York claims that the Staff failed to analyze the environmental impacts of purchased power; and New York asserts that the Staff has not provided a standard for determining the reasonableness of the proposed action. Such issues should have been raised as contentions on the DSEIS or the FSEIS.

8.101 New York's belated attempt to introduce these issues into Contention NYS-37 through its filing of proposed findings comes too late, and fails to follow Commission requirements for the supplementation or amendment of contentions. Accordingly, New York's attempt to inject these issues into the proceeding by way of its proposed findings must be rejected as impermissible. As the Commission recently stated:

> We have long required contention claims to be set forth "with particularity," stressing that it "should not be necessary to speculate about what a pleading is supposed to mean." Our proceedings would prove unmanageable--and unfair to the other parties--if an intervenor could freely change an admitted contention "at will as litigation progresses," "stretching the scope of admitted contentions beyond their reasonably inferred bounds." "Petitioners must raise and reasonably specify at the outset their objections to a license application."
>
> Our rules allow for amendment of contentions and the submission of new contentions when good cause is shown. But [the Intervenor] here does not suggest that new information was introduced that it could not have known about earlier, and it never has sought to amend its contention. It instead insists that Contention 3 as proffered was intended, all along, to include this challenge . . . . We are not persuaded . . . .

Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-12-01, 75 NRC 39, 55-56 (2012) (footnotes omitted). *Accord, Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-05, 71 NRC 90, 100-05 (2010); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 380-81, 386 (2002). Indeed, this Board has previously acknowledged that intervenors must amend their contentions to raise new issues that are beyond the scope of a contention as admitted, citing the Commission's admonition "against allowing 'distinctly new complaints to be added at will as litigation progresses, [and thereby] stretching the scope of admitted contentions beyond their reasonably inferred bounds."[23]

1. The Staff's Static Analysis of Alternatives Is Not Defective.

8.102 In its proposed findings, New York argues that the Staff's analysis of alternatives is "static" and that it is deficient for failing to take into account the possibility that energy needs may change over time. NYS PF ¶ 127. New York states: "Electric grids and resource planning are dynamic, not static, and what will actually replace Indian Point over 20 years will change

[23] "Order (Granting in Part and Denying in Part Applicant's *Motions in Limine*)" (Mar. 6, 2012), slip op. at 3-4, *citing, inter alia, Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 309 (2010) (emphasis added by the Board). In its Order, the Board found that certain issues raised in the intervenors' testimony were within the scope of the contentions as admitted, while one issue (leaks from sources other than the spent fuel pools) was not. *See, e.g., id.,* slip op. at 28-31.

over time, as new resources are added, and some resources are retired."[24]

8.103 New York did not assert that it raised this issue prior to the hearing; it cited no prior portion of the record to show that this issue was raised prior to the hearing; and we have discovered none.

8.104 Accordingly, we find that New York's assertion that the FSEIS is deficient because it uses a static analysis is a new issue, and its inclusion would result in an improper expansion of the scope of the contention beyond its language and bases. On that basis, we reject NYS PF ¶¶ 32, 127.[25]

8.105 We also have grounds for rejecting these proposed findings on substantive grounds. One of the purposes of the FSEIS is to provide a comparison of the environmental impacts of the proposed action and alternatives to the proposed action.[26] The Commission has held that that set of reasonable alternatives consists of single, discrete, baseload production facilities that are technically feasible and commercially viable either at the present time or in the very near future and capable of producing the same amount of power as the facility at issue.[27] This approach necessarily involves a static analysis.

2. The Staff's Adoption of Conservation Levels Advocated by New York

8.106 In its proposed findings, New York criticizes the Staff's adoption of certain levels of conservation, arguing that these levels of conservation are "less reasonably likely than a

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[24] *Id., quoting* New York witness Stephen Schlissel, Tr. 2938-39.

[25] In support of this view, we note that when New York engaged in a NEPA analysis of the potential environmental of the Cricket Valley electricity generating plant (for which New York is the governmental actor), New York used the same kind of "static" analysis that it criticizes the Staff for using. *See* Findings Statement, Cricket Valley Energy Center (Ex. NYS000444) at 29. In its Cricket Valley environmental analysis, New York evaluated the impacts of various alternatives and did so assuming that those alternatives would have to replace the whole of the proposed project without making any allowance for the possibility that the need for energy could vary over time. *Id.*

[26] FSEIS (Ex. NYS000133A) at 1-6.

[27] *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-05, ___ NRC ___ (Mar. 8, 2012) slip op. at 48-50.

combination of conservation and renewable generation." NYS PF ¶ 175.

8.107 For the first time in this proceeding, New York appears to be claiming that the Staff used an overly optimistic estimate of the amount of power that can be saved via conservation and energy efficiency programs. Prior to filing its proposed findings, New York asserted that conservation and energy efficiency gains were more than sufficient to replace Indian Point.[28]

8.108 We will not allow New York to argue, at this late point in the proceeding, that the Staff errs when it assumes that there is sufficient conservation and energy efficiency to replace Indian Point – particularly as the levels of conservation and efficiency assumed by the Staff are levels that are consistent with claims New York has made throughout this proceeding. Accordingly, we reject NYS PF ¶¶ 172 through 175.

3. The Staff's Analysis of the Impacts of Purchased Power

8.109 In its proposed findings, New York asserts that the "Staff failed to do any analysis of the environmental impacts of purchased power." NYS PF ¶ 107.

8.110 In none of the contentions or supporting material, however, did New York raise this issue. In Contentions NYS-33 and NYS-37, New York challenged the Staff's treatment of the grid's ability to transmit purchased power as a replacement for Indian Point; but it did not challenge the Staff's analysis of the environmental impacts of purchased power.[29]

8.111 In any event, the Staff was not required to provide a site-specific analysis of the impacts of purchased power. NEPA does not require an agency to do the unreasonable or the impossible. *Kleppe v. Sierra Club*, 427 U.S. 390, 401-02 (1976). The Staff explained that "all alternatives considered here [in the FSEIS] could supply purchased power." FSEIS (Ex. NYS000133C) at 8-39. Because purchased power could come from any number of sources or

[28] *See, inter alia,* State of New York Contention Concerning NRC Staff's Final Supplemental Environmental Impact Statement, dated February 3, 2011 ("Contention NYS-37"), at 23-28.

[29] *See* Contention NYS-33 at 29-30, 34; Contention NYS-37 at 28-30.

combination of sources, the Staff stated that a site-specific analysis of environmental impacts could not be reasonably undertaken in the absence of information identifying the source of the purchased power.[30] We see nothing wrong with the Staff confessing, forthrightly, the limitations of its analysis.

4. Standard for Determination of Reasonableness of License Renewal

8.112 In NYS PF ¶ 137, for the first time, New York asserts that the Staff has not "provided any standards under which the NRC determines whether license renewal is environmentally unreasonable or not."

8.113 We note, however, that the standard is set forth in the Statements of Consideration that accompanied the publication of the environmental regulations for license renewal. "[T]he Commission believes that it is reasonable to exercise its NEPA authority to reject license renewal applications only when it has determined that the impacts of license renewal sufficiently exceed the impacts of all or almost all of the alternatives that preserving the option of license renewal for future decision makers would be unreasonable."[31] New York itself submitted the Statements of Consideration as an exhibit in support of this contention. In addition, Entergy quoted the standard in its proposed findings.[32]

D. The Regulations of the Council on Environmental Quality

8.114 As the Commission has made clear, the NRC looks to the regulations of the Council on Environmental Quality ("CEQ") for guidance.[33] However, it is the NRC's long-standing policy that, as an independent regulatory agency, it is not bound by CEQ's NEPA

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[30] FSEIS (Ex. NYS000133C) at 8-41.

[31] Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Final Rule, 61 Fed. Reg. 28,467, 28,473 (June 5, 1996) (Ex. NYS000127).

[32] Entergy PF ¶ 78.

[33] *Pacific Gas and Electric Co*. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-11-11, 74 NRC 427, 443-44 (2011); *see also* 10 C.F.R. § 51.10(a).

regulations that have a substantive impact on the way in which the Commission performs its functions.[34]

8.115 Thus, New York's proposed findings of fact and conclusions of law that assert or imply that CEQ regulations govern the Staff's environmental review, NYS PF ¶¶ 20, 50-54, 178, and 197, are erroneous.

III. DISPOSITION OF SPECIFIC NEW YORK PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

8.116 New York asserts, in NYS PF ¶ 34, that the Staff's use of 600 MW of renewables in the FSEIS's combination alternative was "arbitrary." In NYS PF ¶ 31 New York further asserts that the 600 MW figure "grossly understated the amount of renewable energy available in New York to replace the capacity of IP2 and IP3." We find that these assertions are unfounded in light of the fact that New York itself advocated consideration of a combination alternative that consisted of 600-800 MW of renewable power. [35] In addition, as the Staff explained in its proposed findings, use of the lower figure for renewables resulted in lower environmental impacts for renewables.[36] This would have the effect of making the combinations of alternatives that include renewables appear more attractive vis-à-vis other generation sources, including continued operation of Indian Point.

8.117 We find that New York errs when it asserts in NYS PF ¶ 86 that the Staff excluded the impacts of "the construction and operation of a new coal-fired generator" from its considerations. In the FSEIS, the Staff determined that coal was not a reasonable alternative and was not likely to replace Indian Point.[37] For those reasons, the Staff dismissed coal from

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[34] *Id.*

[35] Contention NYS-33 at 33.

[36] Staff PF ¶ 8.54.

[37] FSEIS (Ex. NYS000133C) at 8-43.

consideration as a viable alternative to license renewal.[38] Staff witness Andrew Stuyvenberg testified that "[t]he notion here was to remove from consideration a new coal-fired plant as Mr. Schlissel indicated."[39] Rather than entirely exclude the impacts of coal, the Staff discussed the environmental impacts of new coal generation in the FSEIS.[40] In fact, New York criticizes the Staff for what New York considers an overly lengthy discussion of the environmental impacts of coal.[41] In the FSEIS, the Staff explained that it did not consider coal a reasonable alternative "based on public draft SEIS comments, a staff review of likely generating alternatives in New York State, and policies like the Regional Greenhouse Gas Initiative that all suggest that new coal-fired generation is unlikely in New York State."[42] We cannot agree with New York that the Staff excluded the impacts of new coal from consideration; we find that the Staff excluded new coal as a reasonable alternative to license renewal.

8.118 Contrary to New York, the Staff did not ignore the comments New York submitted on the DSEIS concerning the adequacy of transmission capacity for alternatives to Indian Point production. Instead, in the FSEIS the Staff assumed that there would be adequate transmission capacity for all alternatives to Indian Point production; it excluded none from consideration on the grounds of insufficient transmission capacity.[43] Accordingly, we reject NYS PF ¶¶ 100-105.

8.119 New York claims that during oral testimony at the hearing in this matter, Staff witness Andrew Stuyvenberg failed to identify previous environmental impact statements in which the Staff analyzed the environmental impacts of conservation and efficiency. NYS PF ¶ 112, *citing* Tr. at 3001-02. We find that the transcript shows that Mr. Stuyvenberg stated that

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[38] *Id.*

[39] Tr. at 3015. *See* NYS PF ¶ 85.

[40] *See* FSEIS (Ex. NYS000133C) at 8-49 to 8-59.

[41] NYS PF ¶¶ 162-64.

[42] FSEIS (Ex. NYS000133C) at 8-49.

[43] Staff Testimony on NYS-37 (Ex. NRC000133) at 34.

the EISs he was referring to were the Shearon Harris EIS and Three Mile Island EIS.[44] Mr. Stuyvenberg testified that the Staff anticipated that the impacts of conservation and efficiency at Indian Point would be small, just as they were at Shearon Harris and Three Mile Island, except for socioeconomics, which was small-to-moderate, based on the site-specific impacts at IP.[45] We view New York's assertion in NYS PF ¶ 112, that the Staff witness failed to identify the EIS on which the Staff relied, as unsupported by the record.

8.120 New York asserted that the Indian Point FSEIS is deficient because it fails to discuss the positive socio-economic impacts of conservation and energy efficiency. NYS PF ¶¶ 18, 129. Specifically, New York's expert Stephen Schlissel testified at the hearing about the positive socio-economic impacts of job creation resulting from conservation and energy efficiency programs.[46] He also pointed out that "[p]erhaps houses are improved. Maybe that leads to a property tax increase – property base increase. That's more speculative, but there are jobs and socio-economic impacts."[47] Our review of the record reveals, however, that the Staff did discuss these positive impacts. According to the FSEIS and testimony from the Staff's witness, the Staff incorporated discussions of the environmental impacts of conservation and energy efficiency from the Shearon Harris FSEIS and the Three Mile Island FSEIS into the Indian Point FSEIS.[48] The Shearon Harris and Three Mile Island EISs discussed specific impacts of conservation and efficiency. The Shearon Harris FSEIS identified job creation and the benefits associated with weatherization and insulation, particularly for low-income

[44] Tr. at 3002.

[45] Id. at 3002-03.

[46] Tr. at 3003.

[47] *Id*.

[48] FSEIS (Ex. NYS000133C) at 8-43; Tr. at 3004-06.

households, as the positive socio-economic impacts of conservation and energy efficiency.[49] The Three Mile Island FSEIS made similar findings.[50] These FSEISs did not discuss potential increases in property value, but as New York's own witness acknowledged, such impacts are "speculative." We therefore find that New York's criticism of the FSEIS in NYS PF ¶¶ 118 and 129 is contradicted by the record.

8.121 Furthermore, incorporation by reference of environmental impact analyses is a well-established, well-accepted, and preferred practice.

> The techniques of tiering and incorporation by reference described respectively in 40 CFR 1502.20 and 1508.28 and 40 CFR 1502.21 of CEQ's NEPA regulations may be used as appropriate to aid in the presentation of issues, eliminate repetition or reduce the size of an environmental impact statement.[51]

Because the Staff's incorporation of the Shearon Harris and Three Mile Island EISs was proper, we reject NYS PF ¶¶ 164-69 and 179.

8.122 We do not agree with New York's claim, in NYS PF ¶119, that the FSEIS is deficient because it does not take into account the "substantial property tax payments [localities receive] as 'hosts' of interim spent fuel storage facilities." Those interim spent fuel storage facilities will exist in the event of license renewal and also in the event that license renewal does not occur, thus they will result in property tax payments regardless of the outcome. Thus, they cannot constitute a positive socio-economic impact of the denial of license renewal. New York witness Peter Bradford acknowledges as much when he refers to them as payments that localities "continue to receive[.]"[52] Property tax payments associated with spent fuel storage

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[49] Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 33 Regarding Shearon Harris Nuclear Power Plant, Unit 1 (Aug. 2008) (Ex. NRC000141) at 8-68.

[50] Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 37 Regarding Three Mile Island Nuclear Station, Unit 1 (June 2009) (Ex. NRC000140) at 8-29.

[51] 10 C.F.R. Part 51, Appendix A(1)(b).

[52] NYS Testimony (Bradford) at 21 (emphasis added).

facilities are not benefits that flow from the denial of license renewal. Accordingly, we cannot accept NYS PF ¶ 119.

8.123 New York mischaracterizes the Staff's testimony and its analysis on the issue of transmission resources in NYS PF ¶¶ 153-160. The Staff did not, as New York charges in NYS PF ¶ 156, consider that transmission resources were "not significant." Mr. Stuyvenberg for the Staff, testified that the Staff did not reject any alternative from consideration on the basis of the lack of transmission resources.[53] That is not equivalent to finding transmission "not significant."[54]

8.124 Moreover, the Staff clearly did not consider the question insignificant, as evidenced by the Staff's discussion of transmission resources throughout its analysis of the natural gas-fired combined-cycle generation ("NGCC") alternative.[55] In its analysis of NGCC, the Staff found that, if the NGCC facility were built at Indian Point or at an existing production site, with existing transmission lines, there would be no impact associated with transmission on land use or aesthetics.[56] However, if a new site were used and it had no existing transmission lines, the Staff found that building those lines would involve moderate to large impacts.[57]

8.125 New York asserts, erroneously, that the FSEIS discussion of alternatives should have "included recently completed transmission projects and upgrades[.]" NYS PF ¶ 159. The Staff did not analyze the environmental impacts of these transmission projects and upgrades

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[53] Tr. at 3213-14.

[54] New York also mischaracterizes the Staff witness' testimony in NYS PF ¶ 135. New York states that Mr. Stuyvenberg testified that "reductions in electric demand projections are essentially irrelevant to the no-action alternative analysis[.]" This is not the case. Mr. Stuyvenberg did not state that the projections were "irrelevant." He testified, instead, that NRC regulations do not require an analysis of need for power and that while he testified that he did not "want to call it irrelevant. . . it doesn't really have a significant impact on the analysis we perform typically." Tr. at 3218.

[55] FSEIS (Ex. NYS000133C) at 8-29 to 31, 8-35 to 39.

[56] FSEIS (Ex. NYS000133C) at 8-29 to 30 and 8-35.

[57] *Id.* at 8-30 and 8-35 to 36.

because it could not do so absent a determination that those specific projects and upgrades would actually be called upon to transmit replacement power for Indian Point. The Staff explained, "in the absence of any specific route information, NRC staff will not independently evaluate impacts of the transmission projects in the SEIS."[58] At the hearing, Mr. Stuyvenberg testified that the transmission resources that the Staff discussed in the FSEIS were included for illustrative purposes only "and not as a means of assigning specific impacts."[59] Thus, none of the production sources in the purchased power alternative were assigned any impacts associated with the availability or unavailability of transmission lines. The Staff cannot choose the replacement power for Indian Point and, as a result, it cannot identify which transmission resources will be needed to support that replacement power. Under these circumstances, the Staff's approach, which was to discuss transmission impacts in a general non-specific, qualitative way was reasonable and correct.

8.126 We reject the interpretation of the FSEIS that New York advanced in NYS PF ¶¶ 162 and 163 as insupportable and unjustifiable. We reject the notion that the FSEIS sends a "not-so-subliminal message"[60] that coal, with its negative impacts, may replace Indian Point in the event that license renewal does not occur or that the discussion of coal "improperly skews the NEPA evaluation in favor of relicensing."[61] The FSEIS explicitly stated that the Staff did not view coal as a viable alternative to license renewal and rejected it from further consideration.[62] Given that unequivocal and affirmative statement in the FSEIS, we see no support in the record for New York's interpretation.

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[58] FSEIS (Ex. NYS000133C) at 8-41.

[59] Tr. at 3214.

[60] NYS PF ¶ 162.

[61] NYS PF ¶ 163.

[62] FSEIS (Ex. NYS000133C) at 8-43, 8-49.

8.127 Furthermore, we note that the FSEIS contains a lengthy discussion of coal, complete with its negative impacts, just as it articulates the more benign impacts of a large number of other alternatives. This information provides helpful information for energy planners, such as New York, to weigh in determining which alternative to pursue in the event that license renewal is denied. Instead of militating for coal in the event of that license renewal is denied, the Staff's discussion of coal's adverse environmental impacts militates against it. This does not skew the evaluation in favor of relicensing.

8.128 In NYS PF ¶ 163, New York argues that the Staff should have provided support for its assertion that coal might be a consequence of the no-action alternative. While the Staff witness did testify that coal could be a consequence of the no-action alternative, the Staff testified that all other alternatives could also serve that purpose.[63] The Staff rejected coal, finding that it was not a viable option.[64] The Staff rejected a number of other alternative electricity generating sources as well (*inter alia*, wind, solar, hydropower).[65] All of these generating options are possible alternatives to and potential consequences of the no-action alternative. If Indian Point's license is not renewed, the absence of power that represents must be addressed in some way, either through conservation and efficiency or some other production source. This proposition is self-evident. As the FSEIS stated with respect to alternatives to

[63] Tr. at 3104-05. We do not agree with New York that *Beyond Nuclear v. U.S. Regulatory Com'n*, 704 F.3d 12 (1st Cir. 2013) is applicable. The holding went to the question whether an intervenor had provided sufficient support for its contention to warrant admissibility and thus adjudication: specifically, whether the intervenor had established that the alternative it proffered was, indeed, viable. We are substantially past the admissibility stage in this proceeding; *Beyond Nuclear* is inapposite and, accordingly, we reject NYS PF ¶ 163. Also, to the extent that New York is relying on *Beyond Nuclear* to argue that the Staff must establish the viability of coal as an alternative to license renewal, reliance on the case is also inapposite. The Staff is not claiming that coal is a viable alternative to license renewal; on the contrary, the Staff found that coal was not a viable alternative.

[64] FSEIS (Ex. NYS000133C) at 8-43, 8-49.

[65] *Id.* at 8-43 through 48.

Indian Point, "these options can be alternatives to license renewal (given sufficient resource availability), they also constitute potential consequences of the no-action alternative."[66]

IV. SUPPLEMENTATION OF THE FSEIS

8.129 New York contends that a deficient FSEIS cannot be cured by submissions during the adjudicatory hearing and that the appropriate remedy for a deficient environmental impact statement is for the Board to remand the matter to the NRC Staff to re-analyze site-specific environmental impacts and prepare a supplemental EIS.[67] Entergy, on the other hand, asserts that after the Board considers the entire record of this proceeding, the FSEIS will be "deemed supplemented" by the Board's decisions on NEPA contentions and by any subsequent Commission decision.[68] For the reasons stated below, we find that the FSEIS will be "deemed supplemented" by this adjudicatory decision and by any subsequent Commission decision in this proceeding.

8.130 New York contends that the Commission's deliberate elimination of an earlier regulation, 10 C.F.R. § 51.52(b)(3),[69] permitting licensing boards to "modify the content" of an EIS precludes *"post hoc* supplementation by the Board . . . to cure deficiencies in the challenged FSEIS."[70] However, as Entergy notes, the Commission and licensing boards have routinely followed the process of supplementing EIS conclusions in reactor licensing and other

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[66] FSEIS (Ex. NYS000133C) at 8-22.

[67] NYS PF ¶¶ 181 to 199.

[68] Entergy PF ¶¶ 82-93.

[69] "An initial decision . . . may include findings and conclusions which affirm or modify the content of the final environmental impact statement prepared by the staff. To the extent that findings and conclusions different from those in the final environmental statement prepared by the staff are reached, the statement will be deemed modified to that extent and the initial decision will be distributed as provided in § 51.26(c)."

[70] NYS PF ¶ 181, *see also* NYS PF ¶ 184.

proceedings through adjudicatory decisions to remedy an otherwise deficient EIS, not only in recent decisions, but also in cases dating back decades.[71]

8.131 Moreover, the Appeal Board in *Limerick* explicitly addressed this issue and found that 10 C.F.R. § 51.102 essentially replaced the provision in section 51.52 such that amendment of an environmental statement by the adjudicatory hearing record and subsequent licensing board decision is entirely proper under NRC regulations and court precedent.[72] Further, the Appeal Board noted,

> We need not decide which regulation controls, for section 51.102 serves the same purpose as its differently worded predecessor, section 51.52(b)(3). LEA's argument is therefore without merit. Section 51.102(a) states that '[a] Commission decision on any action for which a final environmental impact statement has been prepared shall be accompanied by or include a concise public record of decision.' Generally, that record is to be prepared by the staff. 10 C.F.R. § 51.102(b). When an adjudicatory hearing is held on the action, however, the initial decision of the [Licensing Board] . . . will constitute the record of decision. An initial or final decision constituting the record of decision will be distributed as provided in § 51.93. 10 C.F.R. § 51.102(c). Section 51.103 describes the contents of the 'record of decision,' noting that it may incorporate by reference any material in the final environmental statement. On its face, 10 C.F.R. § 51.102 thus merges the FES with any relevant licensing board decision to form the complete environmental record of decision—just as former section 51.52(b)(3) did. But even under

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[71] Entergy PF ¶¶ 83-86, citing *Entergy Nuclear Generation Co*. (Pilgrim Nuclear Power Station), CLI-12-01, 75 NRC 39, 61 (2012) (citing *La. Energy Servs., L.P.* (Nat'l Enrichment Facility), CLI-05-28, 62 NRC 721, 731 (2005)); *Pac. Gas & Elec. Co.* (Diablo Canyon Power Plant Indep. Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 526 (2008); *Dominion Nuclear N. Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 230 (2007) ("But *our own* examination of the entire administrative record leads us to conclude that the Staff's underlying review was sufficiently detailed to qualify as "reasonable" and a "hard look" under NEPA — even if the Staff's description of that review in the FEIS was not. Our explanation below provides an additional detailed discussion as part of the record on the alternative site review. We direct the Staff to include a similar level of detail in future FEIS analyses of alternative sites.") (emphasis in original); *Hydro Res., Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 53 (2001) ("[T]he Presiding Officer's incorporation into LBP-99-30 of a staff affidavit on costs and benefits also does not require FEIS supplementation . . . in an adjudicatory hearing, to the extent that any environmental findings by the Presiding Officer (or the Commission) differ from those in the FEIS, the FEIS is deemed modified by the decision."); *Phila. Elec. Co.* (Limerick Generating Station, Units 1 & 2), ALAB–819, 22 NRC 681, 705-07 (1985), *aff'd in part and review otherwise declined*, CLI–86–5, 23 NRC 125 (1986), *remanded in part on other grounds sub nom. Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719 (3d Cir. 1989); *Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347 (1975); *S. Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 733 (2009).

[72] *Limerick*, ALAB-819, 22 NRC at 705-07.

> the stricter construction of section 51.102 urged by LEA, nothing in it precludes modification of an FES by licensing board decision.[73]

8.132 New York contends, however, that to the extent the *Limerick* decision suggests that a licensing board may supplement an EIS, it is inconsistent with 10 C.F.R. § 102(c) in that section 52.102 does not contain any provision for the incorporation of testimony or exhibits in an adjudicatory hearing.[74] We disagree. As the Commission has explicitly stated, "[t]he adjudicatory record and Board decision (and . . . any Commission appellate decisions) become, in effect, part of the FEIS."[75] Moreover, we agree with Entergy that 10 C.F.R. § 51.102 governs the resolution of environmental issues following an adjudicatory hearing and requires the Board to consider the adjudicatory record as a whole when evaluating the environmental impacts of the proposed action, to supplement the FSEIS as necessary, and to modify the NEPA analysis and conclusions, if necessary.[76]

8.133 New York also contends that supplementation of the FSEIS through an adjudicatory hearing "is inconsistent with federal regulations that emphasize the importance of the EIS itself, as well as the public's right to review and participate in the process.[77] New York further asserts that materials prepared after the FSEIS such as studies and memoranda are not a substitute for supplementation and recirculation for public comment.[78] However, as Entergy notes, the Commission has uniformly rejected this argument and has found that, "the hearing process itself allows for additional and more rigorous public scrutiny of the

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[73] *Id.* at 706.

[74] NYS PF ¶¶ 194-195.

[75] *Hydro Res.*, CLI-01-04, 53 NRC at 53 (citing *La. Energy Servs.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998)).

[76] Entergy PF ¶ 86.

[77] NYS PF ¶¶ 181, 187-188.

[78] NYS PF ¶¶ 187-188.

[environmental statement] than does the usual circulation for comment."[79] Moreover, as Entergy notes, the cases New York relies on regarding subsequent studies and memoranda have been previously considered and distinguished by the NRC Appeal Boards.[80]

8.134 Additionally, New York asserts that the NRC Staff is bound by 10 C.F.R. § 51.92 which requires that the Staff prepare a supplemental EIS when there are substantial changes to the proposed action or new and significant information.[81] We find New York's argument unconvincing given that the Commission has repeatedly authorized the supplementation of the FSEIS through the adjudicatory record despite the existence of section 51.92.[82] Moreover, we agree with Entergy's assertion that New York's argument would essentially give no effect to section 51.102(c) governing the resolution of environmental issues following an adjudicatory hearing.[83]

8.135 Finally, New York asserts that federal courts have consistently recognized that under NEPA, the remedy to cure a deficient EIS is to remand the proceeding to the administrative agency to re-initiate the EIS process.[84] However, as New York itself acknowledges, few federal agencies have internal administrative procedures like the NRC's for adjudicating or appealing NEPA issues.[85] Nevertheless, multiple federal courts of appeals

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[79] Entergy PF ¶ 87, citing *Hydro Res.*, CLI-01-04, 53 NRC at 53 (quoting *Limerick*, ALAB-819, 22 NRC at 707).

[80] *See* Entergy PF ¶¶ 90-93.

[81] NYS PF ¶¶ 181, 185.

[82] *Supra* n.61. *See also* Entergy PF¶ 89.

[83] Entergy PF ¶ 89.

[84] NYS PF ¶¶ 187-189.

[85] NYS PF ¶ 190. New York refers to the Interior Board of Land Appeals (within the Department of Interior) as an example of an administrative board requiring a formal supplement to an EIS. *Id.* In contrast, Entergy notes that agencies such as the Federal Energy Regulatory Commission ("FERC") have allowed supplementation through public hearings. Entergy PF ¶ 87, citing *Pacific Alaska LNG Co.*, 9 FERC ¶ 61,334, 61,709 ("the CEQ General Counsel suggests that the matter should also be considered in the FEIS because the Commission proceeding does not provide the broad public review and comment required by NEPA. We disagree. Our final decision will address this issue in detail, based on the record in

have consistently upheld the NRC's practice of supplementing environmental impact statements through the adjudicatory process.[86] Accordingly, for the reasons described above, we find that the FSEIS will be "deemed supplemented" by the Board's decision in this proceeding and by any subsequent Commission decision.

Respectfully submitted

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Dated at Rockville, Maryland
this 3rd day of May 2013

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the proceeding. All interested parties have had an opportunity to contribute to that record, and our decision will therefore be based on full information. This procedure fully comports with the letter and spirit of NEPA.") (citing *Aberdeen & Rockfish R.R. v. SCRAP*, 422 U.S. 289, 320-21 (1975); *Citizens For Safe Power, Inc. v. NRC*, 582 F.2d 87 (1st Cir. 1978)).

[86] Entergy PF ¶ 87, citing *Citizens for Safe Power, Inc. v. NRC*, 524 F.2d 1291, 1294 n. 5 (D.C. Cir. 1975) (holding that the "deemed modified" principled did not depart "from either the letter or the spirit" of NEPA); *Ecology Action v. AEC*, 492 F.2d 998, 1001–02 (2nd Cir. 1974) (omissions from an FEIS can be cured by subsequent consideration of the issue in an agency hearing); *New England Coalition on Nuclear Pollution v. NRC*, 582 F.2d 87, 94 (1st Cir. 1978) (having "no trouble finding" that the NRC's supplementation process satisfies NEPA). *See also Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-78-1, 7 NRC 1 (1978). Although the Appeal Board in *Limerick* noted that federal courts of appeals approved the procedure set forth in former section 51.52(b)(3), providing for the amendment of an environmental statement through the adjudicatory process, the Appeal Board clarified that "[t]here is no reason to believe that the courts would not be just as approving of the same procedure today, either as embodied in section 51.102 or, indeed, in the absence of any regulation, as a matter of board practice." *Limerick*, ALAB-819, 22 NRC at 705-07.

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)	)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R § 2.305 (as revised), I hereby certify that copies of the foregoing "NRC STAFF'S REPLY FINDINGS OF FACT AND CONCLUSIONS OF LAW ON NEW YORK STATE CONTENTIONS NYS-9, NYS-33, AND NYS-37 (NO-ACTION ALTERNATIVE)," dated May 3, 2013, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above- captioned proceeding, this 3rd day of May, 2013.

/Signed (electronically) by/
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