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OFFICE OF THE SECRETARY  
 RULEMAKINGS AND  
 ADJUDICATIONS STAFF  
 UNITED STATES OF AMERICA  
 NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)		
	)	Docket Nos.	50-327
TENNESSEE VALLEY AUTHORITY	)		50-328
	)		50-390
(Sequoyah Nuclear Plant, Units 1 & 2;	)		
Watts Bar Nuclear Plant, Unit 1)	)		
	)		

**RESPONSE OF TENNESSEE VALLEY AUTHORITY TO  
 PROPOSED CONTENTIONS FILED BY  
WE THE PEOPLE AND JEANNINE HONICKER**

**I. INTRODUCTION**

On March 7, 2002, Ms. Jeannine Honicker and We the People ("WTP") (collectively, "Petitioners") each submitted proposed contentions in supplemental filings ("Proposed Contentions") amending their requests for hearing and petitions for leave to intervene.<sup>1</sup> Pursuant to Nuclear Regulatory Commission ("NRC" or "Commission") regulations in 10 C.F.R. § 2.714(c) and the schedule established by the NRC Atomic Safety and Licensing Board ("Licensing Board") in this proceeding by Order of February 7, 2002,<sup>2</sup> Tennessee Valley Authority ("TVA") hereby responds to Petitioners' proposed contentions. As discussed further below, Petitioners have failed to establish standing or identify an admissible contention. Accordingly, Petitioners' requests for hearing should be denied.

<sup>1</sup> "Contentions of Jeannine Honicker" (Mar. 7, 2002) ("Honicker Contentions"); "Contentions of We the People" (Mar. 7, 2002) ("WTP Contentions").

<sup>2</sup> *Tenn. Valley Auth.* (Sequoyah Nuclear Plant, Units 1 & 2; Watts Bar Nuclear Plant, Unit 1), "Memorandum and Order," \_\_ NRC \_\_ (slip op., Feb. 7, 2002) ("Scheduling Order").

## II. PROCEDURAL HISTORY

On August 20 and September 21, 2001, TVA submitted applications to the NRC to amend the licenses for its Watts Bar Nuclear Plant, Unit 1 ("Watts Bar" or "WBN") and Sequoyah Nuclear Plant, Units 1 and 2 ("Sequoyah" or "SQN"), respectively. The requested license amendments, if approved, would change the plants' Technical Specifications ("TS") to allow TVA to provide incore irradiation services for the United States Department of Energy ("DOE"). These services would consist of TVA inserting up to approximately 2300 tritium-producing burnable absorber rods ("TPBARs") into the reactor cores to support DOE in maintaining its tritium inventory for national defense purposes.

On December 17, 2001, the NRC Staff noticed in the *Federal Register* its consideration of the license amendment requests ("LARs"), and proposed determinations that the amendments involved no significant hazards considerations, concurrent with opportunities for hearing.<sup>3</sup> Petitioners thereafter filed petitions to intervene and requests for hearing pursuant to 10 C.F.R. § 2.714 on January 14 (Honicker) and January 16 (WTP), 2002.<sup>4</sup> TVA and the NRC Staff responded to these petitions, on the issue of standing only, on January 28 and 29 (TVA), and January 31 and February 4 (NRC Staff), 2002.<sup>5</sup>

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<sup>3</sup> See "Tennessee Valley Authority; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing," 66 Fed. Reg. 65,000 and 65,005 (Dec. 17, 2001).

<sup>4</sup> In addition, a request for hearing and petition for leave to intervene was filed on January 16, 2002, by the Blue Ridge Environmental Defense League ("BREDL"). While both TVA and the NRC Staff filed answers to BREDL's petition opposing granting of standing, BREDL did not file proposed contentions by the March 7 deadline set forth in this Board's Scheduling Order. TVA therefore assumes that BREDL has withdrawn from participation in this proceeding. In any event, BREDL's petition should be denied.

<sup>5</sup> See "Tennessee Valley Authority's Answer to Request for a Hearing and Petition to Intervene of Jeannine Honicker" (Jan. 28, 2002) ("TVA Answer to Honicker");

On January 28, 2002, a Licensing Board was established for this proceeding.<sup>6</sup> Shortly thereafter, on February 7, 2002, the Licensing Board issued its Scheduling Order setting forth dates and other requirements for Petitioners to amend their petitions with regard to standing and proposed contentions, and for TVA and the NRC Staff to respond thereto.

On February 14 and 21, 2002, pursuant to the Licensing Board's Scheduling Order, Ms. Honicker and WTP, respectively, amended their requests for hearing and petitions for leave to intervene with respect to the issue of standing.<sup>7</sup> TVA responded to both amended petitions in separate filings on February 28, 2002, noting that these Petitioners had failed to remedy the defects in their earlier petitions to intervene and, therefore, have not demonstrated standing to intervene.<sup>8</sup>

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"Tennessee Valley Authority's Answer to Request for a Hearing and Petition to Intervene of We the People Inc., Tennessee" (Jan. 29, 2002) ("TVA Answers to WTP") (TVA filed two identically titled answers in response to WTP's two petitions); "NRC Staff's Answer to Requests for Hearing and Leave to Intervene Filed by Blue Ridge Environmental Defense League and Ms. Jeannine Honicker" (Jan. 31, 2002) ("NRC Answer to BREDL/Honicker"); "NRC Staff's Answer to Requests for Hearing and Leave to Intervene Filed by We the People, Inc. Tennessee" (Feb. 4, 2002) ("NRC Answer to WTP"). While TVA opposed (and continues to oppose) standing for all Petitioners, the NRC Staff only opposed standing for Ms. Honicker and BREDL, and has concluded that WTP has demonstrated standing.

<sup>6</sup> *Tenn. Valley Auth.* (Sequoyah Nuclear Plant, Units 1 & 2; Watts Bar Nuclear Plant, Unit 1), "Establishment of Atomic Safety and Licensing Board," \_\_ NRC \_\_ (slip op., Jan. 28, 2002).

<sup>7</sup> See "Jeannine Honicker's Amended Petition to Intervene in the Hearing for a License Amendment for TVA to Produce Tritium at Sequoyah and Watts Bar" (Feb. 14, 2002) ("Honicker Amended Petition"); "We the People's Amended Petition for Request for a Hearing and Petition to Intervene" (Feb. 21, 2002) ("WTP Amended Petition").

<sup>8</sup> See "Response of Tennessee Valley Authority to Jeannine Honicker's Amended Petition to Intervene" (Feb. 28, 2002) ("TVA Response to Amended Honicker Petition"); "Response of Tennessee Valley Authority to We The People's Amended Request for a Hearing and Petition to Intervene and Motion to Strike" (Feb. 28, 2002) ("TVA Response to Amended WTP Petition").

Moreover, standing alone is not enough to admit a petitioner as a party to a proceeding; a petitioner must submit at least one admissible contention as well.<sup>9</sup> Ms. Honicker and WTP filed their proposed contentions on March 7, 2002. TVA hereby responds to each of the proposed contentions, concluding that no admissible contention has been filed by either Petitioner and that, accordingly, Petitioners' requests for hearing should be denied.

### **III. BACKGROUND: ADMISSIBILITY OF CONTENTIONS**

To be admissible in NRC licensing proceedings, proposed contentions must satisfy 10 C.F.R. § 2.714(b)(2), which provides that each contention "must consist of a specific statement of the issue of law or fact to be raised or controverted." Additionally, each contention must be accompanied by:

- (i) A brief explanation of the bases of the contention.
- (ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.
- (iii) Sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application that the petitioner disputes and the supporting reasons for each dispute.

10 C.F.R. § 2.714(b)(2). These standards for admissibility of contentions are set forth in ample Commission precedent.<sup>10</sup>

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<sup>9</sup> See 10 C.F.R. § 2.714(b)(1); see also *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333 (1999); *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 (1996).

<sup>10</sup> See *Oconee*, CLI-99-11, 49 NRC at 333 ("A contention must specify the particular issue of law or fact the petitioner is raising, and contain: (1) a brief explanation of the bases of the contention; and (2) a concise statement of the alleged facts or expert opinion that

The regulatory requirements governing admissibility of proposed contentions are to be interpreted strictly. The regulation provides that if the contention and supporting material fail to satisfy Section 2.714(b)(2), the presiding officer must refuse to admit the contention. 10 C.F.R. § 2.714(d)(2)(i).<sup>11</sup> A contention also must be rejected when, even if proven, it “would be of no consequence in the proceeding because it would not entitle petitioner to relief.” 10 C.F.R. § 2.714(d)(2)(ii).<sup>12</sup> By requiring some factual basis for an admitted contention, the NRC requirements “preclude a contention from being admitted where an intervenor has no facts to support its position” and hopes to use discovery as a “fishing expedition which might produce relevant supporting facts.”<sup>13</sup> Licensing boards do not, at this stage, review the merits of an issue, but nonetheless must take a critical look at the basis offered for a contention to determine whether it, in reality, supports the petitioner’s claim.<sup>14</sup>

It is well-established that the NRC deliberately “toughened” the standards governing the admissibility of proposed contentions in its 1989 amendments to 10 C.F.R.

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support the contention and upon which the petitioner will rely in proving the contention at the hearing. The contention should refer to those specific documents or other sources of which the petitioner is aware and upon which he ‘intends to rely in establishing the validity of the contention.’ . . . A contention also must show that a ‘genuine dispute’ exists with the Applicant on a ‘material’ issue of law or fact”); *see also Yankee*, CLI-96-7, 43 NRC at 248-49.

<sup>11</sup> *See also Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991) (*citing* “Final Rule, Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process,” 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989)).

<sup>12</sup> *Yankee*, CLI-96-7, 43 NRC at 248-49 (footnote omitted) (*citing Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 142 (1993)).

<sup>13</sup> *Oconee*, CLI-99-11, 49 NRC at 335 (*citing* 54 Fed. Reg. at 33,171).

<sup>14</sup> *Vt. Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated and remanded in part on other grounds*, CLI-90-4, 31 NRC 333 (1990).

§ 2.714.<sup>15</sup> The Commission raised the admissibility threshold to ensure the participation of only those intervenors with “genuine and particularized concerns,” and (based on past experience) to avoid litigation of contentions constituting “little more than speculation.”<sup>16</sup> As a result, Section 2.714(b)(2) reflects the NRC’s explicit direction that contentions not be admitted when unaccompanied by supporting facts — including a clear statement as to the basis for the contentions, the submission of supporting information, and references to specific documents and sources that establish the validity of the contention. *See* 54 Fed. Reg. 33,168, 33,170-71.<sup>17</sup> Recently, the Commission reiterated that in order to show the existence of a “genuine dispute” with the applicant on a “material issue”<sup>18</sup> of law or fact, the contention “should refer to those portions of the license application . . . that the petitioner disputes and indicate supporting reasons for each dispute.”<sup>19</sup> The NRC’s rules on admission of contentions therefore require precision in the contention pleading process to require that a proposed contention be specific, and be accompanied by *valid factual support*.

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<sup>15</sup> In *Union of Concerned Scientists v. United States Nuclear Regulatory Comm’n*, 920 F.2d 50, 52 (D.C. Cir. 1990), the Court upheld the NRC’s 1989 revisions to 10 C.F.R. § 2.714, compared the amended Section 2.714(b) to the prior version, and concluded that “[t]he new rule perceptibly heightens th[e] pleading standard” for contentions.

<sup>16</sup> *Oconee*, CLI-99-11, 49 NRC at 334; *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 19 (2001). *See also* “Final Rule, Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process,” 54 Fed. Reg. 33,168 (Aug. 11, 1989).

<sup>17</sup> *See also Oconee*, CLI-99-11, 49 NRC at 333-35.

<sup>18</sup> A disputed issue is “material” if its resolution would “make a difference in the outcome of the licensing proceeding.” *Oconee*, CLI-99-11, 49 NRC at 333-34 (*citing* 54 Fed. Reg. at 33,172).

<sup>19</sup> *Turkey Point*, CLI-01-17, 54 NRC at 19; *see also Oconee*, CLI-99-11, 49 NRC at 333-34.

In its 1998 *Statement of Policy on Conduct of Adjudicatory Proceedings*, the Commission noted that:

[A Licensing B]oard may appropriately view a petitioner's support for its contention in a light that is favorable to the petitioner, but the board cannot do so by ignoring the requirements set forth in section 2.714(b)(2). *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991). The Commission re-emphasizes that licensing boards should continue to require adherence to section 2.714(b)(2), and that the burden of coming forward with admissible contentions is on their proponent. A contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions in 10 C.F.R. § 2.714(b)(2).<sup>20</sup>

As the Commission has emphasized, the NRC's strict contention rule "serves multiple interests."<sup>21</sup> It "focuses the hearing process on real disputes susceptible of resolution in an adjudication," and precludes attempts to attack in a hearing "generic NRC requirements or regulations," or the expression of "generalized grievances about NRC policies."<sup>22</sup> Additionally, it puts other parties on notice of the petitioners' specific claims and issues that they will have to support or oppose. Finally, the rule helps to ensure that NRC hearings are "triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions."<sup>23</sup> The need for Petitioners to comply fully with Section 2.714(b)(2) was emphasized by this Licensing Board in its February 7, 2002, Scheduling Order.<sup>24</sup>

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<sup>20</sup> *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998). Regarding the obligation of the petitioner to formulate its own contentions, see also *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000).

<sup>21</sup> *Oconee*, CLI-99-11, 49 NRC at 334.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> Scheduling Order at 2-3.

Importantly, under the Commission's regulations and precedent, a contention must address a "material" issue. Thus, in the context of a license amendment proceeding, a petitioner's contentions must address the issues identified in the notice of hearing, the amendment application, and/or the NRC Staff's environmental responsibilities with regard to that application.<sup>25</sup> A petitioner must plausibly demonstrate how it would be injured by activities authorized by the challenged license amendment. The claimed injury must be due to the amendment and not to the previously granted license itself.<sup>26</sup> As discussed below, the Petitioners' proposed contentions here are generally unrelated to the license amendment applications, and often appear to contest the operation of the plants themselves.

#### IV. ANALYSIS OF PETITIONERS' CONTENTIONS

##### A. WTP CONTENTIONS

###### *WTP Contention 1*

*There Have Been Inadequate Evaluations of Possible Tritium Releases During Both Normal and Abnormal Operations, as Well as During a Reactor Meltdown Following an Attack via Terrorist-Piloted Aircraft, Such That an Unreviewed Safety Question Exists. Further, the Use of Computer Models, Rather Than Actual Data, to Perform These Evaluations Should Not Be Permitted.*

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<sup>25</sup> See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-39, 34 NRC 273, 282 (1991). See also *Wis. Elec. Power Co.* (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983) (A Licensing Board "may admit a party's issues for hearing only insofar as those issues are within the scope of matters outlined in the Commission's notice of hearing on the licensing action"); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-01-10, 53 NRC 273, 280 (2001), *aff'd*, CLI-01-24, 54 NRC 349 (2001); *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 400 (1991), *aff'd in part on other grounds*, CLI-91-12, 34 NRC 149 (1991).

<sup>26</sup> See *Energy Fuels Nuclear, Inc.* (White Mesa Uranium Mill), LBP-97-10, 45 NRC 429, 431 (1997).



## ***Response to Contention***

### **1. Preamble: “Unresolved Safety Issue”**

In the preamble to Contention 1, WTP argues that the issues raised in the contention related to hypothetical tritium releases constitute an “Unresolved Safety Issue[] per 10 CFR 50.59.” WTP Contention 1.<sup>27</sup> As a preliminary matter, we note that this reference to “Unresolved Safety Issues per 10 CFR 50.59” has no bearing here. 10 C.F.R. § 50.59 provides, *inter alia*, that a licensee must seek a license amendment if it wishes to implement certain changes, tests or experiments at its facility, as described therein. Obviously, TVA has already requested license amendments for WBN and SQN. Thus, to the extent necessary, TVA has complied with Section 50.59, which otherwise has no application here.

### **2. Radiological Releases**

Contrary to WTP’s assertions, the radiological releases from SQN and WBN during normal and abnormal operations, and from postulated accidents, as a result of tritium production have been adequately and thoroughly evaluated by TVA using approved methods and codes. Those evaluations are included in numerous documents generated, reviewed or under review by the NRC in conjunction with the amendment application.<sup>28</sup> These analyses are a

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<sup>27</sup> WTP did not paginate its Proposed Contentions. Hence, we cite only to the contentions themselves.

<sup>28</sup> This includes NDP-98-181, Rev. 1, “Tritium Production Core Topical Report” (Feb. 1999) (“DOE Topical Report”); NUREG-1672, “Safety Evaluation Report related to the Department of Energy’s topical report on the tritium production core” (May 1999) (“NUREG-1672”); DOE/EIS-0288, “Final Environmental Impact Statement for the Production of Tritium in a Commercial Light Water Reactor” (Mar. 1999) (“DOE/EIS-0288”); “Watts Bar Nuclear Plant (WBN) — Unit 1 — Revision of Boron Concentration Limits and Reactor Core Limitations for Tritium Production Cores (TPCs) — Technical Specification (TS) Change No. TVA-WBN-TS-00-015” (Aug. 20, 2001) (“WBN LAR”); “Sequoyah Nuclear Plant (SQN) — Units 1 and 2 — Revision of Instrumentation Measurement Range, Boron Concentration Limits, Reactor Core Limitations, and Spent

matter of public record and demonstrate, in detail, that for normal, abnormal and postulated accident conditions, doses to individuals resulting from tritium production will remain well below NRC acceptance criteria set forth in 10 C.F.R. Parts 20, 50 (including Appendices A and I), and 100.<sup>29</sup> WTP has not specifically identified those portions of the applications and related documents that it wishes to challenge or provided any basis for such a challenge.

Specifically, both the WBN and SQN LARs conclude that “[p]opulation doses from liquid and airborne effluent releases associated with both [tritium production core] normal and abnormal operation<sup>30</sup> . . . will remain below applicable [Offsite Dose Calculation Manual] limits, and tritium release concentrations will remain within 10 CFR [Part] 20 and ODCM release limits.”<sup>31</sup> With regard to emplacement of TPBARs in the reactor cores, the LARs also explain that “[t]he impacts of TPBARs on the radiological consequences for all evaluated events are very small, and they remain within 10 CFR [Part] 100 regulatory limits. The additional offsite doses due to tritium are small with respect to [Loss of Coolant Accident] source terms and

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Fuel Pool Storage Requirements for Tritium Production Cores (TPCs) — Technical Specification (TS) Change No. 00-06” (Sept. 21, 2001) (“SQN LAR”).

<sup>29</sup> See, e.g., SQN LAR at E1-29 and -30, E1-33 and -34; Enclosure 4 to SQN LAR at sections 2.11, 2.12, 2.15 and 3.5. See also WBN LAR at E1-24 and -25, E1-28 and -29; Enclosure 4 to WBN LAR at sections 2.11, 2.12, 2.15, and 3.5. See also DOE/EIS-0288 at Sections 5.2.1.9, 5.2.2.9, 5.2.12, 5.2.13, 5.3 and Appendices C, D and E; NUREG-1672 at Sections 2.11, 2.12, and 2.15; DOE Topical Report at Sections 2.11, 2.12 and 2.15.

<sup>30</sup> Abnormal operation is defined in both LARs to constitute the failure of two TPBARs in the reactor core, with the associated inventory of tritium assumed to be released to the reactor’s primary coolant. See, e.g., Enclosure 4 to WBN LAR at 2-35.

<sup>31</sup> Enclosure 4 to WBN LAR at 2-35; see also Enclosure 4 to SQN LAR at 2-26.

are well within regulatory limits.”<sup>32</sup> With regard to doses resulting from accident conditions,<sup>33</sup> the LARs similarly state that in all analyses, doses to control room operators are below the NRC regulatory limits set forth in 10 C.F.R. Part 50, Appendix A, and offsite doses remain below 10 C.F.R. Part 100 limits.<sup>34</sup>

To summarize the basis for these conclusions, TVA has calculated for its LARs that (for WBN) the impacts to the public from tritium production will be an increase in projected total body exposure of a maximally exposed individual via a liquid effluent pathway of 0.08 millirem (“mrem”) per year, and an increased exposure of 0.120 mrem per year to a maximally exposed individual’s most exposed organ (the liver) via that same pathway. For the gaseous effluent pathway, the maximum projected dose to the thyroid increases 2.6 mrem per year.<sup>35</sup> For SQN, the corresponding projected dose increases are even less — no increase in projected total body exposure, and an increased exposure of the liver of 0.040 mrem per year, via the liquid effluent pathway; and for the gaseous effluent pathway, a maximum projected dose to the bone of 0.13 mrem per year.<sup>36</sup>

Nearly identical analyses, conducted by DOE and documented in 1999 in DOE/EIS-0288, found low individual dose exposures similar to those contained in the LARs. For normal operations at WBN, DOE concluded that (with 3400 TPBARs in the reactor core) the annual dose to the maximally exposed offsite individual would be 0.34 mrem per year (which is

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<sup>32</sup> WBN LAR at E1-24; *see also* SQN LAR at E1-29.

<sup>33</sup> The accidents analyzed in the LARs are contained in Enclosure 4 to WBN LAR at Section 2.15.6, and Enclosure 4 to SQN LAR at Section 2.15.6.

<sup>34</sup> *Id.*

<sup>35</sup> Enclosure 4 to WBN LAR at 2-35.

<sup>36</sup> Enclosure 4 to SQN LAR at 2-26.

1.4 percent of the annual total dose limit of 25 mrem set forth in 40 C.F.R. Part 190).<sup>37</sup> The corresponding dose exposure for SQN was concluded to be 0.11 mrem per year.<sup>38</sup>

With regard to abnormal operations (under the same parameters as described in the LARs), the dose exposures for SQN expanded slightly to (for the maximally exposed individual) 0.36 mrem (via the air release pathway) or 0.037 mrem (via the liquid release pathway).<sup>39</sup> Similar numbers were generated for WBN abnormal operations.<sup>40</sup>

Petitioner has nowhere in its proposed contention even attempted to address the information in the LARs or the referenced EIS cited above, let alone demonstrate where TVA's or DOE's analyses are deficient or in error. The need to engage the license amendment application is essential to formulating an admissible contention.<sup>41</sup> Petitioner's complete failure to do so here necessarily renders its proposed contention totally without basis and inadmissible as a matter of law.<sup>42</sup>

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<sup>37</sup> DOE/EIS-0288 at 5-11.

<sup>38</sup> *Id.* at 5-25; *see also* DOE/EIS-0288 at C-22 (“[A]ll calculated doses resulting from tritium releases during normal operation are within the limits set forth for the operation of each reactor”) (*citing* Tables C-11 — C-13 in Appendix C).

<sup>39</sup> DOE/EIS-0288 at 5-25.

<sup>40</sup> *Id.* at 5-11.

<sup>41</sup> *See* 10 C.F.R. § 2.714(b)(2)(i)-(iii); *see also* *Dominion Nuclear Conn.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 363-65 (2001); *Ga. Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 41 (1993); *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983) (noting that “an intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question” in formulating its contentions).

<sup>42</sup> *See, e.g., Pacific Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-880, 26 NRC 449, 457 (1987), *remanded*, *Sierra Club v. U.S. Nuclear Regulatory Comm’n*, 862 F.2d 222 (9th Cir. 1988) (stating that a petitioner must “allege at least some

WTP also has offered no basis — in law or fact — for its bald assertion that the NRC should not accept computer models as part of TVA's analyses. The proposed contention does not cite, for instance, any specific defect in the codes or models used by TVA. To the extent this contention is suggesting that some (unspecified) actual data would indicate a need for different (*i.e.*, more stringent) release criteria, the contention is challenging the NRC's own dose-limit regulations in 10 C.F.R. Parts 20, 50 and 100. Such challenges are impermissible in a licensing proceeding.<sup>43</sup>

### 3. Beyond-Design-Basis Security Issues

WTP's final subissue (1.3) posits the scenario of a beyond-design-basis accident caused by a terrorist aircraft attack, which would "render the Tennessee River unusable and destroy all life in the river," therefore denying Petitioner and others "opportunities for recreation and clean drinking water." The Commission has made clear both in its regulations and adjudicatory issuances that the issue of terrorist attacks upon a power reactor is beyond the scope

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credible foundation for" a contention); *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982) (holding that the basis for a safety contention "must either allege with particularity that an applicant is not complying with a specified regulation, or . . . the existence and detail of a substantial safety issue on which the regulations are silent") (footnote omitted).

<sup>43</sup> See 10 C.F.R. § 2.758(a); see also *Dominion*, CLI-01-24, 54 NRC at 364; *Oconee*, CLI-99-11, 49 NRC at 345; *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), LBP-89-10, 29 NRC 297, 299 (1989), *aff'd and rev'd in part*, ALAB-920, 30 NRC 121 (1989).

of licensing proceedings such as this and should not be admitted into litigation. Specifically, 10 C.F.R. § 50.13 presents an absolute bar to further consideration of this issue.<sup>44</sup>

However, Petitioner has shown no plausible connection between its security/terrorist concern and the LARs which are the proper subject of this proceeding. As discussed further below, no basis is provided to demonstrate a nexus between the LARs and the concerns regarding threats to the plants. In reality, WTP is raising a generic challenge to the security design basis that is beyond the scope of an individual proceeding.<sup>45</sup> Therefore, this aspect of the proposed contention must be rejected.

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<sup>44</sup> See *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), LBP-02-04, \_\_ NRC \_\_, slip op. at 74-76 (Jan. 24, 2002); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 445 (2001); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2098 (1982); *Siegel v. Atomic Energy Comm'n*, 400 F.2d 778, 783-84 (D.C. Cir. 1968). Although WTP has not specified whether this is a security or an environmental issue, the issue is outside the scope of this proceeding regardless of whether a purported terrorist-attack scenario is framed in terms of a threat to plant security or resultant harm to the environment. With regard to the inadmissibility of terrorist attacks in terms of the National Environmental Policy Act ("NEPA"), see, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973); *Dominion Nuclear Conn.* (Millstone Nuclear Power Station, Unit No. 3), LBP-02-05, \_\_ NRC \_\_, slip op. at 18 (Jan. 24, 2002); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 487 (2001).

<sup>45</sup> The subject of terrorist attacks against power reactors is currently under review by the Commission. See Letter from Chairman Meserve to Rep. Markey (D-Mass.) (Oct. 16, 2001) (describing ongoing NRC "top-to-bottom analysis [of] all aspects of the Agency's safeguards and physical security programs"); see also *Oconee*, CLI-99-11, 49 NRC at 345 (noting longstanding NRC policy barring contentions "which are (or are about to become) the subject of general rulemaking by the Commission") (citing *Potomac Elec. Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974)).

## **WTP Contention 2**

*There Will be an Increased Likelihood of Threats to the Sequoyah and Watts Bar Reactors as a Result of Tritium Production, and Both the Reactors' Security Plans and NRC Requirements in 10 C.F.R. Part 73 Are Inadequate to Cope With Those Threats. There Also Are Problems With the Reactors' Ice Condenser Containments Which Must be Addressed in This Proceeding. Certain Evidence Relevant to the Above Points Cannot be Presented in This Venue. There Also Will be Increases in Both Core Damage Frequency and Large Early Release Frequency Resulting From Terrorist Attacks on the Reactors.*

### **Response to Contention**

WTP Contention 2 is an unsupported (and unsupportable) mixture of issues. The majority of the text (subissues 2.1 — 2.2.10) discusses alleged increases in terrorist threats to SQN and WBN resulting from the planned tritium production and the plants' purportedly newfound symbolic status as "key facilities of the U.S. Nuclear Weapons Complex." WTP Contention at subissue 2.2. WTP then questions the plants' vulnerability due to their ice condenser containments, and claims that there will be increases in the reactors' Core Damage Frequency ("CDF") and Large Early Release Frequency ("LERF") following the inevitable terrorist attacks posited earlier in the contention. TVA addresses these issues separately.

#### **1. Plant Security Issues**

With respect to the threat of terrorism at WBN and SQN, the Petitioner has provided no basis, other than vague speculation about "symbolism," for its allegation that future tritium production will increase the terrorist threat in and around WBN and SQN. As discussed above, the issue is fundamentally barred by 10 C.F.R. § 50.13<sup>46</sup> and cannot be addressed in this license amendment proceeding. Moreover, the Petitioner simply offers the contention in a void, absent any supporting facts. Without an adequate basis, a contention simply alleging that an

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See note 44 *supra*.

issue ought to be considered may not be admitted in an adjudicatory proceeding. 10 C.F.R. § 2.714 (b)(2)(i) - (iii).<sup>47</sup>

As discussed in the LARs, the level of protection offered by the plants' security plans will not be reduced in any way as a result of the requested amendments.<sup>48</sup> In general terms, both TVA reactors have taken and will take a number of measures in response to NRC security advisories and the Commission's recent Order to power reactor licensees on upgrading security.<sup>49</sup> Once again, Petitioner's contention fails to engage the content of the LARs and identify with basis any specific deficiency, thus rendering its contention inadmissible under 10 C.F.R. § 2.714(b)(2).

In subissues 2.4 and 2.5, Petitioner claims to possess information, which it can only produce in "an appropriately closed environment," explaining how WBN and SQN are "exceptionally vulnerable to certain types of terrorist attack." It notes, however, that "none of the facts to be discussed are, as isolated facts, classified." Regardless of the specific content of Petitioner's information, these statements are not contentions at all, but merely vague allusions to unclassified evidence that Petitioner does not wish to reveal at this time. These assertions are without basis, and in no way meet the Commission's requirements in 10 C.F.R. § 2.714(b) for admissible contentions, as they demonstrate no nexus to the LARs and in no way speak to any

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<sup>47</sup> See also *Wis. Elec. Power Co.* (Point Beach Nuclear Plant, Unit 1), LBP-82-108, 16 NRC 1811, 1821-22 (1982), *aff'd*, ALAB-719, 17 NRC 387 (1983); *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993).

<sup>48</sup> See Enclosure 4 to SQN LAR at section 2.13.2; Enclosure 4 to WBN LAR at section 2.13.2.

<sup>49</sup> See *All Operating Power Reactor Licensees* (Order Modifying Licenses (Effective Immediately)), EA-02-026, \_\_\_ NRC \_\_\_ (slip op., Feb. 25, 2002).



alleged errors or deficiencies therein.<sup>50</sup> They should not be considered further in this proceeding.<sup>51</sup>

## 2. Ice Condenser Issues

Turning from issues of security to those involving the plant design bases, WTP's subissue 2.3 attacks the ice condenser containment system currently used in both the SQN and WBN designs. Petitioner cites an NRC memorandum which states that ice condenser issues will be considered in the course of risk-informing NRC regulation 10 C.F.R. § 50.44.<sup>52</sup> To that end, Petitioner notes the NRC has established "Generic Safety Issue 189" on the subject of ice condensers.

WBN and SQN are operating under NRC-issued operating licenses. The NRC has approved the operation of these facilities, including the use of ice condenser containments as a means to protect plant workers and members of the public from possible releases of radiation. Petitioner's challenge to the existing design bases is outside the scope of the LARs and this proceeding, an impermissible challenge to Commission regulations, and one for which relief would instead need to be sought pursuant to 10 C.F.R. §§ 2.206 or 2.802.<sup>53</sup>

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<sup>50</sup> See, e.g., *Oconee*, CLI-99-11, 49 NRC at 334.

<sup>51</sup> See also *Rancho Seco*, LBP-93-23, 38 NRC at 246 (holding that a contention "simply alleg[ing] that some matter ought to be considered does not provide the basis for an admissible contention").

<sup>52</sup> See "Availability of Draft Rule Wording, Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors," 66 Fed. Reg. 57,001 (Nov. 14, 2001). The draft rule language was made available at <<http://ruleforum.llnl.gov>>. This endeavor is discussed in "Memorandum to Samuel Collins, Director, Office of Nuclear Reactor Regulation, from Ashok Thadani, Director, Office of Nuclear Regulatory Research, re: DCH Issue Resolution for Ice Condenser Plants" (June 22, 2000) ("Thadani Memorandum"), which WTP has attached as an exhibit to this contention.

<sup>53</sup> See *Dominion*, CLI-01-24, 54 NRC at 364.

In subissue 2.3, Petitioner refers to the fact that WBN and SQN must take measures to account for hydrogen combustion, and that alleged “vulnerabilities” exist with regard to ice condenser performance in this regard. Petitioner once again, however, fails to take into account the relevant discussion in the LARs, leaving the proposed contention baseless. While it is true that the plants use a hydrogen mitigation system, consisting of igniters located throughout the containment to prevent the accumulation of hydrogen, the presence of TPBARs does not challenge the ability of the hydrogen mitigation system to function as required. As the LARs explain, “even based on highly conservative assumptions, the TPBARs are not a significant contributor to the post-LOCA hydrogen inventory. The [Tritium Production Core] will not have a significant impact on the total hydrogen production and concentrations within the containment.”<sup>54</sup> Petitioner has not demonstrated any deficiency in the analyses of the issue, or even engaged these analyses in its proposed contention.

In an unsuccessful attempt to support its arguments, Petitioner notes that the NRC is working to risk-inform 10 C.F.R. § 50.44, which regulates combustible gas control systems in light-water reactors. Petitioner also references the NRC’s establishment of Generic Issue 189 to examine the question of additional hydrogen control requirements for ice condenser plants. In that regard, Petitioner implies that these agency activities must lead to a conclusion that WBN and SQN are unfit to operate with TPBARs in place. Apart from failing here to demonstrate any nexus between the LARs and the reactors’ ice condensers, by their very nature these are generic

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<sup>54</sup> Enclosure 4 to WBN LAR at 1-29; *see also* Enclosure 4 to SQN LAR at 1-18. Petitioner also fails to acknowledge that use of ice condenser containments by plants producing tritium also has been evaluated and found acceptable by both DOE and the NRC. *See* DOE Topical Report at 2-178, 2-182, 2-188; NUREG-1672 at 2-23, 2-24 (“DOE concludes, and the [NRC] staff agrees, that if the mass and energy releases do not change significantly with the incorporation of TPBARs, there will be no effect on the containment response of an ice condenser plant from the TPC”).

issues that “are (or are about to become) the subject of general rulemaking by the Commission.”<sup>55</sup> Such challenges to NRC regulatory requirements are not permitted in individual licensing proceedings.

### 3. Other Issues

Subissues 2.6 and 2.7 are an amalgam of the security and ice condenser issues discussed above. WTP alleges that there will be increases in both CDF and LERF as a result of terrorist attacks inspired by tritium production at SQN and WBN. For reasons similar to those discussed above, these assertions also fail to constitute an admissible contention.

For one, as discussed above, the alleged threat of terrorist activity against a power reactor cannot provide the basis for an admissible contention in a licensing proceeding. Second, there is no nexus established between the LARs and the supposed increases in CDF and LERF. Any increase in CDF or LERF would be the proximate effect of a terrorist attack, not the LAR.<sup>56</sup> Moreover, Petitioner claims to possess a “reasonable quantitative analysis” of this issue but gives no details as to its content, basis or methodology. Such vague claims cannot form the basis of a contention pursuant to 10 C.F.R. § 2.714(b)(2).

Petitioner also claims in subissue 2.7 that its supposed analysis renders TVA’s no significant hazards consideration determination “untrue.” Notwithstanding the total lack of evidence for such a claim, to the extent Petitioner is challenging the NRC’s determination in this regard, such a challenge is barred by 10 C.F.R. § 50.58(b)(6).

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<sup>55</sup> See *Oconee*, CLI-99-11, 49 NRC at 345 (citations omitted).

<sup>56</sup> None of TVA’s analyses regarding tritium production at WBN and SQN resulted in a significant effect on the core or containment that would indicate that either CDF or LERF would change at all. Accordingly, TVA did not analyze this issue in its LARs. Petitioner’s claims in this regard fail to demonstrate how CDF or LERF will increase and therefore fail to meet the burden required for an admissible contention.

In total, therefore, because Contention 2 is unsupported by basis, fails to engage the LARs, and presents impermissible challenges to Commission regulations, it should be denied.

### ***WTP Contention 3***

*No Benefit Will Accrue to TVA From the Requested License Amendments. In the Absence of Such Benefits, the Proposed Reductions in Safety Margins From Numerous Changes in Technical Specifications Are Not Permissible. The Need for TVA to Produce Tritium is Artificial and Does Not Take Into Account Current United States Arms Control Efforts.*

### ***Response to Contention***

The essence of WTP Contention 3 appears to be a claim that the changes to SQN and WBN proposed in the LARs “will reduce numerous safety margins,” and that the NRC should not permit such reduction given that TVA will realize “zero benefit” from the proposed changes. In attempting to support this assertion, WTP claims (presumably with regard to the alleged reduction in safety margin) that TVA has requested “numerous changes to Technical Specifications.” However, it has identified only one — involving time intervals for spent fuel pool (“SFP”) cooling and water boiloff.<sup>57</sup> WTP also asserts that, because licensed activities at TVA only “cover electricity production, not other industrial activities,” TVA’s agreement to produce tritium “is clearly based on considerations other than TVA’s . . . charter and should have no bearing on NRC’s evaluations.”<sup>58</sup> On a similar note, WTP implies that because TVA is providing TPBAR irradiation services pursuant to the Economy Act,<sup>59</sup> this will result in “no

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<sup>57</sup> WTP subissue 3.1.

<sup>58</sup> WTP subissue 3.6.

<sup>59</sup> 31 U.S.C. § 1535 *et seq.*

financial benefit to TVA's ratepayers."<sup>60</sup> Finally, WTP alludes to an argument in its proposed Contention 6 that the NRC may not license tritium production, and concludes by claiming that current arms-control efforts obviate the need for new production of tritium.<sup>61</sup> As explained below, this proposed contention should be denied in its entirety.

1. The "No Benefit" Argument

As a threshold legal matter, there is no NRC regulatory or statutory requirement demanding that an applicant demonstrate it will receive "a benefit" from a requested license amendment. When requesting a license amendment, a power reactor applicant must satisfy the requirements of 10 C.F.R. §§ 50.4 and 50.90, and show that the amendment, if approved, complies with applicable NRC requirements and acceptance criteria, and will not otherwise harm public health and safety or the common defense and security. Accordingly, there is no relief that can be granted to Petitioner, and its request for a demonstration of the benefits accruing from future tritium production must be denied. 10 C.F.R. § 2.714(d)(2)(ii).

It is true that cost-benefit and other similar analyses must be conducted pursuant to the National Environmental Policy Act<sup>62</sup> when an EIS is prepared in connection with certain proposed actions. Petitioner makes no showing, however, that an EIS must be prepared in conjunction with the LARs. Rather, DOE has been evaluating, and working with the NRC and TVA to address, tritium production options and issues.<sup>63</sup> Indeed, the need for the proposed

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<sup>60</sup> WTP subissue 3.7.

<sup>61</sup> WTP subissues 3.8 - 3.11.

<sup>62</sup> 42 U.S.C. § 4321 *et seq.*

<sup>63</sup> See generally "Memorandum of Understanding Between the Nuclear Regulatory Commission and the Department of Energy" (May 22, 1996) ("NRC/DOE MOU"); "Interagency Agreement Between the United States Department of Energy and the Tennessee Valley Authority for Irradiation Services" (Jan. 1, 2000) ("DOE/TVA IA").

action was addressed previously in the EIS (DOE/EIS-0288) prepared by DOE with TVA's participation as a "cooperating agency."<sup>64</sup> Petitioner is challenging a matter beyond the scope of the present LARs and this proceeding.<sup>65</sup>

Even if somehow in scope here, Petitioner has failed also to demonstrate any deficiency or error in the record.<sup>66</sup> Specifically, in DOE/EIS-0288, it is clearly stated that DOE is mandated by the AEA to develop and maintain the capability to produce nuclear materials, such as tritium, necessary for the defense of the United States.<sup>67</sup> Because tritium decays at a rate of 5.5 percent per year, periodic replacement is required so long as the United States maintains a nuclear stockpile. Indeed, until tritium production begins at SQN and WBN, DOE will continue to recycle tritium from decommissioned nuclear weapons. Because of tritium's decay rate, however, recycling can only meet national defense requirements for a limited time, even given reductions in stockpiles. For that reason, a Presidential Decision Directive was issued in 1996 mandating that new stores of tritium must be available by approximately 2005 if a commercial light-water reactor ("CLWR") was the chosen option for new production.<sup>68</sup>

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<sup>64</sup> A cooperating agency is defined in CEQ regulations as any federal agency other than a lead agency having jurisdiction by law or special expertise with respect to any environmental issue involved in a proposal. 40 C.F.R. § 1508.5.

<sup>65</sup> See *Savannah River*, 54 NRC at 424 (holding that applicant's "practice of adopting and incorporating the DOE [EISs] into its [environmental report] generally does not bring those DOE documents within the scope of this proceeding or open them to challenge").

<sup>66</sup> 10 C.F.R. § 2.714(b)(2)(iii); see also *Dominion*, CLI-01-24, 54 NRC at 362-63.

<sup>67</sup> See DOE/EIS-0288 at 2-1 (citing 42 U.S.C. § 2011).

<sup>68</sup> *Id.* at 1-9, 2-1 through 2-2.

In determining which option presented the best method of obtaining new tritium, DOE considered a number of factors, including the issue of nuclear nonproliferation.<sup>69</sup> DOE determined that under the terms of the Nuclear Nonproliferation Treaty, the United States as a signatory weapons state would not be in violation if it obtained tritium produced in a CLWR. DOE's analysis also took into account (*see* WTP subissues 3.9 - 3.11) the existence of arms-control treaties and negotiations, and that production of new tritium would support the Nation's nuclear stockpile during the continuing, decades-long efforts to reach and implement new arms control agreements. DOE analyzed the policy issues associated with tritium production in a CLWR and submitted a report on its conclusions to Congress in 1998, finding that the option of CLWR production remained viable.<sup>70</sup> In choosing TVA as the source for new tritium production, DOE noted that it was acting consistently with the Congressional purposes for creating TVA — namely, to provide for the industrial development of the Tennessee Valley and for national defense.<sup>71</sup> The choice of TVA also was made in part because of TVA's status as a federal agency. In sum, Petitioner's claim of "zero benefits" raises an issue for which no relief can properly be granted here, and is nonetheless without basis and is directly contravened by the ample public record.<sup>72</sup>

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<sup>69</sup> See DOE/EIS-0288 at Sections 1.3 - 1.5.

<sup>70</sup> *Id.* at 1-9 through 1-10 (*citing* the "Interagency Review of the Nonproliferation Implications of Alternative Tritium Production Technologies Under Consideration by the Department of Energy, A Report to the Congress" (1998)) ("DOE Interagency Review").

<sup>71</sup> *Id.* at 1-12; *see also* the "National Defense Authorization Act for Fiscal Year 2000," Pub. L. No. 106-65, § 3134, 113 Stat. 512, 927 (1999) ("NDAA 2000"), where Congress expressly mandated TVA to produce tritium at SQN and WBN for DOE. This legislation is discussed at length in TVA's Response to WTP Contention 6 below.

<sup>72</sup> This conclusion is also true with regard to Petitioner's claim that use of the Economy Act somehow results in no benefit to TVA customers. The Economy Act (31 U.S.C. § 1535 *et seq.*) simply allows two federal agencies to enter into an interagency agreement similar

## 2. “Erosion of Safety Margin” Argument

Petitioner’s argument that TVA must demonstrate a “benefit” from tritium production also relies on the claim that such benefits are needed to offset an alleged “erosion in safety margin” that will allegedly occur if the LARs are approved by the NRC.<sup>73</sup> Here too, Petitioner’s arguments lack basis and fail to address the content of the LARs.

First, Petitioner, in subissue 3.1, claims that TVA has requested “numerous changes to Technical Specifications [TS] that represent erosions in safety margins” for SQN and WBN. This is incorrect. In fact, TVA has requested changes to only those TS impacted by implementation of the tritium production program, consistent with NRC requirements.<sup>74</sup> TVA has demonstrated (as described in the NRC’s December 2001, *Federal Register* notices announcing the LARs) that the proposed changes involve no significant reductions in the margins of safety for either affected reactor.<sup>75</sup>

Petitioner, in support of its claim, points to only one alleged TS change, which it claims would decrease the interval between “when the spent fuel pool loses cooling and when it reaches the boiling point,” as well as the time period after which the pool will have “boiled down to the point that spent fuel is exposed.” WTP subissue 3.1. There are, in fact, no TS proposed changes by TVA related to SFP cooling operation or the parameters contained within the TS.

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to that between one agency and a private contractor obtained through the competitive procurement process. Petitioner has made no showing that the TVA/DOE agreement made under this Act violates this or any other law; thus Petitioner’s claim fails for lack of basis. 10 C.F.R. § 2.714(b)(2).

<sup>73</sup> WTP subissues 3.1, 3.3 and 3.4.

<sup>74</sup> See generally 66 Fed. Reg. 65,000, 65,005 (Dec. 17, 2001).

<sup>75</sup> *Id.*



The only TS related to SFP cooling that exists for either reactor is one concerning minimum SFP water level. This TS will remain unaffected by the requested changes in the LARs.

It appears that WTP is referring to SFP cooling analysis changes previously proposed and accepted by the NRC.<sup>76</sup> These changes relate to the WBN Updated Final Safety Analysis Report (“UFSAR”), not the TS. Petitioner draws no specific nexus to the present LARs, and alleges neither a specific deficiency in any TVA calculation or methodology, nor a specific failure to meet NRC acceptance criteria.<sup>77</sup>

Indeed, the increased heat load due to TPBARs and any reduction in the time interval between when the SFP loses cooling and when it reaches the boiling point due to that head load are bounded by the previously accepted changes and do not involve a significant reduction in the plants’ margin of safety. An analysis of the small, within-regulatory-limits increase in SFP heat load due to tritium production is included by TVA in each LAR.<sup>78</sup> Petitioner again has failed to take account of publicly available application materials as the necessary precursor to formulating an admissible contention.

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<sup>76</sup> See “Letter from L. M. Padovan, NRC, to J. A. Scalice, TVA, re: Issuance of WBN Amendment Regarding Spent Fuel Pool Cooling Analysis Methodology Change” (Feb. 21, 2002). The NRC safety evaluation attached to the letter concludes that “there is reasonable assurance that the health and safety of the public will not be endangered by [WBN] operation [pursuant to the issued amendment].”

<sup>77</sup> Such acceptance criteria are contained in NRC publication NUREG-0800, “Standard Review Plan for Safety Analysis Reports” (“NUREG-0800”) The acceptance criteria for SFP cooling, for instance, are located in section 9.1.3 of NUREG-0800.

<sup>78</sup> See Enclosure 4 to WBN LAR at section 1.5.11; Enclosure 4 to SQN LAR at section 1.5.11 (concluding that “[t]ritium production activities will not have an adverse impact on the SFP[Cooling and Cleanup System] heat removal capabilities”).

At bottom, WTP Contention 3 is in reality a challenge to the federal government's decision to produce tritium at SQN and WBN. This raises an issue outside the scope of NRC review and outside the scope of this proceeding.<sup>79</sup> Accordingly, Contention 3 should be denied.

#### ***WTP Contention 4***

*There Are Serious Safety Concerns With Regard to Sequoyah's and Watts Bar's Ice Condenser Containments. These Concerns Have Been Documented in NRC Studies. Accordingly, Special Circumstances Exist Which Require Risk-Informed Analysis. There Has Also Been a Failure by TVA, DOE and the NRC to Examine the Need for Security Upgrades at Watts Bar and Sequoyah Resulting From Tritium Production. Finally, the NRC Has Failed to Make Documents Relevant to This Proceeding Publicly Available in a Timely Fashion.*

#### ***Response to Contention***

WTP Contention 4, as noted above, primarily is concerned with the issue of ice condensers at SQN and WBN. It argues that the LARs, if approved, will result in an "increased probability" of "a core-melt accident" due to inherently flawed ice condenser containments. Petitioner asserts that "special circumstances" exist here that require risk-informed analysis of the proposed changes to SQN and WBN TS in the LARs, referring to assertions in other contentions of increases in CDF and LERF (postulated in proposed WTP Contention 2) and of accidents resulting from lack of commitment to a plant-wide safety culture (discussed in proposed WTP Contention 5). Petitioner then attacks the NRC's review process for evaluating the LARs, as well as an alleged failure to evaluate needed improvements in plant security.<sup>80</sup> Finally, Petitioner asserts at length that the NRC's process for publicly releasing documents

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<sup>79</sup> See *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 329 n.37 (1996) ("[M]embers of the public cannot be allowed to litigate before the Commission any and all issues that occur to them without demolishing the regulatory process.") (citation omitted).

<sup>80</sup> We note that subissue 4.2.1, which alleges inadequate consideration of security by TVA and DOE, is incompletely stated in WTP's filing. TVA therefore has only addressed the portion included (which totals about one and one-half sentences).

relevant to this proceeding was significantly impaired by its response to the events of September 11, 2001.

1. Ice Condenser Issues

As explained above in response to WTP Contention 2, Petitioner's attack on the NRC-approved ice condenser containments is a challenge to the plants' design bases. In this regard, the contention is inadmissible simply due to the fact that it raises issues which are beyond the scope of this proceeding.

In addition, as provided in the LARs, there will be no changes in ice condenser operation resulting from the proposed license amendments.<sup>81</sup> Nowhere has Petitioner seen fit to challenge, or even acknowledge the existence of, these analyses. Petitioner has thus failed completely to establish a nexus between the issue of ice condensers and the LARs.

Petitioner, in an attempt to support its claims of problems with ice condenser performance, references NRC publication NUREG/CR-6427.<sup>82</sup> While not explained by WTP (which has the burden here), this document addresses the Direct Containment Heating ("DCH") issue for nuclear reactor units with ice condenser containments in the United States (such as SQN and WBN). DCH phenomena in ice condenser plants are different in some important aspects from DCH phenomena in other pressurized water reactors ("PWRs"), in that these plants have ice beds to suppress Design Basis Accident ("DBA") steam loads, ac-powered igniters to control hydrogen concentrations in the atmosphere, smaller containment volumes, and

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<sup>81</sup> See Table 1-4 in Enclosure 4 to SQN LAR at 1-46; Table 1-4 in Enclosure 4 to WBN LAR at 1-9 (showing that in neither case was a plant-specific evaluation of ice condenser containment necessary).

<sup>82</sup> NUREG/CR-6427/SAND99-2553, "Assessment of the DCH Issue for Plants with Ice Condenser Containments" (Apr. 2000) ("NUREG/CR-6427").

containment buildings with lower ultimate capacities to withstand internal pressures.<sup>83</sup> In general, NUREG/CR-6427 concluded that ice condenser plants are more vulnerable to early containment failure than PWRs with large dry or subatmospheric containments. The report stated that the probability of early containment failure risk in ice condenser units was dominated by hydrogen combustion events rather than by DCH, and would largely depend on plant-specific probabilities for Station Blackout (hydrogen igniter systems are not operable during Station Blackout events because they are ac powered).<sup>84</sup> Even though the ice condenser plants were determined to be more vulnerable to blackout sequences, the weighted probability of early containment failure (*i.e.*, averaged over all full-power internal events) was considered to be generally within the goal for containment performance.<sup>85</sup>

As discussed above with regard to WTP subissue 2.3, the issues raised in NUREG/CR-6427 are being addressed by the NRC as a generic issue, in part via rulemaking, and thus are outside the scope of this license amendment proceeding. In any event, however, these matters are unconnected to the LARs. WTP implies in this proposed contention that the ice condensers will fail as a result of the increased hydrogen generated by tritium production. The LARs, however, document an analysis of this issue and conclude that:

even based on highly conservative assumptions, the TPBARs are not a significant contributor to the post-LOCA hydrogen inventory. The TPC will not have a significant impact on the total hydrogen production and

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<sup>83</sup> NUREG/CR-6427, Abstract, at iii.

<sup>84</sup> NUREG/CR-6427 relies in part on the results of NRC Staff reviews of Individual Plant Evaluations ("IPE") that had been performed in response to Generic Letter 88-20. These reviews are documented in NUREG-1560, "Individual Plant Examination Program: Perspectives on Reactor Safety and Plant Performance" (1996), which is listed as one of the many references in NUREG/CR-6427.

<sup>85</sup> See Thadani Memorandum at 1. As noted above, this document was provided as an exhibit to proposed WTP Contention 2, with regard to subissue 2.3.

concentrations within the containment, as compared to the values associated with operation with a conventional core. The maximum hydrogen concentration with a TPC can be maintained at less than the lower flammability limit of 4 volume percent, with one recombination train in operation.<sup>86</sup>

The LAR analyses therefore demonstrate that operation of SQN and WBN with TPBARs in place will remain well within NRC acceptance criteria.<sup>87</sup> The Petitioner does not acknowledge or provide a basis to refute this conclusion. NUREG/CR-6427 itself also does not provide a basis for a challenge to these aspects of the LARs; it does not in any way relate to the effects of TPBARs. The presence of TPBARs has no effect on the likelihood of an event involving the loss of all ac power. Each plant is designed to cope with such a beyond-design-basis event until power is restored, without damage to the plant or undue risk to the health and safety of plant workers or members of the public. Petitioner has utterly failed to demonstrate that “special circumstances” exist pursuant to the requirements set forth in 10 C.F.R. § 2.758(b).<sup>88</sup>

## 2. Other Issues

Petitioner’s attack on the NRC Staff’s review of the LARs, as described in subissue 4.2, also must fail. The Staff’s review is not the subject of a license amendment proceeding. A contention must focus on the license amendment application itself and

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<sup>86</sup> Enclosure 4 to SQN LAR at 1-18. *See also* Enclosure 4 to WBN LAR at 1-26 through 1-29.

<sup>87</sup> *Id.*

<sup>88</sup> Petitioner’s attempt to rely on NRC Regulatory Issue Summary 2001-02, “Guidance on Risk-Informed Decisionmaking in License Amendment Reviews” (Jan. 18, 2001), for its claim of special circumstances also fails. That non-binding NRC guidance document merely informs power reactor licensees that the NRC Staff may request additional information from a licensee, when reviewing an amendment request, if it believes new information reveals an unforeseen hazard or a substantially greater potential for a known hazard to occur. No such information has been identified by the Staff.

demonstrate specific mistakes or omissions therein.<sup>89</sup> Additionally, as discussed above, Petitioner's challenge to the proposed no significant hazards consideration determination is barred by 10 C.F.R. § 50.58(b)(6).<sup>90</sup>

Although incompletely stated, Petitioner's challenge in subissue 4.2.1 to TVA and DOE security arrangements at SQN and WBN — in that it raises the spectre of terrorist and beyond-design-basis scenarios — is again without basis and precluded from consideration in this proceeding pursuant to 10 C.F.R. § 50.13. And, finally, Petitioner's complaints in 4.2.2 regarding the availability (or lack thereof) of documents related to this proceeding, in the wake of September 11, 2001, is not a contention, is not a matter for which any relief can be granted in this proceeding, and has no nexus whatsoever to the LARs. The timing or the NRC's release of documents to the public is determined by the NRC, not by TVA.

#### ***WTP Contention 5***

*Past Problems at TVA Regarding the Lack of a Safety Conscious Work Environment Will Lead to a Higher Probability of Accidents and the Resultant Release of Tritium. There are Also Unreviewed Safety Questions Regarding Sticking Ice Condenser Doors and Unreliable Hydrogen Igniters, and Issues of Reliability with Regard to the Plants' Emergency Diesel Generators.*

#### ***Response to Contention***

The first part of this proposed contention is concerned with the alleged lack of a safety-conscious work environment ("SCWE") at SQN and WBN. Petitioner alleges that "adding another mission (tritium) and another customer (the Department of Energy) will likely have the effect of reducing the commitment to safety at the top levels of TVA management."

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<sup>89</sup> See, e.g., *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-03, 53 NRC 84, 97 (2001), *review granted on other grounds*, CLI-01-06, 53 NRC 111 (2001) (*citing* 54 Fed. Reg. 33,168, 33,171 (1989)).

<sup>90</sup> See *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), LBP-98-24, 48 NRC 219, 222 (1998).

WTP subissue 5.1.2. Petitioner attempts to support this speculation by pointing to past allegations of safety-related issues at TVA facilities, and arguing that SCWE-related concerns are “amplified” due to the TVA facilities’ impaired “ability to cope with severe reactor accidents.” WTP subissue 5.3.1. Petitioner further claims that an unreviewed safety question exists with regard to sticking doors and unreliable hydrogen igniters in the plants’ ice condensers. Finally, Petitioner alleges that the plants’ emergency diesel generators (“EDGs”) have a history of unreliability. For the reasons discussed below, Petitioner’s contention is insufficient to clear the thresholds of basis and specificity.

1. SCWE Matters

The majority of this contention (subissues 5.1 — 5.3) is based upon speculation that tritium production at TVA will be unsafe due to the lack of a SCWE at TVA facilities. Petitioner offers no facts, and cannot offer any facts, in support of such conjecture. Moreover, such concerns — even if they could be in any way supported by fact — are completely out-of-scope with respect to this proceeding. They simply have no nexus to the specific license amendment applications at issue. These matters are more appropriately viewed as routine NRC inspection and enforcement matters. For these reasons, this proposed contention is inadmissible.

The Commission has made very clear that “[l]icense amendment proceedings are not a forum ‘[in which] to litigate historical allegations’ or past events with no direct bearing on the challenged licensing action.”<sup>91</sup> Petitioner has not shown that any irregularities exist in the planned tritium production program, or that the content of the LARs was affected by an alleged

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<sup>91</sup> *Dominion*, CLI-01-24, 54 NRC at 366 (citing *Vogtle*, CLI-93-16, 38 NRC at 36 n.22). See also *Ga. Inst. of Tech.* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 120-21 (1995) (“Allegations of management improprieties or poor ‘integrity,’ of course, must be of more than historical interest: they must relate directly to the proposed licensing action.”) (footnote omitted).

lack of concern for safety by TVA management. The Petitioner has other, more suitable pathways through which to raise its concerns — namely 10 C.F.R. § 2.206 or Section 211 of the Energy Reorganization Act of 1974 — which provide for requests for administrative action by the NRC and the Department of Labor (“DOL”), respectively.

WTP’s remaining potpourri of claims within its SCWE assertions also are without basis. For instance, WTP subissue 5.1 alleges, without any bases, that SQN’s and WBN’s abilities to mitigate a core melt accident are “marginal.” As TVA demonstrates below in response to WTP subissues 5.3.1 - 5.5.4, this statement is factually incorrect.

Similarly, WTP subissue 5.1.2 attempts to ascribe motivations to TVA for cooperating with DOE in producing tritium, including that TVA is cooperating with DOE only to thwart Congressional efforts to disband and privatize TVA. Such allegations are not only baseless, but also are, in any event, irrelevant to the question of the acceptability of the LARs submitted for NRC Staff review. There is no NRC regulatory or statutory requirement to ascertain the internal motives of a licensee’s management for submitting an amendment request. And subissue 5.1.3 is speculative as well, providing no basis for its allegation that classified activities are somehow likely to lead to more accidents at reactors. Without any basis to support these claims, these proposed contentions fail to meet the Commission’s requirements for admissibility in 10 C.F.R. § 2.714(b)(2).

## 2. Technical Compliance Issues

WTP then turns to more technical allegations, positing that past problems related to ice condenser doors, hydrogen igniters, and EDGs somehow warrant rejection of the LARs. These past operational issues, however, are (and have been) properly dealt with by TVA’s



corrective action programs and are not properly within the scope of this proceeding. Indeed, Petitioner makes no showing of a nexus to the LARs.

Requirements for the ice condenser doors are included in TS for both SQN and WBN and are not affected by the LARs. The TS require that these doors be fully operable for continued plant operation, and the doors are routinely tested to demonstrate operability in accordance with TS surveillance requirements. The ice condensers at both plants also are monitored in accordance with the performance criteria set forth in NRC regulation 10 C.F.R. § 50.65 (“Maintenance Rule”). The same is true in all respects for these facilities’ hydrogen mitigation systems and igniters. Indeed, the igniter systems at both SQN and WBN are governed by TS limiting conditions that require a plant shutdown if the igniter systems cannot be restored to operability in an appropriate time frame.<sup>92</sup>

It is true that at both plants, a condition was identified in the past where one or more of the lower inlet ice condenser doors could not open as designed. This problem was identified and corrected, however, and these doors are now fully functional consistent with plant design. Further, TVA changed its design and maintenance practices to prevent a recurrence of this problem, and the ice condenser doors are monitored to provide assurance that the ice condensers continue to perform in accordance with their design bases.<sup>93</sup> There is no nexus between this past issue and the present LARs.

Similarly, TVA experienced certain hydrogen igniter failures early in WBN’s plant life, due to a manufacturing defect in one lot of igniters. TVA promptly identified and

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<sup>92</sup> See WBN TS 3.6.8, “Hydrogen Mitigation System;” SQN TS 3.6.4.3, “Hydrogen Mitigation System.”

<sup>93</sup> See WBN TS Surveillance Requirements 3.6.12.1 through 3.6.12.4; SQN TS Surveillance Requirements 4.6.5.3.1 and 4.6.5.4.

corrected the problem, and has experienced no further igniter failures. These, in reality, are ongoing operational matters that are routinely addressed through applicable corrective action processes. Issues of this type also are subject to ongoing NRC oversight. They have no nexus to the specific LARs at issue here.

The proposed amendments also do not change or exacerbate the existing or expected reliability of EDGs at either SQN or WBN. The EDGs are and have been performing in the “green” performance indicator band now used by the NRC in its new Reactor Oversight Program. The EDGs also meet the performance criteria in 10 C.F.R. § 50.65(a)(2) at both SQN and WBN, and have thus demonstrated that they are capable of performing their intended functions. In this contention, Petitioner is attempting to challenge approval of the LARs on grounds that lack basis and are outside the scope of this proceeding. Thus, this contention also should be denied.

#### ***WTP Contention 6***

*The NRC Does not Have the Authority to Grant TVA's Requested License Amendments as a Result of 42 U.S.C. § 7272. This Limitation on NRC Licensing Authority is Reflected in NRC Regulations. A 1998 Study Performed by DOE and Submitted to Congress in Support of Proposed Tritium Production was Submitted Under False Pretenses. DOE is in Essence Forcing TVA to Request the Subject License Amendments.*

#### ***Response to Contention***

WTP Contention 6 argues that the NRC is barred by law from reviewing TVA's LARs because they involve production of tritium for national defense purposes and, thus, are “defense activities” pursuant to 42 U.S.C. § 7272.<sup>94</sup> Petitioner also cites generally (albeit

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This provision is contained in “The Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1981,” Pub. L. No. 96-540, § 210, 94 Stat. 3197, 3202 (1980). It states in relevant part that no funds “may be used for any purpose related to licensing of any defense activity or facility of the Department of Energy by the Nuclear Regulatory Commission.”

incorrectly) to the Energy Reorganization Act of 1974 (“ERA”), 42 U.S.C. § 5801 *et seq.*, provisions of the AEA, and NRC regulation 10 C.F.R. § 50.22, which describes the agency’s licensing authority with regard to Class 103 licenses. Petitioner also cites some remarks in a General Accounting Office (“GAO”) report. As explained below, Petitioner’s assertions are without basis and fail to establish a genuine dispute that would be admissible in this proceeding.

Petitioner’s challenge to NRC licensing authority is primarily based on 42 U.S.C. § 7272. TVA responded to this challenge in opposing Petitioner’s motion to dismiss (which remains pending before the Licensing Board).<sup>95</sup> The NRC Staff also opposed WTP’s motion to dismiss.<sup>96</sup> As noted in both TVA and NRC Staff responses to Petitioner’s motion, nearly twenty years after enacting Section 7272, Congress eliminated any ambiguity by expressly directing DOE to obtain new supplies of tritium to be produced at SQN and WBN.<sup>97</sup> By enacting this subsequent legislation, specifically on point, Congress expressed its clear intent.<sup>98</sup> Therefore, Section 7272 does not bar NRC licensing of tritium production at TVA reactors.

WTP’s additional “bases” in this proposed contention also fail to demonstrate any genuine dispute with respect to an issue of law or fact. First, although the Petitioner refers to the

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<sup>95</sup> See “Response of Tennessee Valley Authority to We The People Motion to Dismiss” (Mar. 18, 2002) (“TVA Response to Motion”).

<sup>96</sup> See “NRC Staff’s Answer to We The People, Inc. Tennessee’s Motion to Dismiss License Amendment Applications and Proceeding” (Mar. 21, 2002) (“NRC Staff Answer to Motion”).

<sup>97</sup> See NDAA 2000 at Section 3134.

<sup>98</sup> Further support for Congress’s intent is found in available legislative history. House Report 106-162, discussing the need for additional tritium supplies, notes that the NRC “will have to issue amended licenses” to SQN and WBN, and that because “the NRC licensing process is often very lengthy,” and the committee “is concerned [about] delays in issuing amended licenses,” DOE should “initiate the licensing process promptly.” H.R. Rep. No. 106-162, at 493 (1999).

ERA in subissue 6.1, it has not in fact cited to the ERA. Rather, it has quoted language from Section 103a. of the AEA on general Commission authority to issue commercial power reactor licenses.<sup>99</sup> In this instance, Petitioner's assertion of legislative intent is completely devoid of any reference to legislative history or other sections of the AEA. Petitioner also fails to address the fact that, because tritium is routinely produced as a byproduct during normal power reactor operations, the NRC as a matter of course authorizes power reactor licensees to produce tritium by authorizing Part 50 activities and possession of byproduct materials. This authority can only be derived from the AEA.

Petitioner's citation to the "Hart-Simpson amendment" also fails to provide a basis for the contention. That provision, enacted in 1983 as part of an NRC authorization and appropriations bill,<sup>100</sup> amended Section 57 of the AEA<sup>101</sup> to add language such that special nuclear material may not be transferred, reprocessed or otherwise made available by an instrumentality of the United States, or any other person, for nuclear explosive purposes. As Petitioner acknowledges, however, this legislation does not include tritium within the revised definition of "special nuclear material." Insofar as this legislation has any relevance to the subject of this proceeding, it simply provides further support for the conclusion, reached by TVA, DOE and the NRC Staff, that the NRC has the necessary legal authority to review and approve the LARs.

Petitioner's attempt to find support for its contention in NRC regulations meets with similar failure. The language cited in subissue 6.4 comes from 10 C.F.R § 50.22, and

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<sup>99</sup> See 42 U.S.C. § 2133.

<sup>100</sup> See "NRC Authorization," Pub. L. No. 97-415, § 14, 96 Stat. 2067, 2075 (1983).

<sup>101</sup> 42 U.S.C. § 2077.

merely directs under what circumstances the Commission will issue a Class 103 license to a commercial nuclear power reactor for normal power operations.<sup>102</sup> Petitioner's argument that the term "industrial or commercial" is separate from the term "research" is a distinction without a difference. Petitioner presents no rationale for concluding that the NRC is barred from reviewing and approving TVA's LARs, or that TVA is barred from producing tritium (which assertion is directly contradicted by actual NRC and industry-wide practice, as noted above). Likewise, Petitioner's claim in subissues 6.5 and 6.6, that DOE's 1998 Interagency Study was "deceptive," is irrelevant and lacks any nexus to the LARs at issue in this proceeding. Petitioner nowhere explains the significance of this study, or its generation, to the issue of whether the LARs meet applicable NRC regulatory requirements. Accordingly, this allegation is insufficient to provide a basis for the proposed contention.<sup>103</sup>

The GAO report<sup>104</sup> cited by Petitioner in subissue 6.2 has no binding legal effect and does not provide any authoritative basis for the contention. The report correctly notes the NRC's conclusion that neither TVA's purposes in seeking the LARs, nor DOE's subsequent use

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<sup>102</sup> We note that while WBN's license was issued pursuant to Section 103 of the AEA, SQN's licenses for its Units 1 and 2 were issued pursuant to Section 104b. of the AEA. There is no practical effect, however, on the operational authority of either SQN or WBN resulting from this distinction — it simply reflects the direction of Section 102 of the AEA that any NRC licenses for production or utilization facilities for industrial or commercial purposes issued after enactment of that section are to be issued pursuant to AEA Section 103 (WBN's license was issued in 1996).

<sup>103</sup> See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-10, 47 NRC 288, 298 (1998) ("[A]ttaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention") (citing *La. Energy Services, L.P.* (Claiborne Enrichment Center), LBP-91-41, 34 NRC 332, 338 (1991)).

<sup>104</sup> GAO/RCED-00-24, "NUCLEAR WEAPONS — Challenges Remain for Successful Implementation of DOE's Tritium Supply Decision" (Jan. 2000) ("GAO/RCED-00-24").

of the TPBARs, are the NRC's concern when reviewing the amendment requests.<sup>105</sup> While the report does acknowledge an argument that licensing a defense activity could be prohibited by 42 U.S.C. § 7272, it fails to adequately reflect Congress's clarification in NDAA 2000.<sup>106</sup>

Petitioner's attack on NRC licensing authority is, at bottom, an impermissible challenge to a reasonable agency interpretation of statutory authority.<sup>107</sup> There can be no question that the NRC's exercise of its authority to review TVA's requested license amendments is and has been reasonable — particularly given Congress's express mandate in NDAA 2000 that new supplies of tritium be produced for DOE at SQN and WBN. Petitioner's attempt to support its proposed contention relies in large part on irrelevant and incorrectly cited materials and, in the end, is based on what is — at best — a policy disagreement. This proposed contention should therefore be rejected for lack of basis.

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<sup>105</sup> *Id.* at 18.

<sup>106</sup> In commenting on a draft version of the GAO report, the NRC Executive Director for Operations also noted that “the report understates the significance of [NDAA 2000]. In our view, the act and the accompanying report language remove any substantial doubt about the NRC's authority, in the face of 42 U.S.C. § 7272, to exercise its normal licensing responsibilities over commercial . . . reactors participating in the [tritium] project.” GAO/RCED-00-24, Appendix IV, “Comments From the Nuclear Regulatory Commission,” at 43-44.

<sup>107</sup> *See Chevron U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837, 866 (1984) (holding that “[w]hen a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail”). In this case, of course, that gap has been filled by an express Congressional mandate.

## **B. HONICKER CONTENTIONS**

### ***Honicker Contention 1***

*TVA Has Not Adequately Considered the Adverse Health Effects of the Large Releases of Tritium That Would Occur if These License Amendments Are Granted. TVA Used Only Computer Models to Calculate the Risks of Tritium Releases to Individuals and the Public, Ignoring Actual Studies Which Show Extremely Adverse Health Effects. This is an Unresolved Safety Question According to 10 C.F.R. § 50.59.*

### ***Response to Contention***

Petitioner's first proposed contention is in essence a condensed version of proposed WTP Contention 1. Here, the Petitioner also claims that TVA has failed to adequately consider the adverse health effects that will be caused, if the LARs are granted, by resulting in "large releases of tritium." Honicker Contentions at 2. Also, like the earlier-discussed WTP contention, Petitioner complains that this inadequacy was caused by the use of computer dose modeling rather than case studies. A number of case study titles are listed by Petitioner, although no actual documents are provided in support of this contention. Finally, Petitioner also claims that the above represents an unresolved safety question pursuant to 10 C.F.R. § 50.59, and provides the name of a planned "expert witness" for this contention. Honicker Contentions at 2-4.

This proposed contention is even more lacking in basis than the similar proposed WTP Contention 1.<sup>108</sup> The Honicker contention does not specify whether it is concerned with normal or abnormal releases of tritium, nor does it specify the mechanism by which such releases

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<sup>108</sup> We point out, again, that 10 C.F.R. § 50.59 is irrelevant to this contention given that TVA has filed for license amendments for its SQN and WBN plants pursuant to Section 50.90. There are no "unresolved safety questions." Petitioner makes the same claim, without further elaboration, to sum up each of her contentions. Rather than argue this point repeatedly throughout this pleading, TVA refers the Board to our discussions above, in response to all of both Petitioners' unfounded assertions pursuant to Section 50.59, as to why these repeated claims are without basis and irrelevant to this proceeding.

would occur. Nonetheless, as explained above in response to proposed WTP Contention 1, TVA has evaluated possible releases of tritium resulting from both normal and abnormal operations, and from postulated accidents, and found that in all cases there will be minimal changes in offsite doses to individuals due to the introduction of TPBARs at the plants.

For instance, both LARs have concluded that “[t]he impacts of TPBARs on the radiological consequences for all evaluated events are very small, and they remain within 10 CFR [Part] 100 regulatory limits. The additional offsite doses due to tritium are small with respect to LOCA source terms and are well within regulatory limits.”<sup>109</sup> TVA also has determined that “[p]opulation doses from liquid and airborne effluent releases associated with both TPC normal and abnormal operation . . . will remain below applicable ODCM limits, and tritium release concentrations will remain below 10 CFR [Part] 20 and ODCM release limits.”<sup>110</sup> With regard to accidents, the LAR analyses demonstrate that doses to affected plant workers and the public would remain well within NRC regulatory limits in 10 C.F.R. Parts 50 and 100.<sup>111</sup> In this proposed contention, no attempt has been made to engage the extensive analyses prepared by TVA, let alone demonstrate where these analyses are deficient. Petitioner has thus failed to meet the Commission’s requirements for an admissible contention set forth in Section 2.714(b)(2)(iii).

This proposed contention also can be read as a challenge to the NRC’s regulatory requirements which set out release and dose limits to which licensees must adhere (*i.e.*,

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<sup>109</sup> SQN LAR at E1-29; WBN LAR at E1-24 through E1-25.

<sup>110</sup> Enclosure 4 to WBN LAR at 2-35; *see also* Enclosure 4 to SQN LAR at 2-26. The actual projected doses from normal and abnormal operations are described in detail above in response to proposed WTP Contention 1.

<sup>111</sup> *See* Enclosure 4 to SQN LAR at section 2.15; Enclosure 4 to WBN LAR at section 2.15. These analyses are also discussed in more detail in response to proposed WTP Contention 1.



10 C.F.R. Parts 20, 50 and 100). The support that Petitioner provides for the contention is a laundry list of studies which purport to show “extremely adverse health effects” from tritium production. Honicker Contentions at 2-4. Petitioner, however, has made no showing as to these studies’ applicability to the specific license amendment requests at hand. As discussed above, to the extent this contention is directed at the regulatory standards themselves, such a challenge to regulations in an individual licensing proceeding is not permitted.<sup>112</sup>

Moreover, a mere list of documents cannot support a contention regarding generalized claims of future radiological harm from tritium production.<sup>113</sup> Because, absent the list of studies, no other support for Petitioner’s proposed contention is provided, this contention should be denied.

### ***Honicker Contention 2***

*TVA Has Not Adequately Calculated the Amount of Tritium That Will be Released Into the Tennessee River Should The LARs be Granted. By Using Information Provided at a Public Meeting on the Proposed Tritium Production, It Can be Shown That 176,032 Curies of Tritium Will be Released if the LARs Are Granted. In Addition, the LARs Seek to Use TPBARs Composed of Different Material Than Those Used in Earlier Tests. These are Unresolved Safety Questions per 10 C.F.R. § 50.59.*

### ***Response to Contention***

Petitioner’s second contention is largely comprised of elaborate calculations based on information provided at an October 2, 2001, NRC public meeting in Evensville, Tennessee. At the meeting, the NRC, TVA, and DOE made presentations and answered

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<sup>112</sup> See 10 C.F.R. § 2.758(a); see also *Dominion*, CLI-01-24, 54 NRC at 364.

<sup>113</sup> See, e.g., *PFS*, LBP-98-10, 47 NRC at 298; *Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), LBP-85-20, 21 NRC 1732, 1741 (1985), *rev’d and remanded on other grounds*, CLI-86-8, 23 NRC 241 (1986) (noting that “a contention may not incorporate massive documents by reference in an effort to supply a basis for an intervenor’s proposition”) (*citing Tenn. Valley Auth.* (Browns Ferry Nuclear Plant, Units 1 and 2), LBP-76-10, 3 NRC 209, 216 (1976)).

questions from the public regarding the subject LARs and NRC's review of those submissions.<sup>114</sup> According to Petitioner's calculations, the LARs will authorize TVA to irradiate up to 2304 TPBARs at WBN for 18 months. This irradiation will result in the release of 176,032 curies of tritium into the Tennessee River. Honicker Contentions at 4. Petitioner also alleges an "uncertainty" in her calculations due to the fact that the TPBARs to be placed in the reactor core following NRC approval are supposedly made of different material than those rods used in earlier tests of the process. *Id.* at 6-7.

Petitioner's calculations are rife with error and, as a result, incorrect on their face. DOE/EIS-0288 examined the issue of possible tritium concentrations in the Tennessee River that could result from tritium production at WBN. It found that at the "edge of near-field" (the area surrounding the discharge point of the effluent where the mixing is taking place), the concentration of tritium in the river at that point from normal operation (*i.e.*, no tritium production) would equal 280 picocuries per liter.<sup>115</sup> With regard to incident-free tritium production, the levels would increase to 674 picocuries/liter (where 1000 TPBARs are emplaced) or 1620 picocuries/liter (where 3400 TPBARs are emplaced). Assuming abnormal operations (in which 2 TPBARs fail during an 18-month operating cycle), riverine tritium concentrations would rise only to 6109 picocuries/liter. Corresponding tritium levels, for the above scenarios, at the nearest drinking water intake would be far lower (22, 52, 126 and 475 picocuries/liter

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<sup>114</sup> See "Summary of the NRC's October 2, 2001, Public Meeting in Evensville, Tennessee, Regarding Tennessee Valley Authority's Tritium Production License Amendment Request" (Jan. 30, 2002) ("NRC Meeting Summary").

<sup>115</sup> To provide some context for this number, the limit for tritium concentrations in drinking water set forth in the Safe Drinking Water Act ("SDWA") at 40 C.F.R. Parts 100-149 is 20,000 picocuries per liter. See DOE/EIS-0288 at 5-6.

respectively).<sup>116</sup> In all cases, tritium releases into the Tennessee River were shown to fall far below applicable regulatory limits, and most certainly below the projections claimed by Petitioner.<sup>117</sup>

The bases provided for Petitioner's proposed contention are in error. Attachment 2 to Petitioner's Contentions (submitted in support of this contention) is taken from an attachment to the NRC Meeting Summary which contains factual errors. The attachment describes the tritium lead test assemblies ("LTA") first used at WBN as having been irradiated in the WBN core from June 1997 to March 1998.<sup>118</sup> As TVA explained at this October 2 meeting, however, the LTA TPBARs were in fact irradiated for an entire reactor operating cycle (from approximately September 1997 to February 1999).<sup>119</sup> This correct information cannot help but

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<sup>116</sup> Although this contention only concerns tritium effluents at WBN, we note that similar calculations were performed with regard to SQN. For 1998, with no TPBARs in place, total tritium releases in liquid effluent were 714 curies. Estimated tritium releases with 1000 TPBARs totaled 1614 curies; and for 3400 TPBARs, 3774 curies. Looking at tritium concentrations in the Tennessee River, the totals in picocuries/liter were, for edge of near-field: 93 (with no TPBARs); 150 (with 1000 TPBARs); 286 (for 3400 TPBARs); and 879 (where two TPBARs failed). At the nearest drinking water intake, the totals dropped significantly to 63; 102; 195; and 600 picocuries/liter, respectively. DOE/EIS-0288 at 5-20. As with WBN, all levels are far below Safe Drinking Water Act limits.

<sup>117</sup> *Id.*; see also Tables C-7 and C-8 in DOE/EIS-0288, which concluded that total increases in liquid effluent releases of tritium at WBN during normal operations would total (for 1000 TPBARs) 900 curies, and (for 3400 TPBARs) 3060 curies. Assuming the failure of two TPBARs, the liquid effluent releases would increase to 20,835 curies of tritium. *Id.* at C-19, C-20. As noted above in TVA's Response to WTP Contention 1 and Honicker Contention 1, all resultant doses to individuals from such releases are projected to remain well below applicable NRC regulatory limits.

<sup>118</sup> NRC Meeting Summary at Attachment 2 (coincidentally, this document is also designated Attachment 2 in Petitioner's proposed contentions).

<sup>119</sup> See "Official Transcript of Proceedings — Public Meeting on NRC Responsibilities in Regard to the Potential Production of Tritium at the Watts Bar and Sequoyah Nuclear Reactors" (Oct. 2, 2001), at 69, 75.

alter Petitioner's calculations, which are erroneously based on an assumed LTA irradiation period of only 9 months.<sup>120</sup> Honicker Contentions at 5.

Petitioner states that, by her calculations, a total of 1456 curies of tritium would have been released "had the 32 test rods been irradiated for 18 months." *Id.* at 6. In fact, the LTA TPBARs were irradiated for approximately that amount of time, and the results documented in the WBN LAR.<sup>121</sup> As explained therein, based on weekly monitoring of WBN reactor coolant for tritium concentrations, "[e]valuation of the tritium concentrations in the reactor coolant has concluded that the LTA irradiation met its design goal of releasing less than 6.7 Ci [curies]/TPBAR/year."<sup>122</sup>

More generally, Petitioner apparently fails to realize that tritium is a normal byproduct of power reactor operation. Because 1996 was the first year of WBN operation, and a build-up of tritium in the reactor coolant system is a natural occurrence, an increase in tritium effluents from 1996 to 1998, as did occur, would be expected. The resulting amounts (as described in Petitioner's Attachment 2) are typical of reactor operation without TPBARs in place, and were within regulatory limits.<sup>123</sup> Petitioner's elaborate calculations are therefore factually incorrect and without basis.

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<sup>120</sup> See *Ga. Inst. of Tech.* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 300, *aff'd*, CLI-95-12, 42 NRC 111 (1995) ("A petitioner's imprecise reading of a reference document [or typographical errors in a document] cannot serve to generate an issue suitable for litigation").

<sup>121</sup> As explained in the WBN LAR, tritium loss from the LTA TPBARs could not be specifically measured due to the presence of tritium generated by other sources in the reactor core. Enclosure 4 to WBN LAR at 3-31. The liquid effluent release data contained in Table 1 to Petitioner's Attachment 2 (for 1996-98), however, are well within the normal range of both expected releases and allowable release limits.

<sup>122</sup> Enclosure 4 to WBN LAR at 3-31.

<sup>123</sup> See note 121 *supra*.

Petitioner also errs in asserting that the TPBARs to be emplaced at WBN and SQN are constructed of different material than those used in the LTAs. Honicker Contentions at 6. In fact, the LTA TPBARs are made of the same material, and are not significantly different in construction, than those which will be emplaced in greater numbers at both reactors. The LTAs included a total of 32 TPBARs, each containing lithium aluminate pellets which would be used to produce the tritium.<sup>124</sup> The TPBARs which are the subject of the LARs also will be using lithium aluminate pellets.<sup>125</sup>

As shown above, Petitioner's statements in support of this contention are factually incorrect on their face and therefore do not provide a legitimate basis for a contention. The proposed contention and bases do not show with specificity any error or deficiency in the LARs. As a result, no relief could be granted in the proceeding and the contention should be denied.<sup>126</sup>

### ***Honicker Contention 3***

*The Tritium That Will Enter the Tennessee River From Tritium Production Will be an Added Insult to an Already Contaminated Water Supply, Which Suffers From Consistent Violations of the Clean Water Act and Safe Drinking Water Act.*

### ***Response to Contention***

This proposed contention is apparently a corollary to the previous one, implying that the aforementioned tritium releases into the Tennessee River will further degrade an "already contaminated water supply." Honicker Contentions at 7. In support of this claim, Petitioner alleges repeated violations of the Clean Water and Safe Drinking Water Acts, cryptically citing a number of purportedly supporting documents of unknown provenance.

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<sup>124</sup> See DOE Topical Report at 3-3.

<sup>125</sup> See Enclosure 4 to SQN LAR at 3-2; Enclosure 4 to WBN LAR at 3-2.

<sup>126</sup> 10 C.F.R. §§ 2.714(b)(2)(iii) and 2.714(d)(2); see also *Dominion*, CLI-01-24, 54 NRC at 362-65; *Catawba*, ALAB-687, 16 NRC at 468.

Honicker Contentions at 7-8. Petitioner has not appended the documents, and the citations provided in the body of the contention are incomplete. Therefore, TVA cannot identify the documents, much less respond to Petitioner's assertions about them. None of the supporting documents cited by Petitioner, however, appears to relate to TVA or TVA activities.

As explained above, releases of tritium into the Tennessee River by WBN and SQN have been and, in the future, are expected to be within applicable regulatory limits. In crafting this proposed contention, Petitioner has not provided any basis to question this conclusion. Petitioner instead has ignored the documented facts. First, both annual radioactive liquid effluents and tritium concentrations in the Tennessee River from tritium production at WBN and SQN have been and will be far below Safe Drinking Water Act limits.<sup>127</sup> Second, tritium production is not expected to affect the requirements of either plant's National Pollution Discharge Elimination System permit.<sup>128</sup> Third, projected doses to members of the public from tritium production discharge in liquid effluent also are below NRC regulatory requirements.<sup>129</sup>

To the extent the contention would challenge the cumulative impacts of releases related to the LARs and other unrelated releases, the contention lacks the requisite specificity. Moreover, cumulative impacts of tritium discharge in WBN and SQN liquid effluent are addressed in detail in Tables 5-59 and 5-60 of DOE/EIS-0288. With respect to WBN, the cumulative amount, based on use of 1000 TPBARs, is 1539 curies of tritium; for 3400 TPBARs, the amount is 3699 curies. For SQN, the numbers are 3277 curies (for 1000 TPBARs) and 7597

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<sup>127</sup> See DOE/EIS-0288 at 5-6, 5-20, C-19, C-20.

<sup>128</sup> See DOE/EIS-0288 at 5-6, 5-20, and TVA Response to Honicker Contention 2 above. Such permits are issued by agencies with full knowledge of the various pollutants in the subject bodies of water.

<sup>129</sup> *Id.* at C-24 through C-25.

curies (for 3400 TPBARs). In neither case would any additional impact to groundwater quality conditions result from issuance of the proposed license amendments.<sup>130</sup> No basis is provided to challenge this conclusion.

Finally, to the extent Petitioner is somehow suggesting misconduct by TVA, the allegation again lacks both specificity and a supporting basis in fact or law. It is impermissible to challenge a license amendment request by assuming that the applicant will violate NRC regulations or its license conditions.<sup>131</sup> Alleged violations of the Clean Water and Safe Drinking Water Acts, even if supported by some valid basis in law or fact, are also beyond the scope of the LARs and NRC jurisdiction in this proceeding. Accordingly, this contention should be denied.

#### ***Honicker Contention 4***

*The Production of Tritium at Watts Bar and Sequoyah is Illegal. The Atomic Energy Act of 1954 Prohibits the Production of Material for Nuclear Weapons at Commercial Nuclear Power Plants. This Prohibition Does Not Apply Only to Plutonium. The Intent of This Prohibition was to Create "Atoms for Peace."*

#### ***Response to Contention***

Petitioner's fourth contention is not really a contention at all, but more akin to a mission statement. Petitioner claims that the AEA forbids production of nuclear-weapons material at commercial nuclear power reactors, and that production of tritium at WBN and SQN will violate that ban, both in spirit and letter. (In that regard, the concept of "Atoms for Peace" is

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<sup>130</sup> DOE/EIS-0288 at 5-119 through 5-120. Additionally, for each plant a negligible amount of curies from "other releases" is included with the totals for tritium effluent.

<sup>131</sup> See, e.g., *Dominion*, CLI-01-24, 54 NRC at 366 ("We cannot allow admission of contentions premised on a general fear that a licensee cannot be trusted to follow regulations of any kind."); see also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-09, 53 NRC 232, 235 (2001); *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 189 (1999) (reiterating Commission position that "licensing actions as a rule do not 'throw[] open an opportunity to engage in a free-ranging inquiry into the 'character' of the licensee") (citing *Vogtle*, CLI-93-16, 38 NRC at 32).

mentioned without elaboration.) Not surprisingly, Petitioner has failed to identify a particular provision in the AEA in which the claimed prohibition resides.

It is clear, first, that no basis is provided for this contention. Petitioner cites to no section or legislative history of the AEA, and makes no reference to any portion of the LARs, including those which explain both the background as well as legal and policy justifications for TVA's planned tritium production. On this ground alone, Petitioner's proposed contention must fail. 10 C.F.R. § 2.714(b)(2).<sup>132</sup>

Additionally, as a matter of law, Petitioner is simply incorrect. To the extent there is language in the AEA which speaks to Petitioner's contention, it is found in AEA Section 57. While Section 57e. of the AEA prohibits the transfer, reprocessing, use or other availability of special nuclear material by any person or instrumentality of the United States for nuclear explosive purposes, such material is not defined to include tritium.<sup>133</sup> More generally, as discussed above in greater detail with regard to WTP Contention 6, the decision to pursue tritium production at TVA originated from a Presidential mandate to increase United States tritium stores, and has been implemented over a period of years by a number of federal agencies including DOE, the NRC, and TVA.<sup>134</sup> Congress also has expressly directed DOE to obtain

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<sup>132</sup> The Licensing Board may not read more into Petitioner's basis for this contention than what is provided. *See Ga. Tech.*, LBP-95-6, 41 NRC at 305 ("[I]t is the petitioner who is obligated to provide the analyses and expert opinion showing why its bases support its contention. . . . [T]he Board may not make factual inferences on petitioner's behalf").

<sup>133</sup> *See* 42 U.S.C. § 2077. As defined, "special nuclear material" includes plutonium, uranium-233 and -235, and other material as designated by the NRC. TVA also notes that pursuant to AEA section 108, the NRC is authorized to order the recapture of any special nuclear material from a commercial power reactor licensee if necessary for "the common defense and security." 42 U.S.C. § 2138.

<sup>134</sup> *See* DOE/EIS-0288 at Section 1.3, Chapter 2; *see also* NRC/DOE MOU; DOE/TVA IA.



tritium that will be produced at WBN and SQN.<sup>135</sup> There is thus clear direction, both in law and fact, to TVA and DOE to produce tritium specifically at these two reactors, and to the NRC to review and, if satisfied, approve the LARs submitted by TVA. The proposed contention should be denied for its lack of legal basis.

#### ***Honicker Contention 5***

*The NRC is Charged with Protecting the National Defense. Production of Tritium is a Threat to National Defense Because It: (1) Will Increase the Threat of Nuclear Proliferation; (2) Undercuts Arms Control Negotiations; (3) Is Unneeded at This Time; and (4) Can be Replaced by Better Alternatives. These Alternatives Include Recycling Tritium From Decommissioned Nuclear Weapons and Building Tritium Production Facilities on DOE Land, and will Avoid Breaching Historical Precedent.*

#### ***Response to Contention***

This contention, like the prior one, lacks any supporting bases. It is fundamentally a challenge to the government's policy decision to pursue tritium production at the TVA plants, and therefore raises matters that cannot be addressed in this forum. The contention fails because relief cannot be granted in this proceeding. 10 C.F.R. § 2.714(d)(2)(ii).

Furthermore, most of Petitioner's arguments are directly addressed in DOE/EIS-0288, where DOE explained that simply recycling tritium from decommissioned nuclear weapons would be insufficient to maintain the United States nuclear stockpile, and that production of tritium at a commercial nuclear power reactor would not violate the Nuclear Nonproliferation Treaty, to which the United States is a signatory nation.<sup>136</sup> Petitioner makes no attempt to engage the rationale provided therein — that tritium replenishment is necessary in part because of the decades-long timeframe anticipated for reaching further arms-control

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<sup>135</sup> See NDAA 2000 at Section 3134.

<sup>136</sup> DOE/EIS-0288 at 1-9.

agreements — or that Congress has mandated that DOE obtain tritium to be produced at SQN and WBN.<sup>137</sup>

At bottom, this contention is comprised of nothing more than Petitioner's strongly-held views on national defense strategy and nuclear weapons development. It is completely outside the scope of this proceeding. Litigation of these policy matters in the form of a contention would be directly contrary to Commission precedent.<sup>138</sup> Accordingly, this proposed contention should be denied.

### ***Honicker Contention 6***

*The March 7, 2002, Deadline for Contentions is Untimely, Unrealistic and Illegal. This Hearing Must Be Postponed Until TVA Issues an EIS on Tritium Production at Watts Bar and Sequoyah, and the NRC Issues its Environmental Reports and/or EISs, and Final Safety Analysis Reports. Petitioners Should be Allowed to Submit Late-Filed Contentions as the Aforementioned Information Becomes Available From TVA and the NRC.*

### ***Response to Contention***

This contention asserts that the Licensing Board's March 7, 2002, deadline set in its Scheduling Order for submission of proposed contentions is "untimely, unrealistic, and illegal," and requests that this proceeding be held in abeyance until the NRC and TVA issue forthcoming EISs, Safety Evaluation Reports ("SERs"), and other documents related to review and approval of the LARs. Honicker Contentions at 10-11. In this regard, Petitioner specifically asks for "the TVA [EIS] concerning the production of tritium at Watts Bar and/or Sequoyah,"

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<sup>137</sup> *Id.* at 1-10; *see also* NDAA 2000 at Section 3134.

<sup>138</sup> *See Rancho Seco*, LBP-93-23, 38 NRC at 246 ("A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention."); *Wis. Elec. Power Co.* (Point Beach Nuclear Plant, Units 1 and 2), LBP-81-55, 14 NRC 1017, 1026 (1981) (where Licensing Board held that petitioner's "general fears or criticisms" of the nuclear industry or applicant's past actions were insufficient to provide the basis for a hearing).

and states that this hearing is “untimely” because, contrary to NEPA requirements, no TVA or NRC EISs have yet been issued by either agency. Petitioner points to her attempt to intervene in the 1977 operating license proceeding for WBN, and how the draft EIS related to licensing that plant (NUREG-0498) was not issued until November 1994, long after the time for intervention had passed. Petitioner requests a reopening of the period within which members of the public may seek to intervene in this proceeding, and that at the very least this Licensing Board allow submission of late-filed contentions as the aforementioned documents are issued. *Id.* at 10-12.

Petitioner’s contention is a challenge to the NRC adjudicatory process generally, and the March 7, 2002, deadline in the Licensing Board’s Scheduling Order specifically. As such, it is not a valid contention. The Commission has clearly and unequivocally stated that contentions are to be timely filed and based on the license amendment application and other publicly available information.<sup>139</sup> It is not the practice of the Commission to halt adjudicatory proceedings pending completion of NRC Staff reviews of a licensing action.<sup>140</sup> TVA notes in this regard that Petitioner is not a stranger to the NRC adjudicatory process; by her own

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<sup>139</sup> See *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1048 (1983) (“[T]he institutional unavailability of a licensing-related document does not establish good cause for filing a contention late if information was available early enough to provide the basis for the timely filing of that contention”); see also *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 21-22 (1998) (“[P]arties to a proceeding . . . are expected to adhere to . . . the scheduling orders in the proceeding. . . . Parties are also obligated in their filings . . . to ensure that their arguments and assertions are supported by appropriate and accurate references to legal authority and factual basis”).

<sup>140</sup> See *Oconee*, CLI-99-11, 49 NRC at 338 (“The Petitioners’ demand that initiation of the NRC hearing process await completion of NRC Staff reviews would turn our adjudicatory process on its head.”); *Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349-50 (1998).

admission, she attempted to intervene in the WBN operating license proceeding.<sup>141</sup> Petitioner thus cannot claim unfamiliarity with NRC adjudicatory procedures or requirements, including those governing admissibility of contentions.

This contention also lacks basis, as it fails to reference the TVA LARs and other studies already available, or to show where any of these documents is deficient. The license amendment applications and the environmental reviews completed to date, all a matter of public record, are sufficient to allow a petitioner to propose contentions for hearing.

As discussed above in regard to WTP Contention 1, and as stated in the LARs themselves,<sup>142</sup> the environmental impacts of producing tritium in WBN and SQN were assessed in detail by DOE in its 1999 publication DOE/EIS-0288. This report was prepared by DOE, with TVA's participation as a cooperating agency. CEQ's regulations emphasize agency cooperation in the NEPA process in order to reduce paperwork, eliminate duplication, and reduce delays, thereby enhancing the efficiency of the NEPA process.<sup>143</sup> Thereafter, in accordance with CEQ regulation 40 C.F.R. § 1506.3(c), TVA independently reviewed this EIS, found it to be adequate, and adopted the EIS for use in preparing its LARs for tritium production. TVA's Record of Decision of this action was published in the *Federal Register* on May 5, 2000.<sup>144</sup>

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<sup>141</sup> See *Tenn. Valley Auth.* (Watts Bar Nuclear Plant, Units 1 and 2), LBP-77-36, 5 NRC 1292 (1977), *aff'd*, ALAB-413, 5 NRC 1418 (1977) (where Honicker petition to intervene in WBN operating license proceeding denied for lack of standing); *see also Exxon Nuclear Co.* (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518 (1977), *aff'd on other grounds*, ALAB-447, 6 NRC 873 (1977) (where Honicker petition to intervene in reprocessing plant construction permit proceeding dismissed for lack of standing and inadequate contentions).

<sup>142</sup> See SQN LAR at E1-37; WBN LAR at E1-33.

<sup>143</sup> See, e.g., 40 C.F.R. §§ 1500.4, 1500.5, 1501.6.

<sup>144</sup> See 65 Fed. Reg. 26,259 (May 5, 2000).

As part of the process of developing its tritium production LARs, TVA conducted a contemporaneous review of both DOE/EIS-0288 and its May 2000, Record of Decision. TVA focused on any changes in radiological impacts associated with the tritium production program. That review determined that there had been no substantial changes in the tritium production program since the publication of DOE/EIS-0288 that were relevant to new circumstances or information relevant to environmental concerns which bore on the tritium production program or its impacts. Accordingly, for its part, TVA has issued all the environmental documents it plans to in support of its LARs, apart from responding to NRC Staff inquiries made in the course of NRC review of the amendment applications. Petitioner's argument that this proceeding must be stayed pending issuance of TVA's EIS is therefore factually incorrect and without basis.

With regard to NRC Staff environmental review of the LARs, the Staff has not as of this filing issued its environmental review. NRC regulations and practice, however, provide for consideration of late-filed contentions, subject to an affirmative showing on a number of factors as set forth in 10 C.F.R. § 2.714(a)(1). Petitioner therefore is free to propose any late-filed contentions based on new information in the future.<sup>145</sup> There is, however, no basis at this time for a contention since no demonstration of error or deficiency in the documents filed to date by TVA has been made.<sup>146</sup> In sum, Petitioner's proposed contention is without basis for the reasons discussed above, and it should be dismissed.

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<sup>145</sup> See *Calvert Cliffs*, CLI-98-25, 48 NRC at 347 & n.9.

<sup>146</sup> See *Turkey Point*, CLI-01-17, 54 NRC at 19; *Oconee*, CLI-99-11, 49 NRC at 333-34.

### ***Honicker Contention 7***

*The Possibility of Accidents From Tritium Production at Watts Bar Cannot be Known Due to the Questionable Quality of the Plant's Construction. The NRC has Failed to Adequately Resolve a Number of Safety Concerns Raised Both by a Former Watts Bar Employee and Petitioner, and has Failed to Take Into Account how Tritium Production will Impact Severe Accident Mitigation Alternatives Rejected by TVA When Initially Licensing Watts Bar. The NRC's Proposed No Significant Hazards Consideration Determination Must Therefore be Denied, as the Above Represents an Unreviewed Safety Question per 10 C.F.R. § 50.59.*

### ***Response to Contention***

This lengthy contention constitutes an attack on the quality of WBN construction. It cites documents submitted over seven years ago, in 1995, to the NRC by a whistleblower, and a contemporaneous letter sent by Petitioner to the then-NRC Chairman containing similar claims. It raises dated matters associated with the initial licensing of WBN, rather than the present-day LARs. Similarly, Petitioner references a 1994 NRC draft Final EIS concerning operation of WBN,<sup>147</sup> claiming that the rejection of certain severe accident mitigation design alternatives (“SAMDA”) at that time should be reconsidered by the NRC in light of the LARs. However, no basis is provided for this. In particular, Petitioner highlights two SAMDAs concerning reactor coolant pump (“RCP”) seals and accumulators for the turbine-driven auxiliary feedwater (“AFW”) pump. Petitioner merely complains that new “NRC analytical models” allowed TVA in the draft EIS to “calculate[] away” radiation doses to members of the public.<sup>148</sup>

This proposed contention is beyond the scope of the LARs and this proceeding. Petitioner’s concerns related to the construction and initial licensing of WBN are untimely and

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<sup>147</sup> NUREG-0498, “Draft Final Environmental Statement Related to the Operation of Watts Bar Nuclear Plant, Units 1 and 2,” Supp. 1 (Nov. 1994) (“NUREG-0498”).

<sup>148</sup> TVA notes again that the ultimate relief sought by Petitioner in this contention — denial of the NRC’s proposed no significant hazards consideration determination — is clearly barred by NRC regulation 10 C.F.R. § 50.58(b)(6). As a result, there is no relief that this Board can provide to Petitioner. 10 C.F.R. § 2.714(d)(2)(ii).

not germane to the changes proposed in the LARs. The time to raise such concerns (as Petitioner unsuccessfully attempted to do 25 years ago<sup>149</sup>) was during the opportunity for hearing offered at the time of plant construction and licensing. Petitioner does not show that a nexus exists between her concerns and the WBN LAR. The contention here only raises issues that were evaluated and dismissed prior to licensing WBN.<sup>150</sup> This is insufficient to provide an adequate basis for the contention as proposed in this license amendment proceeding.<sup>151</sup>

Petitioner's challenge to NUREG-0498 and the WBN SAMDAs described therein is also out-of-scope. Petitioner has no basis to challenge in this license amendment proceeding a draft EIS (actually issued in final in April 1995) that concerns initial plant licensing. The scope of this proceeding is limited to those matters described in the NRC-issued Notice of Opportunity for Hearing and the LARs.<sup>152</sup>

In addition, the Petitioner's argument that SAMDAs considered during the initial licensing process must be revisited in this license amendment proceeding should also be rejected. Contrary to Petitioner's claims, there is no requirement that SAMDAs be considered at all during a license amendment review process.<sup>153</sup> Moreover, there is no nexus between the specific

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<sup>149</sup> See *Watts Bar*, LBP-77-36, 5 NRC 1292.

<sup>150</sup> See Honicker Contentions at 13 (referencing NRC Inspection Report 50-390-95-47 and 50-391-95-47, which Petitioner describes as "the official NRC sign off document for those employee concerns").

<sup>151</sup> See, e.g., *White Mesa*, LBP-97-10, 45 NRC at 431; *Shoreham*, LBP-91-39, 34 NRC at 282.

<sup>152</sup> See *Shoreham*, *supra*, 34 NRC at 282.

<sup>153</sup> See *Vt. Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-869, 26 NRC 13, 31 (1987), *reconsid. denied*, ALAB-876, 26 NRC 277 (1987).

SAMDAs identified in the proposed contention and the LARs, and no basis is offered to support reconsideration based on the activities that would be authorized.

With regard to the SAMDA involving RCP seals, the Petitioner's information is out-of-date. TVA recently installed a new Westinghouse high-temperature RCP seal package in all WBN RCPs. There is no basis provided in the contention that further changes are somehow warranted by the LARs.

For the AFW system, the initial licensing SAMDA evaluation determined that changing the plant design to add accumulators to the control air system was not warranted due to the high cost of the mitigation measure as compared to the benefit. It is true that the original SAMDA evaluation did not encompass the effect of tritium. There is no basis provided on which to conclude that tritium would change the cost-benefit ratio and that the change should now be made.

The Petitioner expresses a concern about operator doses. This, however, does not make technical sense. When the manual actions to align nitrogen bottles are taken, the plant would be shut down and all of the plant fission product barriers would be intact. No fuel damage would have occurred and the temperatures and pressures in the reactor and steam generators would be within design limits. Thus, the dose to plant personnel performing these actions would be both minimal and consistent with the dose rates present during normal plant operation. Petitioner's implication that plant workers manually aligning nitrogen bottles might receive a significant dose because this change was not implemented is therefore not valid.

In sum, because Petitioner seeks to raise issues outside the scope of this proceeding and requests relief which cannot be granted in this proceeding, this proposed contention should be rejected.



### ***Honicker Contention 8***

*The Production of Tritium at Watts Bar and Sequoyah Will Transform Those Plants Into Weapons Material Production Facilities and Military Targets. This is a Site-Specific Issue Given That This is the First Time Any Nuclear Plant has Been Used to Produce Material for Nuclear Weapons. No Additional Security Measures can Protect Against a Fully-Fueled Jetliner Crashing Into a Reactor.*

### ***Response to Contention***

Petitioner's final contention is based on the same claims made by WTP in its Contention 1. As TVA explained at length in its response to that contention, consideration of terrorist attacks on commercial nuclear power reactors is expressly barred in this proceeding by both NRC regulation and precedent.<sup>154</sup>

As discussed above, WBN and SQN are designed and operated in accordance with the Commission-defined design basis threat and other NRC security-based requirements. Plant security includes changes implemented following the September 11, 2001, attacks as directed by the Commission in its interim advisories and February 25, 2002, Order on the subject to operating power reactors.<sup>155</sup> If future changes in plant security or the design basis threat are mandated by the Commission, then TVA will implement compensatory measures as appropriate.

To the extent Petitioner is challenging either 10 C.F.R. § 50.13 or the existing design basis security threat for operating power reactors (*see* 10 C.F.R. § 73.1), Petitioner is seeking to overturn Commission regulations — something expressly barred in NRC adjudicatory proceedings.<sup>156</sup> Petitioner has made no showing that “special circumstances” exist pursuant to

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<sup>154</sup> See 10 C.F.R. § 50.13; *see also, e.g., Dominion*, LBP-02-05, slip op. at 2; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC at 379.

<sup>155</sup> *See, e.g., Operating Power Reactors*, EA-02-026 (slip op., Feb. 25, 2002).

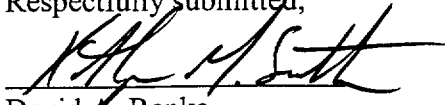
<sup>156</sup> See 10 C.F.R. § 2.758(a); *see also, e.g., Dominion*, CLI-01-24, 54 NRC at 364; *Oconee*, CLI-99-11, 49 NRC at 345.

10 C.F.R. § 2.758 which warrant waiver of Section 50.13 in this proceeding. Accordingly, this proposed contention should be rejected.

V. CONCLUSION

For the reasons stated above, Petitioners' proposed contentions should not be admitted. The requests for hearing and petitions to intervene should be denied.

Respectfully submitted,



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Dated in Washington, D.C.  
this 4th day of April, 2002

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	
	)	Docket Nos. 50-327
TENNESSEE VALLEY AUTHORITY	)	50-328
	)	50-390
(Sequoyah Nuclear Plant, Units 1 & 2;	)	
Watts Bar Nuclear Plant, Unit 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "RESPONSE OF TENNESSEE VALLEY AUTHORITY TO PROPOSED CONTENTIONS FILED BY WE THE PEOPLE AND JEANNINE HONICKER" in the captioned proceeding, have been served on the following by deposit in the United States mail, first class, this 4<sup>th</sup> day of April 2002. Additional e-mail service has been made this same day as shown below. For the party marked by an asterisk (\*) additional service has been made by overnight delivery due to lack of either e-mail or facsimile.

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