

February 9, 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) )

NRC STAFF'S ANSWER TO APPLICANT'S MOTION IN LIMINE TO EXCLUDE PORTIONS  
OF THE PREFILED TESTIMONY, REPORT, AND EXHIBITS FILED BY NEW YORK STATE  
AND DR. STEPHEN SHEPPARD IN SUPPORT OF CONSOLIDATED CONTENTION NYS-16B

INTRODUCTION

In accordance with 10 C.F.R. §§ 2.319, 2.323, 2.337, 2.1204, the Atomic Safety and Licensing Board's ("Board") scheduling Order of July 1, 2010, and Order dated November 17, 2011<sup>1</sup>, the staff of the Nuclear Regulatory Commission ("Staff") files its answer in support of Entergy Nuclear Operations, Inc. ("Entergy" or "Applicant") motion *in limine* ("Entergy's Motion").<sup>2</sup>

The testimony and exhibits that Entergy seeks to exclude from the hearing exceeds the scope of the contention as pled and its identified bases.<sup>3</sup> Although the Staff recognizes that the

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<sup>1</sup> See Licensing Board Order (granting Unopposed Motion by the State of New York and Riverkeeper, Inc. to Amend the Scheduling Order) at 1 (Nov. 17, 2011) (unpublished).

<sup>2</sup> Applicant's Motion in Limine to Exclude Portions of the Prefiled Testimony, Report, and Exhibits Filed By New York State and Dr. Stephen Sheppard In Support of Consolidated Contention NYS-16B ("Entergy's Motion") (Jan. 30, 2012).

<sup>3</sup> See New York State Notice of Intention to Participate and Petition to Intervene ("NYS-16") (Nov. 30, 2007) (Agency-wide Document Access & Management System ("ADAMS") Accession No. ML073400187); State of New York Contentions Concerning NRC Staff's Draft Supplemental Environmental Impact Statement ("NYS-16A") (Feb. 27, 2009) (ADAMS Accession No. ML090690303); State of New York's New and Amended Contentions Concerning the December 2009 Reanalysis of Severe Accident Mitigation Alternatives ("NYS-16B") (Mar. 11, 2010) (ADAMS Accession No. ML100780366).

Board is capable of sorting through the testimony and evidence for scope and weight, allowing portions of Dr. Sheppard's testimony and certain limited exhibits into evidence will result in the needless expenditure of resources on issues that are not properly before the Board by all parties and create a needlessly cluttered and confusing record on the issues to be decided. Thus, the Board should exclude portions of Dr. Sheppard's pre-filed written testimony<sup>4</sup>, portions of his report<sup>5</sup>, and New York State ("NYS") Exhibits ("Ex.") NYS000212, NYS000213, and NYS000214.<sup>6</sup> For the reasons set forth below the Staff fully supports Entergy's motion to exclude portions of New York State's prefiled testimony, expert report and exhibits. Accordingly, the Staff submits that the Board should exclude, in full or in part, the testimony and exhibits challenged in Entergy's motion, for the reasons and to the extent set forth therein.

### DISCUSSION

#### I. Legal Standards Governing Motions in Limine.

In an evidentiary hearing, "[o]nly relevant, material, and reliable evidence which is not unduly repetitious will be admitted. Immaterial or irrelevant parts of an admissible document will be segregated and excluded so far as is practicable." 10 C.F.R. § 2.337(a). While the "strict rules of evidence do not apply to written submissions," the Board may "on motion or on the presiding officer's own initiative, strike any portion of a written presentation or a response to a written question that is irrelevant, immaterial, unreliable, duplicative or cumulative."

10 C.F.R. § 2.319(d). *See also* 10 C.F.R. § 2.319(e).

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<sup>4</sup> Ex. NYS000207, Pre-Filed Written Testimony of Dr. Stephen Sheppard, Ph.D. Regarding Contention NYS-16/16A/16B (Dec. 16, 2011).

<sup>5</sup> Ex. NYS000209, Report of Dr. Stephen C. Sheppard, Ph.D. in Support of Contention NYS-16/16A/16B.

<sup>6</sup> Ex. NYS000212, J.G. Robinson, B. Ahmed, P.D. Gupta and K.A. Woodrow, "Estimation of Population Coverage in the 1990 United States Census Based on Demographic Analysis," *Journal of the American Statistical Association*, Vol. 88, No. 423 (Sep. 1993); Ex. NYS00213, U.S. Census Monitoring Board Presidential Members, Final Report to Congress (Sep. 1, 2001); Ex. NYS000214, J.G. Robinson, ESCAP II: Demographic Analysis Results, Executive Steering Committee for A.C.E. Policy II, Report No. 1 (Oct. 13, 2001).

NRC hearings are limited to the scope of the admitted contentions. It is well established that if an intervenor proffers testimony or evidence outside the scope of the admitted contentions, it will be excluded. *See, e.g., Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 100 (2010) (agreeing with the Staff that the licensing board had properly excluded the intervenors' testimony and exhibits that were outside the scope of the admitted contention). As the Commission explained:

The scope of a contention is limited to issues of law and fact pled with particularity in the intervention petition, including its stated bases, unless the contention is satisfactorily amended in accordance with our rules. Otherwise, NRC adjudications quickly would lose order. Parties and licensing boards must be on notice of the issues being litigated, so that parties and boards may prepare for summary disposition or for hearing. Our procedural rules on contentions are designed to ensure focused and fair proceedings.

*Id.* at 100-01 (internal footnotes omitted). Recently, the Commission emphasized:

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."

*Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-12-01, \_\_ NRC \_\_ (Feb. 9, 2012) (slip op. at 22-23) (internal citations omitted).

## II. THE CONTENTION WAS NARROWLY SCOPED AND UNSUPPORTED

NYS-16B as originally pled raised challenges to Indian Point's Severe Accident Mitigation Alternatives ("SAMA") analysis. Namely, NYS's challenge centered on the use of a Gaussian plume model in the atmospheric model for MELCOR Accident Consequence Code Systems ("MACCS2"). Subsequent to NYS' filing of testimony, it chose to forgo pursuing its

central challenge in this contention.<sup>7</sup> As a result, the scope of NYS-16B has been significantly narrowed to a single footnote. In NYS' three major filings related to NYS-16B, NYS' discussion of its challenge to the population estimates raised a single issue and relegated that issue to a single unsupported footnote. In the initial challenge, NYS' sole support consisted of a single footnote. Footnote 37 stated:

In addition, Entergy's projections of the 2035 population likely to be living within 50 miles of Indian Point are suspect and underestimate the potential exposed population. For example, Table 2-5 State and County Population, 50-Mile Radius of IP2 and IP3 on page 2-36 of the ER contains a projection that in 2035 the population of New York County (Manhattan) will be 1,570,657. The United State Census estimates that in 2006 Manhattan's population was 1,611,581, over 40,000 more than Entergy asserts would be at risk 29 years later. See, e.g., U.S. Department of Commerce, U.S. Census Bureau, State and County QuickFacts, New York County, New York, available at <http://quickfacts.census.gov/qfd/states/36/36061.html>. In its recent submission to the ASLB, New York City contends that as of July 1, 2006 populations of Manhattan and the other four New York City Boroughs were even larger than the Census' estimates for 2006 and that the Census adopted the City's figures in September. See, e.g., New York City Department of City Planning, Population Division, Population Update: the "Current", Population of NYC (2006), available at <http://www.nyc.gov/html/dcp/html/census/popcur.shtm>.<sup>8</sup>

In its amended contention to challenge the Staff's Draft Supplemental Environmental Impact Statement ("DSEIS"), NYS provided an even more abbreviated footnote that left off the last sentence and citation from the earlier footnote.<sup>9</sup> Finally, in its most recent amendment,

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<sup>7</sup> State of New York, Entergy Nuclear Operations, Inc., and NRC Staff Joint Stipulation at 2.

<sup>8</sup> NYS-16 at p 164 n.37. None of NYS experts provided any discussion of the census claim.

<sup>9</sup> Footnote 4 stated that:

In addition, Entergy's projections of the 2035 population likely to be living within 50 miles of Indian Point are suspect and underestimate the potential exposed population. For example, Table 2-5 State and County Population, 50-Mile Radius of IP2 and IP3 on page 2-36 of the ER contains a projection that in 2035 the population of New York County (Manhattan) will be 1,570,657. The United State Census estimates that in 2007 Manhattan's population was 1,620,867, over 50,000 more than Entergy asserts would be

NYS again relegated its claims to a single footnote. In that footnote, NYS added claims related to the unobjectionable part of Dr. Sheppard's testimony, namely tourist and commuter populations. Tellingly, NYS' amended contention remains completely silent as to any assertion of error in the U.S. Census reports.<sup>10</sup> The contention notably and repeatedly identifies the census data as being the correct and appropriate source of information.<sup>11</sup> In its entirety, NYS' allegations regarding the population estimates in its amended footnote are:

In addition, the December 2009 SAMA Reanalysis projections of the 2035 population likely to be living within 50 miles of Indian Point are suspect and underestimate the potential exposed population. For example, Table 2-5 State and County Population, 50-Mile Radius of IP2 and IP3 on page 2-36 of the ER contains a projection that in 2035 the population of New York County (Manhattan) will be 11,570,657. The United State Census Bureau estimates that in 2008 Manhattan's population was 1,634,795, over 60,000 more than what the ER asserts would be at risk 29 years later. See, e.g., U.S. Department of Commerce, U.S. Census Bureau, State and County QuickFacts, New York County, New York, available at <http://quickfacts.census.gov/qfd/states/36/36061.html> (last visited on Mar. 10, 2010). NRC Staff questioned Entergy about the assumptions concerning permanent and transient population and economic impact of lost tourism and business contained in the original SAMA analysis: See NRC Staff RAI 4(c), (e) (Dec. 7, 2007); Entergy RAI Response RAI 4(c), (e) (Feb. 5, 2008); Summary of Telephone Conference Held on Nov. 9, 2009 (requesting among other things revised estimates of the offsite population dose and offsite economic costs). The December 2009 SAMA Reanalysis relies, in part, on a revised analysis prepared by Entergy's consultant, Enercon. See Enercon Site Specific MACCS2 Input Data for Indian Point Energy Center, Revision 1, (Dec. 1, 2009) IPEC00208853. The December 2009 SAMA Reanalysis does not adequately take into account tourists and daily commuters - individuals who are not included in New York City's resident population, but who nevertheless could be

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at risk 29 years later. See, e.g., U.S. Census Bureau, State and County QuickFacts, New York County, New York, available at <http://quickfacts.census.gov/qfd/states/36/36061.html>.

NYS-16A at 10 n. 4. Again, NYS provided no discussion regarding this claim from its experts.

<sup>10</sup> Compare NYS-16 at p 164 n.37; NYS-16A at 10 n. 4; NYS-16B at 8 n. 3.

<sup>11</sup> *Id.*

affected by a severe accident while they are in the City. The U.S. Census Bureau estimates that New York City's daytime population as of 2000 was approximately 8,570,000 people - reflecting a daily influx of approximately 563,000 people in addition to the City's resident population. In addition, New York City estimates that 47 million tourists (domestic and foreign) visited the City in 2008. See U.S. Department of Commerce, U.S. Census Bureau, Census 2000 PHC-T-40, Estimated Daytime Population and Employment-Residence Ratios: 2000; see also New York City tourism data available at <http://www.nycgo.com>. The December 2009 SAMA Reanalysis does not adequately take into account such additional people and thus further underestimates the population that would be exposed to a severe accident release of radiation and the benefit of any mitigation measure that would reduce such exposure.<sup>12</sup>

III. NYS' TESTIMONY, REPORTS, AND EXHIBITS EXCEEDED THE LIMITED SCOPE OF THIS CONTENTION

The Staff agrees with Entergy that "the contention admitted by the Board never contemplated hearings on alleged undercounting in the U.S. Census Bureau data ...."<sup>13</sup> Thus, the Staff agrees with Entergy's view that the portions of NYS's pre-filed testimony and exhibits that Entergy seeks to exclude from the hearing record should be excluded, on the grounds that it is beyond the scope of Contention NYS-16B.

Since the beginning of this proceeding, Dr. Sheppard has been providing advice and support to NYS and its contentions.<sup>14</sup> As such, NYS had an iron-clad obligation to identify Dr. Sheppard's concerns regarding the census undercount in NYS-16B or its supporting bases. However, Dr. Sheppard did not provide any supporting declaration regarding NYS-16B and NYS limited its claims to the unsupported assertions in a footnote to its original contention and two subsequent amendments. By allowing NYS and its expert to revitalize an essentially abandoned contention with a new theory disclosed for the first time in its pre-filed testimony,

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<sup>12</sup> NYS-16B at 8 n.3

<sup>13</sup> Entergy's Motion at 9.

<sup>14</sup> See Dr. Sheppard's Declaration in support of petition to intervene.

would result in a manifest injustice to the Staff and the Staff's experts. As such, this new theory as provided in NYS' testimony and exhibits should be excluded from the proceeding as outside the scope of the admitted contention.

CONCLUSION

Because portions of Dr. Sheppard's testimony and portions of his report as identified by Entergy in its motion are outside the scope of the admitted contention, they should be excluded. Further, NYS' Exs. NYS000212, NYS000213, and NYS000214 also exceed the scope of the Contention 16B as originally pled by NYS and as subsequently amended, and these exhibits should be excluded from the hearing. Thus, Entergy's Motion should be granted.

Respectfully submitted,

**/Signed (electronically) by/**  
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Dated at Rockville, MD  
this 9th day of February 2012

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing "NRC STAFF'S ANSWER TO APPLICANT'S MOTION IN LIMINE TO EXCLUDE PORTIONS OF THE PREFILED TESTIMONY, REPORT, AND EXHIBITS FILED BY NEW YORK STATE AND DR. STEPHEN SHEPPARD IN SUPPORT OF CONSOLIDATED CONTENTION NYS-16B" in the above-captioned proceeding has been filed and served by Electronic Information Exchange (EIE), with copies to be served by the EIE system on the following persons, this 9th day of February, 2012.

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