### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### **BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

In the Matter of

Southern Nuclear Operating Company

(COL Application for Vogtle Electric Generating Plant, Units 3 and 4) Docket Nos. 52-025-COL and 52-026-COL

January 29, 2010

### SOUTHERN NUCLEAR OPERATING COMPANY'S MOTION FOR SUMMARY DISPOSITION OF CONTENTION SAFETY-1

In accordance with the Atomic and Safety and Licensing Board's ("Board" or "ASLB") Order dated January 8, 2010,<sup>1</sup> Southern Nuclear Operating Company ("SNC" or "Applicant") hereby moves for summary disposition of Contention Safety-1, as amended. As explained by the Board, Safety-1 poses a limited legal question.<sup>2</sup> SNC moves for summary disposition on the grounds that no genuine issue as to any material fact exists, and the applicable Nuclear Regulatory Commission ("NRC" or "Commission") regulations entitle SNC to disposition as a matter of law.<sup>3</sup> This Motion is supported by the Final Safety Analysis Report ("FSAR"), SNC's Statement of Undisputed Facts,<sup>4</sup> and the sworn affidavit cited therein. Summary disposition of Safety-1 resolves all admitted contentions in this proceeding for a Combined License ("COL") for Vogtle Units 3 and 4. The undersigned certifies that he has contacted Counsel for the NRC

<sup>&</sup>lt;sup>1</sup> See Memorandum and Order (Ruling on Motion to Amend Contention), Docket Nos. 52-025-COL and 52-026-COL (Jan. 8, 2010) ("Order Amending Safety-1").

 $<sup>^{2}</sup>$  *Id.* at 2.

<sup>&</sup>lt;sup>3</sup> 10 C.F.R. § 2.1205; 10 C.F.R. § 2.710(d)(2).

<sup>&</sup>lt;sup>4</sup> SNC's "Statement of Undisputed Facts In Support of Motion for Summary Disposition of Contention Safety-1" is attached hereto and cited herein as "Facts."

Staff and the Joint Intervenors in an effort to resolve the issues raised in this motion. The NRC Staff has not taken a position on the Motion as of the deadline for submission of the Motion, and Joint Intervenors oppose the Motion.

#### I. <u>BACKGROUND</u>

On March 28, 2008, SNC submitted an application to the NRC for a COL for Vogtle Units 3 and 4 ("COLA").<sup>5</sup> The COLA incorporates by reference SNC's Early Site Permit ("ESP") which was issued on August 17, 2009.<sup>6</sup> On September 16, 2008, the NRC published a Notice of Hearing for the COLA stating that any person who wished to participate as a party must file a petition for leave to intervene by November 17, 2008, in accordance with 10 C.F.R. § 2.309(b).<sup>7</sup>

Joint Intervenors<sup>8</sup> filed a petition for leave to intervene and admit three contentions on November 17, 2008. The Board granted the petition to intervene, finding only Safety-1 admissible.<sup>9</sup> SNC and NRC Staff appealed the admission of Safety-1, and the Commission denied the appeals of the Board's order.<sup>10</sup>

As originally admitted, Safety-1 stated:

CONTENTION: SNC's COLA is incomplete because the FSAR fails to provide any detail as to how SNC will comply with NRC regulations governing storage of

<sup>&</sup>lt;sup>5</sup> Notice of Receipt and Availability of Application for a Combined License, 73 Fed. Reg. 24,616 (May 5, 2008).

<sup>&</sup>lt;sup>6</sup> Second and Final Partial Initial Decision (Mandatory/Uncontested Proceedings), *Southern Nuclear Operating Co.*, Docket Nos. 52-025-COL and 52-026-COL (Aug. 17, 2009) ("Second PID").

<sup>&</sup>lt;sup>7</sup> See Southern Nuclear Operating Company, *et al.*, Notice of Hearing and Opportunity to Petition for Leave to Intervene, 73 Fed. Reg. 53,446 (Sept. 16, 2008) ("Hearing Notice").

<sup>&</sup>lt;sup>8</sup> Joint Intervenors include the Atlanta Women's Action for New Directions, Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Savannah Riverkeeper, and Southern Alliance for Clean Energy.

<sup>&</sup>lt;sup>9</sup> Memorandum and Order (Ruling on Standing and Contention Admissibility), LBP-09-03, Docket Nos. 52-025-COL and 52-026-COL (Mar. 5, 2009) ("Order Admitting Safety-1").

<sup>&</sup>lt;sup>10</sup> See In re Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI09-16, 2009 WL 2383011, at \*3 (NRC July 31, 2009) ("Commission Order on Safety-1").

LLRW in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations.<sup>11</sup>

On October 23, 2009, Joint Intervenors moved to amend Safety-1, which motion the Board

granted on January 8, 2010.<sup>12</sup> Based on Joint Intervenors' assertions in their motion to amend

Safety-1, the Board amended Safety-1 to state:

CONTENTION: SNC's COLA is incomplete because the FSAR fails to provide adequate detail as to how SNC will comply with NRC regulations governing storage of LLRW in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations in that it does not contain the following information:

- A. A design plan for the LLRW storage facility for the two new proposed units based on more than assurances that the facility design will comply with NRC requirements, which must include information regarding building materials and high-integrity containers so as to permit a determination regarding exposure rates and dosages;
- B. A specific designation of where on the VEGP site the storage facility will be located; and
- C. A discussion of the health impacts on SNC employees from the additional LLRW storage associated with the two new proposed units.

The Board found that because Safety-1 constitutes "a rather straightforward legal issue,"

submission of motions for summary disposition was the most appropriate procedural path, prompting SNC to file this Motion.<sup>13</sup>

## II. <u>APPLICABLE LAW</u>

#### A. Standard for Summary Disposition

Although this proceeding is governed by the informal adjudicatory procedures prescribed in Subpart L of 10 C.F.R. Part 2, Subpart L's instructions for filing motions for summary disposition direct the Board to apply the standards in Subpart G (Section 2.710(d)(2)).<sup>14</sup> A

<sup>&</sup>lt;sup>11</sup> *Id.* at Appendix A.

<sup>&</sup>lt;sup>12</sup> Order Amending Safety-1, at 2.

<sup>&</sup>lt;sup>13</sup> Order Amending Safety-1, at 8-9.

<sup>&</sup>lt;sup>14</sup> 10 C.F.R. § 2.1205(c).

motion for summary disposition must be granted "if the filings in the proceeding ..., together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law."<sup>15</sup> Summary disposition "is a useful tool for resolving ... contentions that ... are shown by undisputed facts to have nothing to commend them."<sup>16</sup> Without a genuine issue of material fact, the Board may summarily dispose of the contention on the basis of the pleadings.<sup>17</sup>

In the present situation, the Board already has determined that the contention is legal in nature, asking the narrow question of whether the items asserted to be missing from the FSAR are required by Commission regulations.<sup>18</sup> If the information in question is not required by regulation, Safety-1 is due to be dismissed as a matter of law.

#### **B.** Regulations Governing the Content of SNC's FSAR

10 C.F.R. Part 52, Subpart C of NRC regulations governs the content of COLAs, and Section 52.79 in particular governs the "Contents of applications; technical information in final safety analysis report."<sup>19</sup> 10 C.R.F. § 52.79(a) requires that the FSAR address the design of the "facility ... at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that *must be resolved* by the Commission *before issuance of a combined license*."<sup>20</sup>

<sup>&</sup>lt;sup>15</sup> 10 C.F.R. § 2.710(d)(2); *see Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 179-80 (2005).

<sup>&</sup>lt;sup>16</sup> Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 509 (2001).

<sup>&</sup>lt;sup>17</sup> *N. States Power Co.* (Prarie Island Nuclear Generating Plant, Units 1 and 2), CLI-73-12, 6 A.E.C. 241, 242 (1973), *aff'd sub. Nom. BPI v. AEC*, 502 F.2d 424 (D.C. Cir. 1974).

<sup>&</sup>lt;sup>18</sup> Order Amending Safety 1, at 8-9.

<sup>&</sup>lt;sup>19</sup> 10 C.F.R. § 52.79.

<sup>&</sup>lt;sup>20</sup> 10 C.F.R. § 52.79(a) (emphasis added).

As the Commission recognized in its July 31, 2009 decision, 10 C.F.R. 52.79(a)(3) contains the pertinent licensing requirement applicable to Safety-1.<sup>21</sup> It requires that the FSAR include:

The kinds and quantities of radioactive materials expected to be produced in the operation and the *means* for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter[.]

# C. Regulations and Guidance Regarding On-Site Storage of LLRW

10 C.F.R. Part 20 "establish[es] standards for protection against ionizing radiation resulting from activities conducted under licenses issued by the [Commission,]" in order to "control the receipt, possession, use, transfer, and disposal of licensed material by any licensee in such a manner that the total dose to an individual ... does not exceed the standards for protection against radiation prescribed in [Part 20]."<sup>22</sup> Part 20 sets out generally the standards regarding radiation protection programs, dose limits, security, storage, and monitoring and reporting that apply to a licensee with responsibility for radioactive material. Part 20 does not define the requisite contents of an FSAR.

Issued in December 2008 in response to closure of the Barnwell facility to all but a handful of NRC licensees, NRC Regulatory Issue Summary 2008-32<sup>23</sup> surveyed and clarifies years of NRC guidance regarding interim long-term storage of LLRW.<sup>24</sup> RIS 2008-32 explains the procedure a licensee seeking to construct onsite LLRW storage must follow, citing prior generic communications in GL 81-38 and SECY 94-198. RIS 2008-32 refers licensees to the

<sup>&</sup>lt;sup>21</sup> See Commission Order on Safety-1, at \*3.

<sup>&</sup>lt;sup>22</sup> 10 C.F.R. § 20.1001.

<sup>&</sup>lt;sup>23</sup> NRC Regulatory Issue Summary 2008-32: Interim [LLRW] Storage at Reactor Sites (Dec. 30, 2008) ("RIS 2008-32").

<sup>&</sup>lt;sup>24</sup> RIS 2008-32 at 2-4 (citing Generic Letter 81-38, "Storage of Low-Level Radioactive Wastes at Power Reactor Sites" (1981) ("GL 81-38"); Generic Letter 85-14, "Commercial Storage at Power Reactor Sites of Low-Level Radioactive Waste Not Generated by the Utility"; Information Notice 89-13, "Alternative Waste Management Procedures in Case of Denial of Access to Low-Level Waste Disposal Sites" (1989); SECY-94-198, "Review of Existing Guidance Concerning the Extended Storage of Low-Level Radioactive Waste").

applicable guidance covering whether a license amendment will be required to construct the storage,<sup>25</sup> the safety of onsite storage,<sup>26</sup> and the criteria the NRC staff will use to review a license amendment for the construction of additional onsite storage.<sup>27</sup>

#### III. <u>ARGUMENT</u>

SNC's FSAR satisfies Section 52.79 as a matter of law, because it: 1) contains the requisite level of detail regarding a contingent on-site facility per Section 52.79(a)(3); 2) describes SNC's means for future compliance with regulations applicable to the operation of the facility; and 3) includes information of the kind and specificity Section 52.79 was intended to require, as evidenced by analogous regulations and related guidance. Because SNC's FSAR satisfies the applicable regulation, Safety-1 lacks an adequate legal basis and therefore fails to raise a genuine issue as to any material fact. As a result, SNC is entitled to summary disposition as a matter of law.

### A. Requirements Governing the Content of SNC's FSAR

Safety-1 poses the legal question "Whether the agency's regulatory requirements governing the content of COLAs mandate that the SNC FSAR contain" information regarding the location, design, and health impacts of contingent LLRW storage as argued by Joint Intervenors.<sup>28</sup> The threshold issue the Board therefore must determine is clear: What are "the agency's regulatory requirements governing the content of COLAs" regarding the location, design, and health impacts of contingent on-site LLRW storage?<sup>29</sup>

<sup>&</sup>lt;sup>25</sup> *Id.* at 2-3 (citing GL 81-38; SECY 94-198).

<sup>&</sup>lt;sup>26</sup> *Id.* at 3 (citing SECY 94-198).

<sup>&</sup>lt;sup>27</sup> *Id.* at 4 (citing NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" (2007) ("NUREG-0800")).

<sup>&</sup>lt;sup>28</sup> Order Amending Safety-1, at 8.

<sup>&</sup>lt;sup>29</sup> *Id.* at 8.

As stated above, Section 52.79 governs the contents of an FSAR and requires generally that the FSAR address the design of the "facility ... at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that *must be resolved* by the Commission *before issuance of a combined license*."<sup>30</sup> Section 52.79(a) lists several categories of information that are required in order to resolve safety determinations.<sup>31</sup> Only one subsection, 10 C.F.R. § 52.79(a)(3), relates to LLRW management. Section 52.79(a)(3) requires that the FSAR include:

The kinds and quantities of radioactive materials expected to be produced in the operation and the *means* for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter[.] (emphasis supplied).

Joint Intervenors have cited Part 20 in support of Safety-1, arguing in their Motion to Amend Safety-1 that "10 C.F.R. Parts 20 and 52 demand sufficient detail in order for the NRC staff and Joint Intervenors to evaluate whether precautionary measures are as safe as possible" and that "[t]he new information in SNC's Response to RAI 39 simply does not provide the detail and analysis necessary to demonstrate how SNC will comply with 10 C.F.R. Parts 20 and 52."<sup>32</sup> Joint Intervenors argue that SNC should "demonstrate that onsite storage will comply with 10 C.F.R. Parts 20 and 52."<sup>33</sup> These statements however, do not accurately reflect the requirements set forth in the governing regulations.

First of all, the applicable standard for the issuance of a license is not "as safe as possible" as implied by Joint Intervenors, but whether there is "reasonable assurance" that public

<sup>&</sup>lt;sup>30</sup> 10 C.F.R. § 52.79(a) (emphasis added).

<sup>&</sup>lt;sup>31</sup> See 10 C.F.R. § 52.79(a)(1) to (a)(47).

<sup>&</sup>lt;sup>32</sup> Joint Intervenors' Motion to Amend Contention Safety-1, Docket Nos. 52-025 and 52-026 (Oct. 23, 2009), at 3, 5 ("Motion to Amend").

<sup>&</sup>lt;sup>33</sup> *Id.* at 4.

health and safety will be protected.<sup>34</sup> Moreover, the Joint Intervenors misinterpret 10 C.F.R. Part 20, which simply does not define the necessary content of a COLA. Rather, Part 20 prescribes limits on radiation exposures to the public and employees from the operation of nuclear power plants generally. The regulation does not prescribe the level of information to be included in an FSAR supporting a COLA regarding the location, design, and health impacts of contingent on-site LLRW storage.<sup>35</sup> Section 52.79(a)(3) only requires a COL applicant to address in the FSAR the "means" for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20.

Significantly, 10 C.F.R. § 52.79(a)(3) does not require a COL applicant to include detailed information such as those items asserted by Joint Intervenors to be required in Safety-1 unless the "means" for controlling exposures includes a structure to be built as part of the "facility" sought to be licensed under the COLA, or that "health impacts" from such means are to be addressed except with respect to compliance with 10 C.F.R. Part 20 limits. If an LLRW storage installation was proposed as part of the "facility" to be constructed under the COL, 10 C.F.R § 52.79(a)(4) would require information such as the "principal design criteria," the "design bases," and "information relative to materials of construction, arrangement, and

<sup>&</sup>lt;sup>34</sup> See In re Amergen Energy Co. (Oyster Creek Nuclear Generating Station), 69 N.R.C. 235, 262 (2009) ("[A]n applicant is 'not obliged to meet an absolute standard but to provide 'reasonable assurance' that public health, safety and environmental concerns were protected, and to demonstrate that assurance 'by a preponderance of the evidence.'' (citing *Commonwealth Edison Co.* (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 421 (1980)); *In re Pacific Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-94-35, 40 N.R.C. 180, 1994 WL 687611, at \*5 (1994) ("NRC may issue operating licenses upon finding that there is 'reasonable assurance (i) that the activities authorized by the operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with [NRC] regulations' and that issuance of the license' will not be inimical to the ... health and safety of the public.'" (citing 10 C.F.R. 50.57(a)(3) and (a)(6))).

<sup>&</sup>lt;sup>35</sup> See Commission Order on Safety-1, at \*5 ("We agree that the plain language of section 52.79(a)(3) does not explicitly require a description of LLRW storage for a specified duration. On its face, therefore, section 52.79(a)(3) sets no quantity or time restrictions relative to onsite storage of such waste.").

dimensions, sufficient to provide reasonable assurance that the design will conform to the design bases with adequate margin for safety."

Importantly, the requirements of Section 52.79(a)(4) are triggered *only* when temporary LLRW storage *is a component of the facility to be constructed* under the COL. For contingent on-site storage plans *not* currently included in the facility design, the *only* applicable requirement is Section 52.79(a)(3). This distinction is determinative of this Motion, as a matter of law, as explained below.

Namely, the Vogtle Units 3 and 4 radwaste buildings, which provide the AP1000 LLRW storage capacity and which will be constructed as part of the facility for which construction authorization is sought in the COLA, is described in Revision 15 of the Westinghouse AP1000 Design Control Document, and was approved and certified by the Commission in 10 C.F.R. Part 52, Appendix D. It is incorporated by reference in the Vogtle Units 3 and 4 COLA.<sup>36</sup> The NRC's requirements regarding the content of design certification applications relative to information regarding the means for controlling radiation exposures and information regarding the design detail of the "facility," are identical to the requirements for COLAs.<sup>37</sup> Accordingly, the information required to be included in the Vogtle Units 3 and 4 COLA regarding LLRW facilities that are proposed to be constructed under the COL have been fully described and approved by the Commission in Revision 15 of the AP1000 DCD – as codified in Part 52, Appendix D. For purposes of contingent on-site LLRW storage that might be required in the

<sup>&</sup>lt;sup>36</sup> AP1000 Design Control Document ("DCD"), § 11.4. On January 27, 2006, the NRC issued the AP1000 final Design Certification Rule in the *Federal Register*. AP100 Design Certification, 71 Fed. Reg. 4,464. Although Westinghouse has submitted proposed revisions to the AP1000 those revisions do not address the LLRW storage capacity of the AP1000 design and do not affect the finality of those provisions of the AP1000 DCD.

<sup>&</sup>lt;sup>37</sup> *Compare* 10 C.F.R. § 52.79(a)(3) *with* 10 C.F.R. § 52.47(a)(5) ("The kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter[.]").

event off-site options are not available, 10 C.F.R. § 52.79(a)(4) does not apply and only Section 52.79(a)(3)'s "means of compliance" standard governs the content of the Vogtle COLA.<sup>38</sup>

The Board and Commission have recognized that no applicable regulation or guidance expressly states what information is required of a COL applicant regarding the location, design, and health impacts of contingent on-site LLRW storage, or compels a certain kind of capacity of on-site LLRW storage.<sup>39</sup> As fully explained below, however, NRC guidance to Part 50 licensees regarding the issue of management of LLRW in the absence of off-site disposal options provides valuable insight into the level of information necessary to describe the "means for controlling" radiation exposures in the COLA. This question must be answered with reference to what the controlling regulations require, and not to the Joint Intervenors argument of what the regulations *should* require.<sup>40</sup>

#### B. Regulatory Guidance Regarding On-Site LLRW Storage

RIS 2008-32 expressly addresses the underlying issue raised by Safety-1, the potential necessity of interim, long-term storage of LLRW at licensed facilities. RIS 2008-32 surveyed and clarified years of NRC guidance regarding interim long-term storage of LLRW in response to the Barnwell facility's closure to all but a handful of NRC licensees.<sup>41</sup> First, RIS 2008-32 makes clear that the preferred method for LLRW management is shipment off-site, particularly

<sup>&</sup>lt;sup>38</sup> This conclusion is confirmed by the Board's decision in *Bell Bend*, which recognized that a general description of the intent to construct on-site storage facilities was adequate. *See In re PPL Bell Bend, LLC*, LBP-09-18, 70 NRC (Aug. 10, 2009) (slip op. at 45-46), *aff'd on other grounds* CLI-10-07, 2010 WL 87744 (NRC Jan. 7, 2010) ("[t]he Commission's regulations do not dictate the duration and capacity for onsite LLRW storage that COL applicants must provide....the Application discusses the possibility that no offsite disposal facility will be available for Class B and C waste when operations commence.").

<sup>&</sup>lt;sup>39</sup> Commission Order on Safety-1, at \*3; Order Amending Safety-1, at 24-25.

<sup>&</sup>lt;sup>40</sup> *Id.* 

<sup>&</sup>lt;sup>41</sup> RIS 2008-32 at 2-4 (citing GL 81-38; GL 85-14, Information Notice 89-13, and SECY-94-198).

for disposal, and that LLRW on-site storage should be contingent only.<sup>42</sup> NUREG-0800 also makes clear that on-site storage should only be utilized if off-site options are unavailable.<sup>43</sup> In other words, all applicable guidance favors limiting on-site storage to a future commitment to be undertaken only if other off-site options fail. It does not follow that the regulations would insist on the inclusion of construction-level detail in a COLA for storage facilities that the regulatory guidance is simultaneously discouraging.

Second, RIS 2008-32 reiterates earlier NRC guidance that licensees may utilize the FSAR change procedure in 10 C.F.R § 50.59 to evaluate the need for a license amendment prior to expanding on-site LLRW storage facilities.<sup>44</sup> 10 C.F.R. § 50.59 allows a licensee to "make changes in the facility as described in the final safety analysis report" or "make changes in the procedures as described in the final safety analysis report" without a license amendment if certain conditions are met.<sup>45</sup> RIS 2008-32 explains that this process is available to licensees for the construction of temporary on-site LLRW storage and that in the absence of a failure to meet the 10 C.F.R § 50.59 thresholds, a nuclear plant licensee requires no license amendment (*i.e.*,

<sup>&</sup>lt;sup>42</sup> GL 85-14 ("While some licensees have taken steps to temporarily store LLW generated, at their sites to alleviate any impact that limiting of access to disposal capacity may have on licensed operations, provisions for storing LLW should be used only for interim contingency purposes. It is the policy of the NRC that licensees should continue to ship waste for disposal at existing sites to the maximum extent practicable.").

<sup>&</sup>lt;sup>43</sup> NUREG-0800, Appendix II.4-A ("waste should not be placed in contingency storage if it can be disposed at a licensed disposal site").

<sup>&</sup>lt;sup>44</sup> RIS 2008-32, at 3-4. The Commission has explained that Section 50.59 is designed as a "uniform system for authorization of such actions." Licensing of Production and Utilization Facilities; Procedures for Review of Certain Nuclear Reactors Exempted from Licensing Requirements, 38 Fed. Reg. 22,796 (Aug. 24, 1973).

 $<sup>^{45}</sup>$  10. C.F.R. § 50.59(c), (d). If the proposed change to the FSAR would not (a) result in a more than minimal increase in the frequency of occurrence or consequences of an accident evaluated in the FSAR, or in the likelihood of occurrence of or consequences of a malfunction of a structure, system or component important to safety already evaluated in the FSAR, (b) create a possibility of a type of accident not evaluated in the FSAR, a malfunction with a different result than was considered in the FSAR, (c) cause a design basis limit for a fission product barrier described in the FSAR to be exceeded or altered, or (d) cause a departure from a method described in the FSAR used in establishing the design bases or in the safety analyses, then no license amendment would be required. *Id.* § 50.59(c)(2).

prior NRC approval) to expand storage capacity for LLRW generated by that facility, or to store such material for an indefinite period of time.<sup>46</sup>

RIS 2008-32 further explains that if the licensee's on-site storage proposal does not meet the criteria in Section 50.59 to proceed without a license amendment, then the licensee must obtain a license amendment under 10 C.F.R. § 50.90.<sup>47</sup> Regardless of whether such on-site capacity is added with or without a license amendment, however, the NRC's repeated recognition that such capacity can be expanded through one or the other of these processes demonstrates that all contingent facilities for storing LLRW on-site are not required to be described at a construction-level of detail in a COLA – as they are not subject to prior NRC approval. Such a requirement would be internally inconsistent with RIS 2008-32 and previous NRC guidance and practice.

RIS 2008-32 provides additional guidance on this point. In its discussion of the on-site storage of LLRW, RIS 2008-32 states:

In 2007, the NRC revised NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," in anticipation of receiving new reactor license applications. While NUREG-0800 was revised and updated in anticipation for new license applications, it is also used by staff during license amendment reviews for operating plants. Chapter 11.4, "Solid Waste Management System," specifies the information that NRC staff has determined should be included in a Construction and Operating License Application. Appendix 11.4-A, "Design Guidance for Temporary Storage of Low-Level Radioactive Waste" provides specific guidance to licensees for increasing on-site LLRW storage capacity.<sup>48</sup>

RIS 2008-32, as well as the plain language of NUREG-0800, makes clear that the information required by Appendix 11.4-A of NUREG-0800, which includes some of the

<sup>&</sup>lt;sup>46</sup> RIS 2008-32, at 2 (citing GL 81-38).

<sup>&</sup>lt;sup>47</sup> *Id.*; RIS 2008-32, at 3 (citing SECY-94-198).

<sup>&</sup>lt;sup>48</sup> RIS 2008-32, at 4 (citing NUREG-0800).

information that Safety-1 demands be included in the COLA, is necessary only when temporary LLRW storage capacity is actually constructed, and is not required in a COLA.<sup>49</sup>

#### C. SNC's FSAR Satisfies the Requirements of Section 52.79(a)(3)

Given the analysis of applicable regulations and guidance above, it is evident that the requisite description of the "means for controlling and limiting ... radiation exposures within the limits set forth in part 20," is satisfied by a qualitative description of a COL applicant's *commitment* to manage LLRW in accordance with applicable regulations. Both the Board and the Commission, while acknowledging that no express requirement as to the extent of the information required exists, have implied that a description of the applicant's *plan* would satisfy 52.70(a)(2):

52.79(a)(3):

- The Commission stated that the information required by Section 52.79 "is tied to the COL applicant's particular *plans* for compliance through design, operational organization, and procedures. However, the scope and extent of that required information on specific plans or contingency planning is not clear."<sup>50</sup>
- This Board stated "we do not see how, if offsite disposal for LLRW remains unavailable, *a COL applicant* could address compliance with [Part 20] limits in accordance with section 52.79(a)(3) without addressing *what it intends to do* with the LLRW[.]" The Board's criticism of the FSAR prior to SNC's amendment was that "the discussion and analysis in both documents make it clear that what is being considered is no more than a 'concept' that lacks *SNC adoption as an actual plan* for longer-term LLRW storage for the proposed Vogtle units."<sup>51</sup>

It is noteworthy what the Commission and this Board said, and what they did not say, in

admitting this contention. The focus on the applicant's plan to comply with regulatory

<sup>&</sup>lt;sup>49</sup> See NUREG-0800, Appendix 11.4-A ("Before implementing any additional onsite storage capacity, licensees should conduct substantial safety review and environmental assessments to assure adequate public health and safety protections…"); see also, e.g. RIS 2008-32 ("[U]nder Part 20 requirements, licensees storing LLRW on reactor sites for an indefinite period of time must ensure that, in connection with such LLRW storage, occupational doses are as low as is reasonably achievable and that doses to individual members of the public are within regulatory limits. In addition, licensees must ensure that the storage of LLRW has been accounted for in their Part 20 radiation protection programs, including meeting the requirements for surveys and monitoring, labeling, and reports and record retention.").

<sup>&</sup>lt;sup>50</sup> Commission Order on Safety-1, at 6 (emphasis added).

<sup>&</sup>lt;sup>51</sup> Order Admitting Safety-1, at 24, 26-27 (emphasis added).

requirements, given the uncertainty regarding whether off-site disposal facilities will be available, underscores that detailed design information regarding contingent storage facilities is not called for by either decision. Rather the decisions reflect the necessity to include a commitment, in the form of an articulable plan, to control exposures from LLRW. The marked difference in the language of Section 52.79(a)(3), as opposed to that in the other subsections, reveals that its focus is not trained on the inclusion of specific design and construction information, but rather on the licensee's plans and commitments for complying with the Commission's regulations in the future.<sup>52</sup>

This focus on commitment rather than actual design and construction information for LLRW control is consistent with RIS 2008-32's guidance regarding the requirements for constructing on-site storage. If SNC alters its facility to construct on-site storage in the future, then the processes in Sections 50.59 and/or 50.90 ensure that the facility is constructed so as to enable the licensee to comply with Part 20 and other applicable regulatory requirements. This is the only practical way to address the issue since the required assessments under 10 C.F.R. §§ 50.59 or 50.90 would be performed when information regarding the quantity, type and radioactivity level of LLRW to be stored would be known, instead of the subject of speculation as they are at the COLA stage. The types of details sought by the Joint Intervenors would be evaluated contemporaneous with a finding that the storage is actually needed; meaning those assessments would be focused on a real facility and actual, rather than theoretical, need.

<sup>&</sup>lt;sup>52</sup> By comparison, this distinction between structures that fall within the license and are subject to 10 C.F.R. § 52.79(a)(4), versus contingent structures, also exists in the context of a Independent Spent Fuel Storage Installation ("ISFSI"). An applicant is not required to address the necessity of an ISFSI or evaluate health impacts of an ISFSI in its COLA. 10 C.F.R. § 72.210 grants nuclear plant licensees a general license to construct an ISFSI based only on a requirement that the licensee perform a safety analysis to conclude that the ISFSI complies with the Certificate of Compliance for the cask. Similarly, a COL holder can expand LLRW storage capacity through the 10 C.F.R. § 50.59 process, which at most would require a license amendment and then only if the thresholds in § 50.59 are not met. As RIS 2008-32 and GL 81-38 illustrate, those thresholds are normally met in the context of LLRW storage facilities. *See infra* pages 11-13 of this Motion.

Joint Intervenors' attempt to immediately force fit contingent on-site LLRW storage facility design information into the COLA has no basis in statute, NRC regulations, or even guidance documents, as evidenced by the dearth of authority in their contention. The entirety of Safety-1 is based on the erroneous assumption that Section 52.79(a)(3) requires that a COLA include detailed information about a contingent LLRW storage facility identical to the level of detail required by Part 52 about the facility itself. In fact, Section 52.79(a)(3) only requires that the COLA contain a clear "intent" or "plan," which when and if executed, must then comply with substantive storage regulations. The Vogtle Units 3 and 4 COLA fully satisfies Section 52.79(a)(3) as a matter of law.

# 1. SNC's Plan for Controlling LLRW Adequately Describes the Means for Future Compliance with Part 20.

As the Commission noted in affirming the Board's order admitting Safety-1, the contention is premised on the assumption that a licensed LLRW disposal facility will not be available to the Vogtle 3 and 4 and the information required depends on SNC's "particular plans" in the absence of such a facility.<sup>53</sup> The Commission's decision recognized that its rules do not compel any specific measures be undertaken as long as they achieve compliance.

SNC's FSAR now contains a plan for controlling LLRW, sufficiently setting forth the means SNC will use to comply with Part 20 regulations. Consistent with NRC guidance, SNC's FSAR describes SNC's plan to dispose of all LLRW generated by Vogtle Units 3 and 4 off-site, to the extent a disposal facility is available. Currently, the EnergySolutions, Inc. facility in Clive, Utah accepts Class A waste for disposal. Facts ¶ 10. Class A represents 95% of the LLRW that will be generated by Vogtle Units 3 and 4. FSAR, Section 11.4.2.4.3; Facts ¶¶ 7-8. Assuming a Class B and C waste disposal facility is not available to SNC that will accept Class

<sup>&</sup>lt;sup>53</sup> Commission Order on Safety-1, at 6.

B and C wastes after Vogtle 3 and 4 begin operation,<sup>54</sup> the FSAR describes the storage options that SNC intends to pursue. FSAR, Section 11.4.2.4.3; Facts  $\P$  9.

First, the DCD provides that the "AP1000 has sufficient radwaste storage capacity to accommodate the maximum generation rate" and..."provide[s] more than a year of spent resin storage at the expected rate [of generation]."<sup>55</sup> FSAR, Section 11.4.2.4.3; DCD, Section 11.4.2.1; Facts ¶ 9. Next, if the storage provided in the DCD is insufficient, then SNC plans to use vendor services that are currently available for waste processing and off-site storage of Class B and C wastes. FSAR, Section 11.4.2.4.3; Facts ¶ 9. With regard to Class B and C wastes, Studsvik, Inc. currently offers to take possession of and title to Class B and C wastes and then transfer the waste to the Waste Control Specialists, Inc. ("WCS") site near Andrews, Texas (or similar sites that may be developed) for storage until a permanent disposal option is available. FSAR, Section 11.4.2.4.3; Facts ¶¶ 13-14. In addition, the commercial option to directly ship Class A, B, and C wastes to WCS for storage is currently available. FSAR, Section 11.4.2.4.3; Facts ¶¶ 9, 11. The availability of off-site storage options undercuts the fundamental premise of Safety-1, *i.e.*, that on-site storage is a certainty and a necessity.

If these planned processes do not provide adequate storage, or otherwise enable SNC to disposition Class B and C waste, then SNC has committed in the FSAR to construct and/or expand on-site storage facilities (or use another licensed nuclear plant's facility). FSAR, Section 11.4.2.4.3; Facts ¶ 15. SNC's on-site contingency plan includes the key design and program

<sup>&</sup>lt;sup>54</sup> The WCS disposal facility is expected to be operational when Vogtle Units 3 and 4 begin operation. WCS has publicly stated that it expects to receive authorization in 2010 from the Texas Compact Commission to import waste from non-compact states, to begin construction of the disposal facility in the spring of 2010, and to commence operation of the facility in early 2011. Facts ¶ 12.

<sup>&</sup>lt;sup>55</sup> See NUREG-0800, Sections 11.1-6 and BTP 11-3-2 ("Insofar as the continuous operation of the SWMS is contingent on the availability of storage space for the interim period between waste packaging and shipment off site, the applicant should give consideration to providing ample storage capacity to accommodate wastes during periods when offsite shipments are not possible... in view of the reduced availability of burial site disposal capacity, it may be desirable to provide additional onsite short-term storage capacity to accommodate surges in solid waste volume resulting from interruption or limitations in offsite disposal services.").

features set out by the EPRI Guidelines Report and NRC guidance documents. FSAR, Section 11.4.2.4.3; Facts ¶ 15. Specifically, SNC's FSAR addresses the essential categories of information set out in NUREG-0800, Appendix 11.4-A.

SNC's FSAR provides that (1) the outside storage pad will be located within the Owner Controlled Area; (2) the subject LLRW will be stored in high integrity containers ("HICs"), or other suitable containers that will not decay over time, stored within shielded containers; (3) a description of operating considerations for the storage pad, including considerations for the use of cranes, ability of personnel to inspect containers, and fire protection; (4) the percentage of Class B and C waste that will be wet based on industry experience; and (5) the design storage capacity based on expected generation over the life of the plant, to be added in phases depending on the availability of SNC's primary plan for waste storage and disposal.<sup>56</sup> SNC has not only demonstrated that adequate off-site options are and will continue to be available, but also has provided an adequate contingency plan at the appropriate level of detail, supported by reference to the potentially applicable regulations in the event the contingency is realized. Facts ¶ 16.

Joint Intervenors have not made any allegation that a compliant on-site storage facility is an inadequate method for complying with Part 20 regulations, but have only contended that SNC is now - in the COLA - required to provide more detail for this plan.<sup>57</sup> Joint Intervenors have not charged the "means" described by SNC are inadequate, only that SNC has not now, in the COLA, provided a detailed description of the "means." Additional detail can not be provided, however, without designing an actual facility that SNC does not intend to build because off-site options are expected to be available and because the amount and type of material that might have

<sup>&</sup>lt;sup>56</sup> See NUREG-0800, Appendix 11.4-A. Of course, this list is not exhaustive. See Facts  $\P$  15 for SNC's information regarding the contingent on-site storage facility in its entirety.

<sup>&</sup>lt;sup>57</sup> SNC's Answer Opposing Motion to Amend Contention, Docket Nos. 52-025-COL and 52-026-COL (Nov. 6, 2009), at 8-9.

to be stored is unknown. Relevant NRC guidance regarding contingency planning for LLRW management, which permit and emphasize flexibility in dealing with this issue, demonstrates the impracticality of the Joint Intervenors' demand for more information.

Joint Intervenors also allege that the FSAR is deficient because it fails to include "[a] discussion of the health impacts on SNC employees from the additional LLRW storage associated with the two new proposed units."<sup>58</sup> SNC's FSAR shows the means it will use to comply with 10 C.F.R. Part 20 and commits that on-site dose limits will be controlled per Part 20, including the ALARA Principle of 10 C.F.R. § 20.1101.<sup>59</sup> This is all 10 C.F.R. § 52.79(a)(3) requires. An additional requirement to analyze "health impacts" from LLRW storage is not even hinted at in 10 C.F.R. § 52.79(a)(3). FSAR Section 11.4.6.3 describes the means by which SNC would manage radioactive exposures from LLRW within Part 20 limits. SNC's site-specific contingency plan includes information regarding the general location and construction materials of the contingent storage pad; the type of storage containers to be used and the method of shielding them from the environment; that 100% of Class B and C waste will be wet; that periodic inspection and testing that will be conducted during operation; and how the storage capacity of the facility will be increased, depending on the availability of on-site storage and disposal. FSAR Sections 11.4.6.3.1, 11.4.6.3.2, and 11.4.7; Facts ¶ 15-16.

Accordingly, the FSAR adequately describes the means SNC commits to use to manage LLRW in sufficient detail to comply with NRC regulations and guidance. SNC has provided a plant-specific contingency plan for expanding on-site LLRW storage capacity (including the key design and program features potentially required by the regulatory guidance) and commitments

<sup>&</sup>lt;sup>58</sup> Order Amending Safety-1, App. A.

<sup>&</sup>lt;sup>59</sup> FSAR, § 11.4.6.3.1.

to construct the facilities and follow the applicable regulations in the event the contingency plan to construct or expand on-site storage is implemented. FSAR, Section 11.4.2.4.3.

#### 2. SNC's FSAR and Commitment Satisfies Section 52.79(a)(3) and, Therefore, No Additional Detail is Necessary.

At the most fundamental level, Joint Intervenors argue that the regulations *should* require SNC to provide more detail because its commitments to future action are inadequate, "lip service," and "generalizations and blanket assurances."<sup>60</sup> However, commitments by licensees found to be technically qualified and otherwise capable of fulfilling those commitments, are a recognized part of the licensing process across many aspects of administrative law, including the NRC.<sup>61</sup> While Joint Intervenors correctly understand radioactive effluent safety to be an important safety issue, the associated review of SNC's qualifications as a potential licensee are correspondingly stringent, which is why applicant commitments to future action are also found in the nuclear context. For example, the FSAR describes a number of programs that SNC commits to develop, which commitment alone demonstrates compliance with referenced regulations.<sup>62</sup> In these instances, SNC is not required to provide the completed program documents or more detail in order to satisfy the regulations. SNC is only required to show the means by which it will

<sup>&</sup>lt;sup>60</sup> Motion to Amend, at 3, 5. Joint Intervenors' argument is an improper challenge to the regulation, which challenge is beyond the scope of this proceeding. The appropriate mechanism to change the rule would be a petition for rulemaking.

<sup>&</sup>lt;sup>61</sup> See, e.g. In re Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), LBP-99-32, 50 NRC at 158-60 (citing *Pub. Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-734, 18 NRC 11 (1984) ("[Applicant] declares that... the focus of the staff's review is the commitments contained within the QA plan, not the details of the implementing methodology that may be developed at a later date... [W]e... conclude [] that the matters of QA plan detail...appear to have been adequately addressed[.]"));*Wisconsin v. FERC*, 104 F.3d 462, 470 (D.C. Cir. 1997); *Office of Communication of United Church of Christ v. FCC*, 911 F.2d 803, 805 (D.C. Cir. 1990).

<sup>&</sup>lt;sup>62</sup> See FSAR, Chapter 13, Table 13.4-201. The table identifies the programs and provides references to the applicable FSAR sections that describe the programs and SNC's related commitments.

comply.<sup>63</sup> Importantly, NRC's inspection and enforcement processes serve to ensure that COL applicants comply not only with NRC's regulations but also the commitments in the FSAR.<sup>64</sup>

Nothing in Section 52.79(a)(3) gives any indication that contingent plans related to LLRW should be treated more stringently than any of the other activities SNC has made future commitments to undertake in the COLA. Put another way, provided this Board finds that SNC is appropriately qualified, the safety question with respect to future LLRW storage has been answered by its off-site plans in conjunction with its commitment to on-site storage if it becomes needed. Joint Intervenors have offered no legal authority for their assertion that SNC must provide the requested additional detail under Section 52.79(a)(3) in order to bolster its already-binding commitment.

#### IV. CONCLUSION

For the foregoing reasons, SNC's FSAR complies with the applicable requirement in Section 52.79(a)(3). SNC is entitled to summary disposition of Safety-1.

Respectfully submitted,

Signed (electronically) by M. Stanford Blanton

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<sup>&</sup>lt;sup>63</sup> See In re Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), LBP-99-32, 50 NRC at 158-60 (citing Pub. Serv. Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-734, 18 NRC 11 (1984).

<sup>&</sup>lt;sup>64</sup> Many elements of a COLA are necessarily forward looking, as would be the details sought in Safety-1, and therefore could be derided by the Joint Intervenors as "lip service." Inspections by the NRC Staff, buttressed by NRC's enforcement authority, provide the assurance that applicant commitments are followed in practice.

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COUNSEL FOR SOUTHERN NUCLEAR OPERATING COMPANY

Dated this 29<sup>th</sup> day of January, 2010.

### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### **BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

)	
In the Matter of )	
)	Docket Nos. 52-025-COL and 52-026-COL
Southern Nuclear Operating Company )	
(COL Application for Vogtle Electric )	January 29, 2010
Generating Plant, Units 3 and 4) )	

#### **CERTIFICATE OF SERVICE**

I hereby certify that copies of SOUTHERN NUCLEAR OPERATING COMPANY'S MOTION FOR SUMMARY DISPOSITION OF CONTENTION SAFETY-1 in the abovecaptioned proceeding have been served by electronic mail as shown below, this 29<sup>th</sup> day of January, 2010, and/or by e-submittal.

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U.S. Nuclear Regulatory Commission Atomic Safety and Licensing Board Panel Mail Stop T-3 F23 Washington, DC 20555-0001

Administrative Judge G. Paul Bollwerk, III, Chair E-mail: gpb@nrc.gov

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\*And upon any other persons designated on the official service list compiled by the Nuclear Regulatory Commission in this proceeding.

(Original signed by M. Stanford Blanton)

M. Stanford Blanton Counsel for Southern Nuclear Operating Company

Dated this 29<sup>th</sup> day of January, 2010.

## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

) )

In the Matter of

Southern Nuclear Operating Company

(COL Application for Vogtle Electric Generating Plant, Units 3 and 4) Docket Nos. 52-025-COL and 52-026-COL

January 29, 2010

## SOUTHERN NUCLEAR OPERATING COMPANY'S STATEMENT OF UNDISPUTED FACTS IN SUPPORT OF MOTION FOR SUMMARY DISPOSITION OF CONTENTION SAFETY-1

In accordance with the January 8, 2010 Memorandum and Order of the Atomic Safety and Licensing Board, Southern Nuclear Operating Company ("SNC") submits this Statement of Undisputed Facts in support of its Motion for Summary Disposition of Joint Intervenors' Contention Safety-1.<sup>1</sup> As the undisputed facts set forth below demonstrate, SNC is entitled to a ruling as a matter of law as to Contention Safety-1. The proposed undisputed facts supporting this motion are as follows:

## **Background and Admitted Contention Safety-1**

1. On March 28, 2008, SNC submitted an application to the NRC for a COL for Vogtle Units 3 and 4.<sup>2</sup> The COLA incorporates by reference SNC's Early Site Permit ("ESP") which was issued on August 17, 2009.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Joint Intervenors include the Atlanta Women's Action for New Directions, Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Savannah Riverkeeper, and Southern Alliance for Clean Energy.

<sup>&</sup>lt;sup>2</sup> Notice of Receipt and Availability of Application for a Combined License, 73 Fed. Reg. 24,616 (May 5, 2008).

2. On September 16, 2008, the NRC published a Notice of Hearing for the COLA stating that any person who wished to participate as a party must file a petition for leave to intervene by November 17, 2008, in accordance with 10 C.F.R.  $\S 2.309(b)$ .<sup>4</sup>

3. Joint Intervenors filed a petition for leave to intervene and admit three contentions

on November 17, 2008. The Board granted the petition to intervene, finding only Safety-1

admissible.<sup>5</sup>

4. As originally admitted, Safety-1 stated:

CONTENTION: SNC's COLA is incomplete because the FSAR fails to provide any detail as to how SNC will comply with NRC regulations governing storage of LLRW in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations.<sup>6</sup>

5. On October 23, 2009, Joint Intervenors moved to amend Safety-1, which motion

the Board granted on January 8, 2010.7 Specifically, based on Joint Intervenors' assertions in

their motion to amend Safety-1, the Board amended Safety-1 to state:

CONTENTION: SNC's COLA is incomplete because the FSAR fails to provide adequate detail as to how SNC will comply with NRC regulations governing storage of LLRW in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations in that it does not contain the following information:

A. A design plan for the LLRW storage facility for the two new proposed units based on more than assurances that the facility design will comply with NRC requirements, which must include information regarding building materials and high-integrity containers so as to permit a determination regarding exposure rates and dosages;

<sup>&</sup>lt;sup>3</sup> Second and Final Partial Initial Decision (Mandatory/Uncontested Proceedings), *Southern Nuclear Operating Co.*, Docket Nos. 52-025-COL and 52-026-COL (Aug. 17, 2009).

<sup>&</sup>lt;sup>4</sup> See Southern Nuclear Operating Company *et al.*, Notice of Hearing and Opportunity to Petition for Leave to Intervene, 73 Fed. Reg. 53,446 (Sept. 16, 2008) ("Hearing Notice").

<sup>&</sup>lt;sup>5</sup> Memorandum and Order (Ruling on Standing and Contention Admissibility), LBP-09-03, Docket Nos. 52-025-COL and 52-026-COL (Mar. 5, 2009) ("Order Admitting Safety-1").

<sup>&</sup>lt;sup>6</sup> *Id.* at Appendix A.

<sup>&</sup>lt;sup>7</sup> See Memorandum and Order (Ruling on Motion to Amend Contention), Docket Nos. 52-025-COL and 52-026-COL (Jan. 8, 2010) ("Order Amending Safety-1"), at 2.

B. A specific designation of where on the VEGP site the storage facility will be located; and

C. A discussion of the health impacts on SNC employees from the additional LLRW storage associated with the two new proposed units.

#### **SNC's FSAR Describes the Means by which SNC will Control LLRW**

6. On December 11, 2009, SNC submitted a revision to the FSAR. Specifically, SNC added section 11.4.2.4.3 regarding Alternatives for B and C Wastes, revised section 11.4.6.3 regarding the Long Term On-Site Storage Facility, and added sections 11.4.6.3.1 and 11.4.6.3.2 to provide details regarding such Long Term On-Site Storage Facility.

7. The FSAR states that Class B and C wastes will constitute approximately 5 percent by volume of the Low-Level Radioactive Waste ("LLRW") that will be generated by Vogtle 3 and 4 with the balance being Class A waste. Approximately 100 percent of the total volume of Class B and C wastes is wet. FSAR, Section 11.4.2.4.3.

8. The FSAR explains that the LLRW disposal facility in Barnwell, South Carolina is no longer accepting Class B and C waste from sources in states that are outside of the Atlantic Compact, but that the EnergySolutions, Inc. disposal facility in Clive, Utah is still accepting Class A waste from out of state. FSAR, Section 11.4.2.4.3.

9. With regard to Class B and C wastes, the FSAR states that there are several options available for storage of such waste in the event that no disposal facilities is available when Vogtle 3 and 4 begin operation, including:

- As provided in referenced DCD Subsection 11.4.2., the Auxiliary Building is designed to have more than a year of spent resin storage capacity at the expected rate and the spent resin tanks may be mixed to limit the radioactivity concentrations thereby limiting the volume of Class B and C wet waste requiring storage.
- Vendor services are available to process Class A, B, and C waste and transfer for storage of that material until a disposal site is available. Currently, Waste Control Specialists (WCS) of Texas is

available to store Class A, B, and C material pending the availability of a licensed disposal site.

• If additional storage capacity were eventually needed, the plant could construct or expand storage facilities onsite or gain access to a storage facility at another licensed nuclear plant.

#### **Off-site Storage and Disposal Options**

10. EnergySolutions, Inc. owns and operates a LLRW disposal facility located near Clive, Utah. EnergySolutions' facility is licensed by the State of Utah to accept for disposal Class A LLRW from sources outside of Utah. Public Meeting on Low-Level Waste, Tr. pgs. 18-19 (Oct. 7, 2009) (Statement of Ms. Patty Bubar, Deputy Director, Division of Waste Mgmt. NRC) (ML092880048).

11. Waste Control Specialists, Inc. ("WCS") owns and operates a storage and disposal facility located near Andrews, Texas. WCS is currently licensed by the Texas Commission for Environmental Quality ("TCEQ") (License #R04971) to accept for processing and storage of Class A, B, and C wastes from entities outside of Texas. *See* NUREG-1853, "History of Framework of Commercial Low-Level Radioactive Waste Management in the United States," at p. 31 (NRC Advisory Committee on Nuclear Waste) (January 2007); 74 Fed. Reg. 55071, 55072 (Oct. 26, 2009); NRC Public Meeting on Low-Level Waste (Oct. 7, 2009) (ML092880048); Tr. pgs. 20 (Statement of Ms. Patty Bubar, Deputy Director, NRC Division of Waste Mgmt.); Tr. pgs. 96-99 (Statement of William Dornsife, WCS). WCS License #R04971 is available at http://www.wcstexas.com/cap licenses permits.html.

12. WCS is licensed to dispose of Class A, B and C wastes from Texas and Vermont as member states of the Texas Compact (TCEQ License # R04100). The Texas Compact Commission can authorize WCS to accept Class A, B, and C wastes for disposal from states

4

outside the Texas Compact. A request for this authorization is pending before the Texas Compact Commission. *Id.*; Presentation of Waste Control Specialists, NRC Meeting on Blending of Radioactive Low-Level Waste (Dec. 14, 2009) (ML093620115) ("WCS Presentation"). WCS has publicly stated that it expects to receive this authorization in 2010, to begin construction of the disposal facility in the spring of 2010, and to commence operation of the facility in early 2011. WCS Presentation at 4-7 (ML093620115). A copy of WCS License #R04100 is available at http://www.wcstexas.com/cap\_licenses\_permits.html.

13. Studsvik, Inc. owns and operates a waste processing facility located near Erwin, Tennessee. Studsvik is licensed by the State of Tennessee to accept Class A, B, and C wastes. Specifically, Amendment 28 (issued October 2008) to Studsvik's Erwin, Tennessee Radioactive Material License (R-86011-E17) provides the authority for Studsvik to become the attributable generator and therefore allowing title of the waste to transfer to Studsvik. Affidavit of Steven Jameson ("Jameson Aff.") at ¶ 4, attached hereto as Exhibit A.

14. Studsvik offers the nuclear industry a service whereby Studsvik accepts Class B and C radwaste material (upon acceptance title transfers to Studsvik), processes such waste, and then transports the waste to the WCS facility in Andrews County, Texas for storage until a permanent disposal option becomes available. Jameson Aff. at ¶¶ 4-6.

#### **On-site Storage Options**

15. With regard to on-site storage, Section 11.4.6.3 of the FSAR states:

Storage space for six-month's volume of packaged waste is provided in the radwaste building. Radioactive waste generated by VEGP Units 3 and 4 will normally be shipped to a licensed disposal or off-site storage facility. However, should disposal facilities or off-site storage facilities not be available, storage capacity will be expanded as described below to provide additional on-site storage for VEGP Units 3 and 4.

Additional on-site low-level radioactive waste (LLRW) storage capabilities are available if Class B and C waste cannot be disposed at a licensed disposal facility. An outside storage pad will be utilized to provide this capability. The VEGP Units 3 and 4 LLRW storage facility would be located outside the Protected Area (PA) in the Owner Controlled Area (OCA). The storage facility would be enclosed by an eight-foot high fence with locked gates and would be provided with area lighting. The storage of LLRW would be in high integrity containers (HICs) or other suitable containers that will not decay over time, which would be stored within shielded containers. The design of the storage facility will comply with the guidance of documents as identified in this section which is consistent with NUREG-0800, Appendix 11.4A. The design storage capacity is based on the expected generation in Table 11.4-1, industry experience that indicates approximately 100% of the Class B and C waste is expected to be in the form of wet waste, and volume minimization/reduction programs. The site waste management plan will include radioactive wet waste reduction initiatives for waste Class B and C. The storage facility will be sited such that it could be sized to accommodate storage of Class B and C waste over the operating life of the plant and designed to accommodate future expansion as needed. Capacity would be added in phases based on the expected availability of off-site treatment and storage, and disposal facilities.

16. With regard to on-site storage pad operations, Section 11.4.6.3.2 of the FSAR

states:

The following operating considerations for on-site storage pad operations are based on NRC and Industry guidance (References 202, 203 and 204) and would be included in operating procedures:

• Identification of the arrangement of storage shields, waste handling, storage methods, safety analysis limitations, accident conditions, and off site dose calculations.

• The use of hold-down devices to secure the waste container during severe environmental events, such as strong wind would be provided for, unless the waste container and storage shields can be demonstrated to remain in place without restraints during such events.

• The waste container selected for use is compatible with the waste form stored to ensure waste container integrity.

• Shielding requirements would be determined before the waste container is loaded into a storage shield to eliminate the radiation exposure associated with adding additional shielding.

• If additional shield walls around the perimeter of the storage pad are required, the shield walls would be easily installed and capable of being moved.

• Periodic inspection and testing requirements for outside storage pad operation would include the following:

- Dose rate and contamination surveys in accordance with health physics procedures.

- Sampling of storage shields for water and storage shields containing dewatered resin for explosive gas build-up.

- Visual inspection of selected waste containers in storage to detect unexpected changes / container integrity. (Remote inspection methods and the use of high integrity containers will allow reduced scope for ALARA practices.)

- Defoliation and general condition of the onsite storage pad.

• Total radioactive material inventory limits would be established to demonstrate compliance with the design limits for the storage area, dose limits for members of the public and safety features or measures provided by the storage module.

• The contents of records for inventory controls, monitoring and inspection and other relevant data are maintained and retrievable.

• Operational safety features for handling waste containers and storage shields would include the training required for personnel operating cranes, forklifts, tie downs and heavy equipment during any waste container/storage shield transfer activity.

• Criteria for the end of storage period that would include waste container inspection and additional reprocessing required prior to shipment offsite.

Respectfully submitted,

(Original signed by M. Stanford Blanton)

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COUNSEL FOR SOUTHERN NUCLEAR OPERATING COMPANY

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# CO-COUNSEL FOR SOUTHERN NUCLEAR OPERATING COMPANY

Dated this 29<sup>th</sup> day of January, 2010.

### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### **BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

)	
In the Matter of (	
)	Docket Nos. 52-025-COL and 52-026-COL
Southern Nuclear Operating Company )	
)	
(COL Application for Vogtle Electric )	January 29, 2010
Generating Plant, Units 3 and 4)	

#### **CERTIFICATE OF SERVICE**

I hereby certify that copies of SOUTHERN NUCLEAR OPERATING COMPANY'S STATEMENT OF UNDISPUTED FACTS IN SUPPORT OF MOTION FOR SUMMARY DISPOSITION OF CONTENTION SAFETY-1 in the above-captioned proceeding have been served by electronic mail as shown below, this 29<sup>th</sup> day of January, 2010, and/or by e-submittal.

Office of Commission Appellate Adjudication U.S. Nuclear Regulatory Commission Washington, DC 20555-0001 E-mail: <u>ocaamail@nrc.gov</u>

U.S. Nuclear Regulatory Commission Atomic Safety and Licensing Board Panel Mail Stop T-3 F23 Washington, DC 20555-0001

Administrative Judge G. Paul Bollwerk, III, Chair E-mail: <u>gpb@nrc.gov</u>

Administrative Judge Nicholas G. Trikouros E-mail: <u>ngt@nrc.gov</u>

Administrative Judge James F. Jackson E-mail: jxj2@nrc.gov jackson538@comcast.net Moanica M. Caston, Esq. Southern Nuclear Operating Company, Inc. 40 Inverness Center Parkway P.O. Box 1295, Bin B-022 Birmingham, AL 35201-1295 E-mail: <u>mcaston@southernco.com</u>

U.S. Nuclear Regulatory Commission Office of the Secretary of the Commission Mail Stop O-16C1 Washington, DC 20555-0001 Hearing Docket E-mail: hearingdocket@nrc.gov

U.S. Nuclear Regulatory Commission Office of the General Counsel Mail Stop O-15D-21 Washington, DC 20555-0001 Patrick A. Moulding, Esq. Sarah Price, Esq. Jody C. Martin, Paralegal E-mail: <u>patrick.moulding@nrc.gov</u>, <u>sap1@nrc.gov</u> jcm@nrc.gov M. Stanford Blanton, Esq. C. Grady Moore, III, Esq. Leslie G. Allen, Esq. Peter D. LeJeune, Esq. Kenneth C. Hairston, Esq. Balch & Bingham LLP 1710 Sixth Avenue North Birmingham, Alabama 35203-2014 E-mail: <u>sblanton@balch.com</u>; <u>gmoore@balch.com</u>; <u>lgallen@balch.com</u>; <u>plejeune@balch.com</u>; <u>kchairston@balch.com</u>

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Atlanta Women's Action for New Directions (WAND), Blue Ridge Environmental Defense League (BREDL), Center for Sustainable Coast (CSC), Savannah Riverkeeper and Southern Alliance for Clean Energy (SACE)

Robert B. Haemer, Esq. Pillsbury Winthrop Shaw Pittman LLP 2300 N Street, NW Washington, DC 20037-1122 E-mail: <u>robert.haemer@pillsburylaw.com</u>

\*And upon any other persons designated on the official service list compiled by the Nuclear Regulatory Commission in this proceeding. (Original signed by M. Stanford Blanton)

M. Stanford Blanton Counsel for Southern Nuclear Operating Company

Dated this 29<sup>th</sup> day of January, 2010.

**EXHIBIT** A

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# **BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

)

)

In the Matter of

Southern Nuclear Operating Company

(COL Application for Vogtle Electric Generating Plant, Units 3 and 4) Docket Nos. 52-025-COL and 52-026-COL

January 29, 2010

## **AFFIDAVIT OF STEVEN JAMESON**

I, Steven Jameson, do hereby state as follows:

1. I am employed by Studsvik, Inc. ("Studsvik") as Vice President of Sales and Marketing. My business address is 5605 Glenridge Drive, Suite 705, Atlanta, GA 30342. I am authorized to provide this certification on behalf of Studsvik, Inc.

2. Studsvik owns and operates a waste processing facility located near Erwin, Tennessee.

3. Studsvik is licensed by the State of Tennessee to accept Class A, B, and C lowlevel radioactive (LLW) wastes. Specifically, Amendment 28 (issued October 2008) to Studsvik's Erwin, Tennessee Radioactive Material License (R-86011-E17) provides the authority for Studsvik to become the attributable generator and therefore allowing title of the waste to transfer to Studsvik.

4. Studsvik offers the nuclear industry a process to permanently disposition for disposal Class A, B, and C LLW. Under the Waste Disposition for Disposal Program, this approved path authorizes attribution and title to all "Qualifying Material" to transfer from the utility to Studsvik.

5. "Qualifying Material" is defined as Class A, B and C LLW, as addressed in Studsvik's Tennessee License and the corresponding Waste Acceptance Guidelines. Typically this includes bead, powdered, and similar resins, filter media and filters, liquids, and sludges.

6. Studsvik thermally processes the waste at its Erwin facility. The final waste product, now attributed to Studsvik, is dispositioned by Studsvik for disposal as follows: (1) The Class A material is sent directly to Clive, Utah where it is disposed of as Studsvik waste; and (2)

Studsvik transports its Class B and C LLW to the WCS Facility in Andrews County, Texas for storage until a permanent disposal option becomes available.

7. To the best of my knowledge, information and belief, the topegoing information is true and correct.

Steven Jameson

Subscribed and sworn to before me this 28 day of January, 2010.

Kula Bronn Notary Public

My Commission Expires: 5/13/2013

