

December 20, 2013

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 RESPONSE TO THE ATOMIC SAFETY AND LICENSING  
BOARD'S ORDER OF NOVEMBER 27, 2013 (DENYING NEW YORK'S MOTION)

On November 27, 2013, the Atomic Safety and Licensing Board ("Board") issued its "Order (Denying New York's Motion)" ("Order"), in which it denied the State of New York's ("New York" or "NYS") motion for leave to submit a recent ruling by the New York State Public Service Commission ("PSC") as an exhibit concerning Contention NYS-37 (no-action alternative) in this proceeding.<sup>1</sup> In addition, the Board, *inter alia*, directed the NRC Staff to "report to the Board within 45 days . . . whether it will supplement the FSEIS pursuant to [10 C.F.R.] Section 51.92(a)(2) and, if so, . . . provide a realistic estimate of when any such draft SEIS will issue." Order at 2. In accordance with the Board's Order, the NRC Staff ("Staff") hereby provides the following information, together with the attached Declaration of Andrew L. Stuyvenberg and Lois M. James.<sup>2</sup>

In its Motion of November 25, 2013, New York sought leave to file, as an exhibit, an

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<sup>1</sup> "State of New York Motion for Leave to Submit Recently-Issued Ruling by New York State Public Service Commission as an Additional Exhibit Concerning Contention NYS-37 (Nov. 25, 2013) ("Motion").

<sup>2</sup> "Declaration of Andrew L. Stuyvenberg and Lois M. James Concerning the November 4, 2013 Order of the New York State Public Service Commission" (Dec. 20, 2013) ("Declaration").

order of the New York State PSC<sup>3</sup> that considered the potential shutdown of Indian Point Nuclear Generating Unit Nos. 2 and 3 (“Indian Point”), and discussed, *inter alia*, energy efficiency, demand reduction, and combined heat and power as alternatives to Indian Point. On November 27, 2013, The Board denied New York’s Motion, stating that it would be “premature for the Board to consider the PSC Order before the NRC Staff has had the opportunity to review its impact and determine whether to supplement the existing FSEIS.”<sup>4</sup> Accordingly, the Board directed the Staff to report whether it will supplement the Final Supplemental Environmental Impact Statement (“FSEIS”)<sup>5</sup> pursuant to 10 C.F.R. § 51.92(a)(2)<sup>6</sup> and, if so, to provide a realistic estimate of when any such draft Supplement to the FSEIS would be issued.<sup>7</sup>

As explained in the Declaration of Andrew L. Stuyvenberg and Lois M. James attached hereto, the NRC Staff reviewed the New York PSC’s Order of November 4, 2013, and determined that it did not show new and significant circumstances or constitute new and significant information regarding electric transmission, energy efficiency, demand reduction, and combined heat and power as compared to the discussion of these matters in the current FSEIS.

More specifically, Mr. Stuyvenberg (the NRC Staff’s expert who authored the FSEIS discussion of energy alternatives for license renewal of Indian Point) stated that he reviewed the PSC’s Order and the FSEIS discussion of energy alternatives. Declaration, at 3, ¶ 4.

Mr. Stuyvenberg observed that the PSC Order addressed contingency planning for the potential

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<sup>3</sup> N.Y. Pub. Serv. Comm’n., Case 12-E-0503 (Proceeding on Motion of the Commission to Review Generation Retirement Contingency Plans), “Order Accepting IPEC Reliability Contingency Plans, Establishing Cost Allocation and Recovery, and Denying Requests for Hearing,” (Nov. 4, 2013).

<sup>4</sup> Order at 2.

<sup>5</sup> NUREG-1437, Supplement 38, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Final Report” (Dec. 2010).

<sup>6</sup> The regulation in 10 C.F.R. § 51.92(a)(2) provides that the NRC staff will prepare a supplement to an FSEIS if there are “new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.”

<sup>7</sup> *Id.*

future shutdown of Indian Point Units 2 and 3 – and, *inter alia*, accepted for implementation a portfolio that includes three Transmission Owner Transmission Solution (“TOTS”) projects (PSC Order at 46). Those projects would cumulatively provide approximately 600 megawatts (“MW”) of transmission capacity (Order at 6), and 125 MW in revised energy efficiency (“EE”)/demand-response (“DR”) projects (100 MW) and combined-heat-and-power projects (25 MW) (PSC Order at 47). See Declaration at 3, ¶¶ 4-5.

Further, Mr. Stuyvenberg noted that in Chapter 8 of the FSEIS, the Staff had included an assumption, for purposes of the FSEIS analysis of alternatives, that “adequate transmission will exist . . .” (FSEIS at 8-27). Mr. Stuyvenberg observed that “[t]his conclusion is not affected by the PSC Order, which appears to show that the TOTS projects afford an additional means of providing adequate transmission for alternatives to Indian Point.” Further, he noted that “[t]he PSC Order’s discussion of the TOTS projects is thus not contrary to the Staff’s assumption that an adequate transmission capacity will exist to support alternatives to Indian Point.” In sum, Mr. Stuyvenberg concluded that “the PSC Order’s discussion of the TOTS projects does not affect the FSEIS analysis and conclusions, and it does not present new and significant information beyond that considered in the FSEIS.” Declaration at 3-4, ¶ 6.

In addition, Mr. Stuyvenberg observed that in Chapter 8 of the FSEIS, the Staff had addressed the alternatives of energy efficiency and demand-response. Declaration at 4, ¶ 7.

In this regard, Mr. Stuyvenberg observed as follows:

The NRC Staff considered that energy efficiency and/or energy conservation could replace the entire 2058-MW capacity of Indian Point (FSEIS at 8-41 to 8-43); in contrast, the PSC Order discusses only a total of 100 MW of combined EE and DR projects (Order at 10). Because the FSEIS considered significantly larger amounts of energy efficiency and/or conservation as a stand-alone alternative to Indian Point, the PSC Order’s discussion of the much smaller amount of energy associated with the EE and DR projects does not affect the FSEIS analysis and conclusions. Further, the NRC Staff noted in the FSEIS that the New York State Energy Research and Development Authority (“NYSERDA”) had forecasted a technical potential for energy efficiency programs to reduce peak loads by 3,800 MW by 2012 and 7,400

MW by 2022 (FSEIS at 8-42). Much like the NYSERDA forecast discussed in the FSEIS, the EE/DR programs addressed in the PSC Order serve to reduce peak loads (see Order at 10). Since the peak-load reductions discussed in the FSEIS are significantly larger than the peak-load reductions provided by the EE/DR programs discussed in the PSC Order, the peak-load reduction offered by these EE/DR programs do not affect the Staff's discussion of peak-load reductions presented in the FSEIS as part of the Staff's consideration of energy efficiency and conservation.

*Id.*

Lastly, Mr. Stuyvenberg observed that the Staff's discussion of energy alternatives in Chapter 8 of the Indian Point FSEIS also discussed combined-heat-and-power ("CHP") projects. Declaration at 4-5, ¶ 8. In this regard, Mr. Stuyvenberg stated as follows:

In the FSEIS, the Staff dismissed CHP projects from further consideration because, by supplying heat in addition to electricity, CHP "fulfills a need not currently met by IP2 and IP3 and is not a direct alternative to IP2 and IP3 license renewal." (FSEIS at 8-49). This conclusion is not affected by the PSC Order. Moreover, the quantity of CHP included in the PSC Order is only 25 MW, while the amount of CHP that New York State had posited in its comments on the DSEIS – and which the NRC Staff declined to consider in the FSEIS (*id.*) – totaled 100-200 MW. In this regard, the NRC Staff's determination to dismiss CHP projects from further consideration was based on the nature of CHP, not on the amount of electricity produced by CHP. Accordingly, neither the potential for CHP projects to be built nor the PSC Order's consideration of the amount of electricity that may be produced by CHP has any effect on the NRC Staff's analysis of alternatives in the FSEIS.

*Id.* at 5, ¶ 8 (footnote omitted).

Based upon his review of the PSC Order, his familiarity with the FSEIS, and his expertise in the analysis of energy alternatives, Mr. Stuyvenberg concluded that the information contained in the PSC Order "does not constitute new and significant information as compared to the discussion of those matters in the NRC Staff's FSEIS such that supplementation of the Indian Point FSEIS would be warranted. In addition, nothing in the PSC Order shows that there are any new and significant circumstances that would warrant supplementation of the FSEIS."

*Id.* at 5, ¶ 9.

The NRC Staff has concluded its review of this matter, as directed by the Board. Based on its review of the PSC Order, the FSEIS discussion of energy alternatives, and the review of these matters that has been conducted by Mr. Stuyvenberg (the Staff's expert on energy alternatives in this proceeding), the Staff has determined as follows:

[T]he information presented in the PSC Order does not present new and significant circumstances or new and significant information relevant to the environmental concerns and bearing on the proposed action. Therefore, the NRC Staff has determined that it will not supplement the Indian Point FSEIS on the basis of the November 4, 2013 Order of the New York Public Service Commission.

*Id.* at 6, ¶ 10.

Respectfully submitted

**/Signed Electronically by/**

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Dated at Rockville, Maryland  
this 20th day of December, 2013

December 20, 2013

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) )

DECLARATION OF  
ANDREW L. STUYVENBERG AND LOIS M. JAMES  
CONCERNING THE NOVEMBER 4, 2013 ORDER OF  
THE NEW YORK STATE PUBLIC SERVICE COMMISSION

Andrew L. Stuyvenberg ("ALS") and Lois M. James ("LMJ"), being first duly sworn, do hereby state as follows:

1. (ALS) My name is Andrew L. Stuyvenberg. I currently serve as a project manager in the Communications, Planning and Rulemaking Branch, Waste Confidence Directorate, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission ("NRC"). From February 2008 to October 2011, I served as a project manager in the Division of License Renewal ("DLR") in the NRC Office of Nuclear Reactor Regulation ("NRR"), with responsibility for the NRC Staff's ("Staff") evaluation of environmental matters in connection with the license renewal application filed by Entergy Nuclear Operations, Inc. ("Entergy") for Indian Point Nuclear Generating Unit Nos. 2 and 3 ("Indian Point"). In addition, I have served as the NRC staff's subject-matter expert for energy alternatives in the Indian Point renewal proceeding since April 2007, when Entergy proffered the license-renewal application. In this latter capacity, I wrote the alternatives analysis (including the no-action alternative and

the discussion of alternative energy sources) contained in Chapter 8 of the Indian Point Draft Supplemental Environmental Impact Statement ("DSEIS")<sup>1</sup> and Final Supplemental Environmental Impact Statement (FSEIS").<sup>2</sup> I have also served as a subject-matter expert in the area of energy alternatives for license renewal proceedings involving other NRC-licensed nuclear power plants. A statement of my professional qualifications was admitted into evidence in this proceeding as Ex. NRC000083.

2. (LMJ) My name is Lois M. James. I currently serve as a Senior Project Manager in the Division of License Renewal in the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission. Since November 2012, I have served as the environmental project manager for the Indian Point license renewal application. As part of my official duties, I am responsible for, among other things, the publication of any supplement(s) to the NRC Staff's Final Supplemental Environmental Impact Statement related to Indian Point license renewal.

3. (LMJ) In my duties as the environmental project manager for Indian Point, I rely on the regulations in 10 C.F.R. Part 51 that govern the NRC's environmental review. Those regulations include, without limitation, the following provision in 10 C.F.R. § 51.92(a):

(a) If the proposed action has not been taken, the NRC staff will prepare a supplement to a final environmental impact statement for which a notice of availability has been published in the Federal Register as provided in § 51.118, if:

(1) There are substantial changes in the proposed action that are relevant to environmental concerns; or

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<sup>1</sup> NUREG-1437, Supplement 38, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Draft Report for Comment" (Dec. 2008).

<sup>2</sup> NUREG-1437, Supplement 38, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Final Report" (Dec. 2010).

(2) There are new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

4. (ALS, LMJ) I have reviewed an Order issued November 4, 2013 (“Order”), by the New York State Public Service Commission, in PSC Case 12-E-0503, submitted by the State of New York in this proceeding, concerning contingency planning for a potential future shutdown of the Indian Point nuclear reactors.<sup>3</sup> I have also reviewed the alternatives discussion presented in Chapter 8 of the NRC Staff’s FSEIS for Indian Point license renewal.

5. (ALS) Among other matters, the PSC Order attempts to address the “unique and significant reliability issues” posed by the potential retirement of Indian Point Units 2 and 3, which, the Order notes, are “compounded by the inability of the existing processes and markets to fashion a timely response.” (Order at 45). The Order accepts for implementation a portfolio that includes three Transmission Owner Transmission Solution (“TOTS”) projects (Order at 46) — which cumulatively provide approximately 600 megawatts (“MW”) of transmission capacity (Order at 6), and 125 MW in revised energy efficiency (“EE”)/demand-response (“DR”) projects (100 MW) and combined-heat-and-power projects (25 MW) (Order at 47). The Order also, among other things, addresses timely project completion; cost allocation and cost recovery accounting and reporting; a future report on potential energy efficiency, demand reduction, and combined heat and power programs; and various other regulatory and administrative matters (see Order at 47-49).

6. (ALS) In Chapter 8 of the FSEIS, the Staff included an assumption, for purposes of the FSEIS analysis of alternatives, that “adequate transmission will exist . . .”

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<sup>3</sup> N.Y. Pub. Serv. Comm’n, Case 12-E-0503 (Proceeding on Motion of the Commission to Review Generation Retirement Contingency Plans), “Order Accepting IPEC Reliability Contingency Plans, Establishing Cost Allocation and Recovery, and Denying Requests for Hearing,” (Nov. 4, 2013).



(FSEIS at 8-27). This conclusion is not affected by the PSC Order, which appears to show that the TOTS projects afford an additional means of providing adequate transmission for alternatives to Indian Point. The PSC Order's discussion of the TOTS projects is thus not contrary to the Staff's assumption that an adequate transmission capacity will exist to support alternatives to Indian Point. In sum, the PSC Order's discussion of the TOTS projects does not affect the FSEIS analysis and conclusions, and it does not present new and significant information beyond that considered in the FSEIS.

7. (ALS) In addition, in Chapter 8 of the FSEIS, the NRC Staff addressed the alternatives of energy efficiency and demand-response. In this regard, the NRC Staff considered that energy efficiency and/or energy conservation could replace the entire 2058-MW capacity of Indian Point (FSEIS at 8-41 to 8-43); in contrast, the PSC Order discusses only a total of 100 MW of combined EE and DR projects (Order at 10). Because the FSEIS considered significantly larger amounts of energy efficiency and/or conservation as a stand-alone alternative to Indian Point, the PSC Order's discussion of the much smaller amount of energy associated with the EE and DR projects does not affect the FSEIS analysis and conclusions. Further, the NRC Staff noted in the FSEIS that the New York State Energy Research and Development Authority ("NYSERDA") had forecasted a technical potential for energy efficiency programs to reduce peak loads by 3,800 MW by 2012 and 7,400 MW by 2022 (FSEIS at 8-42). Much like the NYSERDA forecast discussed in the FSEIS, the EE/DR programs addressed in the Order serve to reduce peak loads (see Order at 10). Since the peak-load reductions discussed in the FSEIS are significantly larger than the peak-load reductions provided by the EE/DR programs discussed in the PSC Order, the peak-load reduction offered by these EE/DR programs do not affect the Staff's discussion of peak-load reductions presented in the FSEIS as part of the Staff's consideration of energy efficiency and conservation.

8. (ALS) Further, the NRC Staff's discussion of energy alternatives in Chapter 8 of

the FSEIS also discussed combined-heat-and-power (“CHP”) projects. In the FSEIS, the Staff dismissed CHP projects from further consideration because, by supplying heat in addition to electricity, CHP “fulfills a need not currently met by IP2 and IP3 and is not a direct alternative to IP2 and IP3 license renewal.” (FSEIS at 8-49). This conclusion is not affected by the PSC Order. Moreover, the quantity of CHP included in the PSC Order is only 25 MW, while the amount of CHP that New York State had posited in its comments on the DSEIS, and which the NRC Staff declined to consider in the FSEIS (*id.*), totaled 100-200 MW.<sup>4</sup> In this regard, the NRC Staff’s determination to dismiss CHP projects from further consideration was based on the nature of CHP, not on the amount of electricity produced by CHP. Accordingly, neither the potential for CHP projects to be built nor the PSC Order’s consideration of the amount of electricity that may be produced by CHP has any effect on the NRC Staff’s analysis of alternatives in the FSEIS.

9. (ALS) Based on my review of the PSC Order, my familiarity with the FSEIS, and my expertise with respect to the analysis of energy alternatives, I have determined that the information contained in the PSC Order regarding electric transmission, energy efficiency, demand reduction, and combined heat and power projects does not constitute new and significant information as compared to the discussion of those matters in the NRC Staff’s FSEIS such that supplementation of the Indian Point FSEIS would be warranted. In addition, nothing in the PSC Order shows that there are any new and significant circumstances that would warrant supplementation of the FSEIS.

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<sup>4</sup> See Comments Submitted by the New York State Office of the Attorney General on the [DSEIS] Prepared by the Staff of the [NRC] for the Renewal of the Operating Licenses for [Indian Point]” (Mar. 18, 2009), at 35-36 (reprinted in FSEIS (Ex. NYS000133G) at A-1020); *see also* FSEIS at A-150-160 (response to “Comments Concerning Alternatives”).

10. (LMJ) Based on the review of the PSC Order and FSEIS by the NRC Staff subject matter expert on alternatives in this proceeding (Andrew L. Stuyvenberg), as well as the NRC Staff's review of the PSC Order and the FSEIS for Indian Point license renewal, the Staff has concluded that the information presented in the PSC Order does not present new and significant circumstances or new and significant information relevant to the environmental concerns and bearing on the proposed action. Therefore, the NRC Staff has determined that it will not supplement the Indian Point FSEIS on the basis of the November 4, 2013 Order of the New York Public Service Commission.

11. (ALS, LMJ) I hereby declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge, information and belief.

**Executed in Accord with 10 C.F.R. § 2.304(d)**

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Dated at Rockville, Maryland  
This 20th day of December, 2013

**Executed in Accord with 10 C.F.R. § 2.304(d)**

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Dated at Rockville, Maryland  
This 20th day of December, 2013

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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, I hereby certify that copies of the foregoing "NRC STAFF'S RESPONSE TO THE ATOMIC SAFETY AND LICENSING BOARD'S ORDER OF NOVEMBER 27, 2013 (DENYING NEW YORK'S MOTION)," dated December 20, 2013, have been served upon the Electronic Information Exchange, the NRC's E-Filing System, in the above-captioned proceeding, this 20th day of December, 2013.

**/Signed (electronically) by/**

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