

September 14, 2012

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
FIRSTENERGY NUCLEAR OPERATING CO.) Docket No. 50-346-LRA
)
(Davis-Besse Nuclear Power Station, Unit 1))
)

NRC STAFF'S ANSWER TO FIRSTENERGY'S MOTION FOR SUMMARY
DISPOSITION OF CONTENTION 4 (SAMA ANALYSIS SOURCE TERMS)

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), and the Atomic Safety and Licensing Board's ("Board") Orders,¹ the Nuclear Regulatory Commission ("NRC") Staff hereby files its answer in support of "FirstEnergy's Motion for Summary Disposition of Contention 4 (SAMA Analysis Source Terms)" ("FirstEnergy's Motion")² regarding FirstEnergy's license renewal application ("LRA") for Davis-Besse Nuclear Power Station, Unit 1 ("Davis-Besse").³ As more fully set forth below, FirstEnergy has demonstrated that there is no genuine issue as to any material fact with respect to Contention 4 and that it is entitled to judgment as a matter of law. Accordingly, FirstEnergy's Motion should be granted and Contention 4 should be dismissed.

¹ See Board's Initial Scheduling Order ("ISO") at B.2; Board Order (Granting Motion for Extension of Time to File an Answer (Aug. 3, 2012) (Agencywide Documents Access and Management System ("ADAMS") Accession No. ML111662021).

² See FirstEnergy's Motion for Summary Disposition of Contention 4 (SAMA Analysis Source Terms) (July 26, 2012).

³ Letter from Barry S. Allen, Vice President, dated August 27, 2010, transmitting the license renewal application for Davis-Besse (ADAMS Accession No. ML1024505650).

BACKGROUND

A. Procedural History

This proceeding concerns FirstEnergy's August 27, 2010 application to renew its operating license for Davis-Besse for an additional twenty years from the current expiration date of April 22, 2017.⁴ The Staff accepted the LRA for review, and on October 25, 2010, published a *Federal Register* Notice providing a Notice of Opportunity for Hearing.⁵ On December 27, 2010, Joint Petitioners filed a petition to intervene.⁶ On April 26, 2011, the Board admitted in part two of four originally proffered contentions. On March 27, 2012, the Commission affirmed in part, and reversed in part, the Board's decision.⁷ Specifically, the Commission held that the Board erred in admitting the energy alternatives contention⁸ and parts of the severe accident mitigation alternatives ("SAMA") contention.⁹ Therefore, only part of Intervenors' Contention 4 regarding SAMAs is currently an admitted contention pending in this proceeding.¹⁰ As narrowed by the Commission, Contention 4 states that:

The Environmental Report (ER) is inadequate because it underestimates the true cost of a severe accident at Davis-Besse in violation of 10 C.F.R. § 51.53(c)(3)(ii)(L) and Further Analysis by the Applicant, FirstEnergy, is called for because of:

⁴ LRA at 1.2-1. If the LRA is approved, Davis-Besse's new license expiration date would be April 22, 2037.

⁵ Notice of Acceptance for Docketing of the Application, Notice of Opportunity for Hearing for Facility Operating License No. NPF-003 for an Additional 20-Year Period; FirstEnergy Nuclear Operating Company, Davis-Besse Nuclear Power Station, Unit 1, 75 Fed. Reg. 65,528 (Oct. 25, 2010).

⁶ Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio Request for Public Hearing and Petition for Leave to Intervene (Dec. 27, 2010).

⁷ See FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-08, 75 NRC __ (Mar. 27, 2012) (slip op. at 1).

⁸ *Id.* at 8, 10.

⁹ See *id.* at 20.

¹⁰ *Id.* at 21 (deferring to the Board regarding the admission of Intervenors' Modular Accident Analysis Program ("MAAP") code claims).

(1) Minimization of the potential amount of radioactive material released in a severe accident by using a source term based on radionuclide release fractions which are smaller for key radionuclides than the release fractions specified in NRC guidance.¹¹

The Commission, however, describes Intervenors' challenge to the source terms "as weak."¹²

On July 16, 2012, FirstEnergy supplemented and amended the SAMA analysis that was submitted as part of its ER.¹³ Ten days later, FirstEnergy moved for summary disposition of the remaining portion of Contention 4.¹⁴

DISCUSSION

I. Legal Standards Governing Motions for Summary Disposition

Pursuant to 10 C.F.R. § 2.1205(a), motions for summary disposition must be in writing, must include a written explanation of the basis for the motion, and must include affidavits to support statements of fact. In ruling on a motion for summary disposition, the presiding officer is to apply the standards for summary disposition set forth in 10 C.F.R. § 2.710.¹⁵ A moving party is entitled to summary disposition of a contention if the filings in the proceeding, together with the statements of the parties and the affidavits, demonstrate that there is no genuine issue as to any material fact and that it is entitled to a decision in its favor as a matter of law.¹⁶

¹¹ See *id.* at 21; *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-13, 73 NRC 534, 577 (2011).

¹² *Davis-Besse*, CLI-12-08 (Mar. 27, 2012) (slip op. at 21).

¹³ Letter from John C. Dominy, Director, Site Maintenance, FirstEnergy, to Document Control Desk, U.S. N.R.C., "Correction of Errors in the Davis-Besse Nuclear Power Station, Unit No. 1, License Renewal Application (TAC No. ME4613) Environmental Report Severe Accident Mitigation Alternatives Analysis, and License Renewal Application Amendment No. 29 (July 16, 2012).

¹⁴ FirstEnergy's Motion at 1.

¹⁵ See 10 C.F.R. § 2.1205(c).

¹⁶ See 10 C.F.R. §§ 2.1205 and 2.710(d)(2); see also *Advanced Medical Sys., Inc.* (One Factory Row, Geneva, Ohio), CLI-93-22, 38 NRC 98, 102-03 (1993); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 179-80 (2005).

A party seeking summary disposition bears the burden of demonstrating that no genuine issue of material fact exists.¹⁷ The evidence submitted must be construed in favor of the non-moving party.¹⁸ Affidavits submitted in support of a summary disposition motion must be executed by individuals qualified by “knowledge, skill, experience, training, or education,” and must be sufficiently grounded in facts.¹⁹

A party opposing a motion for summary disposition cannot rely on mere allegations or denials of the moving party’s facts; rather, the non-moving party must set forth specific facts demonstrating a genuine issue of material fact.²⁰ Bare assertions and general denials, even by an expert, are insufficient to oppose a properly supported motion for summary disposition.²¹ Although the burden is on the moving party to show there is no genuine issue of material fact, the non-moving party must controvert any material fact proffered by the moving party or that fact will be deemed admitted.²²

Absent any probative evidence supporting the claim, mere assertions of a dispute as to material facts does not invalidate the licensing Board’s grant of summary disposition.²³ The adjudicating body need only consider the purported factual disputes that are “material” to the

¹⁷ See *Sequoyah Fuels Corp. & General Atomics Corp.* (Gore, Okla. Site Decontamination and Decommissioning Funding), LBP-94-17, 39 NRC 359, 361 (1994).

¹⁸ *Id.*

¹⁹ *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-04, 61 NRC 71, 80-81 (2005) (citing Fed. Rule of Evid., Rule 702); *Bragdon v. Abbott*, 524 U.S. 624, 653 (1998) (stating that an expert’s opinion must have a traceable, analytical basis in objective fact before it may be considered on summary judgment).

²⁰ See 10 C.F.R. § 2.710(b); *Advanced Medical Sys.*, CLI-93-22, 38 NRC at 102.

²¹ *Duke Cogema*, LBP-05-04, 61 NRC at 81 (citing *Advanced Medical Sys.*, CLI-93-22, 38 NRC at 102); *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-629, 13 NRC 75, 78 (1981).

²² *Advanced Medical Sys.*, CLI-93-22, 38 NRC at 102 – 03.

²³ *Advanced Med. Sys., Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 309-10 (1994).

resolution of the issues raised in the summary disposition motion.²⁴ Material facts are those with the potential to affect the outcome of the case.²⁵

In addition to demonstrating that no genuine issue of material fact exists, the movant must also demonstrate that it is entitled to the decision as a matter of law.²⁶

II. Legal Standards Governing SAMA Analysis Under NEPA

The National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321 *et seq.*, requires federal agencies, including the NRC, to take a hard look at the environmental impacts of their actions. NEPA does not mandate a specific outcome or a course of action, including a decision to mitigate any potential impacts.²⁷ For operating license renewals, the NRC fulfills its obligations under NEPA through the Final Supplemental Environmental Impact Statement (“FSEIS”) and the Generic Environmental Impact Statement (“GEIS”).²⁸ The Commission stated that “there is no NEPA requirement to use the best scientific methodology, and NEPA ‘should

²⁴ *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Because the Commission’s summary disposition rules follow Rule 56 of the Federal Rules of Civil Procedure, federal court decisions that interpret and apply Rule 56 are considered appropriate precedent for the Commission’s rules. See *Safety Light Corp.* (Bloomsburg Site Decommissioning and License Renewal Denials), LBP-95-9, 41 NRC 412, 449 n. 167 (1995). See also *Advanced Medical Sys.*, CLI-93-22, 38 NRC at 102-03; *Duke Cogema Stone & Webster*, 61 NRC at 79.

²⁵ *Ganton Technologies Inc. v. National Indus. Group Pension Plan*, 865 F. Supp 201, 205 (S.D.N.Y 1994); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-18, 44 NRC 86, 99 (1996).

²⁶ *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

²⁷ See, e.g., *Baltimore Gas and Elec. Co. v. Nat. Res. Def. Council*, 426 U.S. 87, 97 (1983) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976))(stating that NEPA requires “only that the agency take a ‘hard look’ at the environmental consequences before taking a major action); *Sierra Club v. Army Corp of Engineers*, 446 F.3d 808, 815 (2006)(same); *Louisiana Energy Services, L.P.* (Clairborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998)(same); *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-19, 64 NRC 53, 63-64 (2006)(same); see also *Winter v. Nat. Res. Def. Council*, 129 S.Ct. 365, 376 (2008)(stating that “NEPA imposes only procedural requirements” and does not mandate any particular result).

²⁸ 10 C.F.R. § 51.2. In this case, FirstEnergy’s ER stands in the place of the Staff’s Draft Supplemental Environmental Impact Statement (“DSEIS”) and FSEIS. See 10 C.F.R. § 2.309(f)(2) (noting that contentions must be based on documents or other information available at the time the petition is to be filed).

be construed in light of reason if it is not to demand' virtually infinite study and resources."²⁹

The Commission has cautioned that "[o]ur boards do not sit to 'flyspeck' environmental documents or to add details or nuances. If the [EIS] on its face 'comes to grips with all important considerations' nothing more need be done."³⁰

In its recent *Pilgrim* decision, the Commission clearly articulated the legal standard for SAMA contentions. The Commission stated: "NRC adjudicatory hearings are not 'EIS editing sessions.' The ultimate concern here is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis."³¹ In *Pilgrim*, the Commission stated:

Ultimately, we hold adjudicatory proceedings on issues that are material to licensing decisions. With respect to a SAMA analysis in particular, unless a contention, submitted with adequate factual, documentary, or expert support, raises a potentially significant deficiency in the SAMA analysis—that is, a deficiency that could credibly render the SAMA analysis altogether unreasonable under NEPA standards—a SAMA-related dispute will not be material to the licensing decision, and is not appropriate for litigation in an NRC proceeding.³²

The Commission warned that "in a highly predictive analysis such as a SAMA analysis, there are bound to be significant uncertainties, and therefore an uncertainty analysis is performed."³³

The Commission, anticipating the wide ranging disputes over individual aspects of the SAMA analysis, has said:

²⁹ *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Station), CLI-10-11, 71 NRC 287, 315 (2010).

³⁰ *Exelon Generation Co, LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005)(citing *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)(footnote omitted)).

³¹ *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009).

³² *Pilgrim*, CLI-12-01, ___ NRC ___ slip op at 25 (Feb. 9, 2012) (emphasis added).

³³ CLI-12-01 at 25.

It always will be possible to conceive of yet another input or methodology that could have been used in the SAMA computer modeling, and many different inputs and approaches may all be reasonable choices. ... The SAMA analysis is not a safety review performed under the Atomic Energy Act. The mitigation measures examined are supplemental to those we already require under our safety regulations for reasonable assurance of safe operation.³⁴

In other words, it is not enough for an intervenor to take issue with a particular aspect of the SAMA analysis. Instead, an intervenor's challenge to a SAMA analysis must show that it is unreasonable as a whole.³⁵ The Commission recently stressed that

the "proper question is not whether there are plausible alternative choices for use in the analysis, but whether the analysis that was done is reasonable under NEPA." To challenge an application, a petitioner must point with support to an asserted deficiency that renders the SAMA analysis unreasonable under NEPA. In other words, "[a] contention proposing alternative inputs or methodologies must present some factual or expert basis for why the proposed changes in the analysis are warranted (e.g., why the inputs or methodology used is unreasonable, and the proposed changes or methodology would be more appropriate)."³⁶

Finally, the Commission has concluded that "[u]ltimately, NEPA requires the NRC to provide a 'reasonable' mitigation alternatives analysis, containing 'reasonable' estimates, including where appropriate, full disclosures of any known shortcomings in available methodology, disclosure of incomplete or unavailable information and significant uncertainties, and reasoned evaluation of whether and to what extent these or other considerations credibly could or would alter the Pilgrim SAMA analysis conclusions"³⁷

³⁴ *Id.* at 24.

³⁵ *Id.* at 24-25.

³⁶ *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit1), CLI-12-08, ___ NRC ___, (slip op. at 17-18) (Mar. 27, 2012). (reversing the admission of contention challenging the costs to clean-up a severe accident) (internal citations omitted).

³⁷ *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-22 72 NRC 202, 208-09 (Aug. 27, 2010).

II. Intervenors' Contention 4 Does Not Raise a Genuine Issue of Material Fact and Does Not Require Resolution In a Hearing

The Staff has carefully reviewed FirstEnergy's Motion, its statement of material facts, affidavit in support of its motion, and the accompanying attachments. After reviewing FirstEnergy's filings and as explained below, the Staff agrees that there are no genuine issues of material fact and that Contention 4 may be resolved as a matter of law.

A. FirstEnergy's Motion Demonstrates That No Genuine Issue of Material Fact Exists Regarding Contention 4

The Staff has carefully reviewed the reports, declarations, and list of material facts that form the basis of FirstEnergy's Motion, and agrees with FirstEnergy that no genuine issues of material exist. FirstEnergy has listed 79 facts, of which it considers 38 material and not in dispute. The Staff, after reviewing all 79 facts, has determined that the statements contained in FirstEnergy's Statement of Material Facts are correct, with certain minor clarifications and corrections noted by the Staff's affiants and in the Staff's Statement of Material Facts.

The Staff is in full agreement with 78 of the 79 stated facts and 37 of 38 stated material facts. As to the remaining fact, the Staff provided some additional clarifications but these clarifications are not material to the issue before the Board in Contention 4 and would not preclude the Board from ruling on FirstEnergy's Motion. As indicated in the attached Affidavit, these clarifications do not materially change the underlying facts. See Affidavit of Kyle W. Ross Concerning the Motion for Summary Disposition of Contention 4 ("Ross' Affidavit"); The Staff's Response to FirstEnergy's Statement of Material Facts ("Staff's Statement of Material Facts"). In paragraph 49 of FirstEnergy's Statement of Material Facts, the Staff explains that although the NRC does not normally validate computer codes nothing would preclude the NRC from validating a particular computer code.³⁸ In fact, the Staff has validated a particular computer

³⁸ Staff's Statement of Material Facts at ¶ 49.

code previously.³⁹ Therefore, the Staff has concluded that no genuine dispute of material fact exists with respect to Contention 4 and Contention 4 may be resolved as a matter of law.

B. FirstEnergy is Entitled to a Judgment as a Matter of Law

As explained by the Commission, the adequacy of a SAMA analysis is not determined by whether different or alternative inputs could have been used.⁴⁰ A SAMA analysis, under NEPA, is evaluated as to whether it is reasonable such that a change suggested by Intervenor's challenging the analysis could credibly alter the conclusions.⁴¹

Here, Intervenor's argue that FirstEnergy's SAMA analysis is unreasonable because source terms developed from the Modular Accident Analysis Program ("MAAP") Version 4 results in an under-estimation of the true consequences of a severe accident.⁴² Specifically, Intervenor's claim that instead of using the source terms generated by the MAAP4 code, FirstEnergy should have used the source terms identified in NUREG-1465 or NUREG-1150.⁴³ As the Staff's expert explains, source terms from NUREG-1465 and NUREG-1150 are not relevant or appropriate for a site-specific SAMA analysis at Davis-Besse because they represent source terms that do not appropriately account for removal mechanisms prior to being released into the environment or calculations that are inappropriate in light of the substantial changes to severe accident modeling during the last two decades.⁴⁴ Even assuming *arguendo* that NUREG-1150's two decade old calculations might be applicable to evaluating the proper

³⁹ *Id.*

⁴⁰ *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-22 72 NRC 202, 208-09 (Aug. 27, 2010).

⁴¹ *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-22 72 NRC 202, 208-09 (Aug. 27, 2010).

⁴² See *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-08 (Mar. 27, 2012) (slip op. at 21)

⁴³ See *id.*; *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-13, 73 NRC 534, 577 (Apr. 26, 2011).

⁴⁴ Ross' Affidavit at ¶¶ 9 – 12.

source term, the source terms used by FirstEnergy for Davis-Besse, source terms generated from modern accident codes like MAAP and MELCOR, and even the source term found in NUREG-1150 are in remarkable agreement.⁴⁵

1. NUREG-1465 Is an Inappropriate Reference for Determining the Proper Source Term for a SAMA Analysis

Intervenors' reliance on NUREG-1465 to show that the source terms used by FirstEnergy are inappropriately too small is fundamentally in error.⁴⁶ NUREG-1465 is a NRC document that is primarily related to siting criteria for a nuclear reactor.⁴⁷ The source term described in NUREG-1465 occurs at a different point during a severe accident sequence than the source terms used by MELCOR Accident Consequence Code Systems ("MACCS2").⁴⁸ The NUREG-1465 source term describes the radionuclides released into the containment,⁴⁹ while the SAMA analysis source terms are concerned about radionuclides released into the environment.⁵⁰ As Mr. Ross explains, radionuclides released into containment undergo a multitude of physical and chemical processes that serve to preclude their uncontrolled release into the environment.⁵¹ These physical and chemical removal mechanisms include settling, adsorption, washing by the containment spray, and scrubbing.⁵² As a result of these active and passive radionuclide removal processes, the source term released into the environment should be and is significantly smaller than source term that was calculated for a release into

⁴⁵ Ross' Affidavit at ¶¶ 13 – 21.

⁴⁶ *Id.* at ¶ 9.

⁴⁷ Staff's Statement of Material Facts at ¶ 53.

⁴⁸ See Ross' Affidavit at ¶ 9.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

containment.⁵³ As Mr. Ross explains, the source terms released into containment are simply not applicable to a SAMA analysis, which is concerned with the impact from releasing radionuclides into the environment.⁵⁴ Thus, Intervenor's concern about the differences between source terms calculated from MAAP4 or calculated in NUREG-1465 are simply not relevant to whether FirstEnergy's SAMA analysis was conducted in a reasonable manner. Thus, FirstEnergy is entitled judgment a matter law in regard to the Intervenor's assertions with respect to NUREG-1465..

2. NUREG-1150's Source Terms are Consistent with the Source Terms Used by FirstEnergy

Intervenor's arguments asserting that source terms produced by MAAP are consistently smaller than the source terms produced by MELCOR or as identified in NUREG-1150 do not withstand even the most limited scrutiny. As Mr. Ross explains, the draft NUREG-1150 statements comparing MAAP to MELCOR were not included in the final version of NUREG-1150 and do not make a proper comparison of similar accident source terms.⁵⁵ The draft NUREG-1150 compared mean source terms generated under MAAP with maximum source terms generated by MELCOR for different plants, potentially using different inputs, and different accident sequences.⁵⁶ Mr. Ross compared the source terms identified in NUREG-1150 and the source terms used in FirstEnergy's SAMA analysis.⁵⁷ Once the source terms were compared on a consistent basis, including looking at the entire statistical description of the source term and the type of accident, it is apparent that the source terms generated by FirstEnergy using MAAP4 are comparable with NUREG-1150 and actually produced higher amounts of the key

⁵³ Ross' Affidavit at ¶¶ 9 – 12.

⁵⁴ *Id.*

⁵⁵ *Id.* at ¶ 18.

⁵⁶ *Id.* at ¶¶ 16 – 19.

⁵⁷ *Id.*

radionuclides of concern in some accident calculations.⁵⁸ Since the source terms produced by MAAP4 were consistent with the source terms identified in NUREG-1150, Intervenor's concern that MAAP produces non-conservative source terms is simply not supported. Thus, FirstEnergy is entitled to judgment as a matter of law.

3. NUREG-1150's Analysis is Not Reasonable in light of the Improved Modeling Performance Reflected in MELCOR and MAAP

Finally, the Staff's expert explains that Intervenor's assertions regarding the NUREG-1150 source terms and even the comparison between source terms appearing in NUREG-1150 has no real value or relevance to determining whether modern source term codes are producing reasonable results.⁵⁹ The severe accident modeling capabilities that existed at the time of NUREG-1150 were limited in comparison to the modern models being used today.⁶⁰ Mr. Ross explains that since NUREG-1150 was first published, more modern accident codes have introduced more realistic physics and thermo-hydraulic models. Many of the early codes were predominantly parametric where modern codes have adopted more mechanistic calculations.⁶¹ Since the accident source terms produced in NUREG-1150 represent two decade old analysis with limited performance compared to the more modern and complete codes used now like MAAP4, Intervenor's concern that the MAAP4 code may produce non-conservative results is unsupported by the facts and immaterial to issue currently before the Board. Thus, Intervenor's Contention 4 should be dismissed and FirstEnergy's Motion granted.

⁵⁸ Ross' Affidavit at ¶¶ 16 – 19.

⁵⁹ *Id.* at ¶ 20.

⁶⁰ *Id.* at ¶¶ 13 – 14..

⁶¹ *Id.* at ¶ 13 – 15..

CONCLUSION

For the reasons discussed above, FirstEnergy's motion for summary disposition on Contention 4 should be granted and Contention 4 should be dismissed.

Respectfully submitted,

Signed (electronically) by

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
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FIRSTENERGY NUCLEAR OPERATING CO.) Docket No. 50-346-LRA
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CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER TO FIRSTENERGY'S MOTION FOR SUMMARY DISPOSITION OF CONTENTION 4 (SAMA ANALYSIS SOURCE TERMS)," "THE STAFF'S RESPONSE TO FIRSTENERGY'S STATEMENT OF MATERIAL FACTS," "AFFIDAVIT OF KYLE W. ROSS CONCERNING THE MOTION FOR SUMMARY DISPOSITION OF CONTENTION 4," Kyle W. Ross' Statement of Professional Qualifications, and Attachments A-E in the above-captioned proceeding have been served on the following by Electronic Information Exchange this 14th day of September, 2012.

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