

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

In the Matter of	)	Docket Nos. 52-012-COL
	)	52-013-COL
STP NUCLEAR OPERATING COMPANY	)	
	)	
(South Texas Project Units 3 and 4)	)	January 25, 2010
	)	

**APPLICANT’S ANSWER OPPOSING NEW AND REVISED CONTENTIONS  
REGARDING THE MAIN COOLING RESERVOIR**

**I. INTRODUCTION**

In accordance with 10 C.F.R. § 2.309(h), STP Nuclear Operating Company (“STPNOC”), applicant in the above-captioned proceeding, hereby submits this Answer opposing the new and revised contentions proffered by the Intervenors related to the Main Cooling Reservoir (“MCR”) at the STP site.

In the December 23, 2009 “Intervenors’ Contentions Regarding Applicant’s Proposed Revision to Environmental Report Sections 2.3.1, 5.2, and 5.4 and Request for Hearing” (“Request”), the Intervenors sought admission of five new contentions related to STPNOC’s revisions to the Environmental Report (“ER”) for STP Units 3 and 4 that provided additional information on environmental impacts related to the MCR. Additionally, in the December 14, 2009 “Intervenors’ Response to Applicant’s Motion to Dismiss Contentions 8, 9, 14 as Moot” (“Intervenors’ Answer”), the Intervenors requested that the Atomic Safety and Licensing Board (“Board”) revise admitted Contention 8 based upon the ER revisions.

As demonstrated below, the five new contentions and the proposed revisions to Contention 8 do not satisfy the contention admissibility requirements specified in 10 C.F.R. § 2.309(f) and therefore should be rejected.

## II. PROCEDURAL BACKGROUND

The Board admitted Contentions 8, 9, and 14 on September 29, 2009.<sup>1</sup> As admitted by the Board, these contentions were limited as follows:

Contention 8. The Environmental Report fails to address adequately the environmental impacts associated with the increase in radionuclide concentration in the MCR due to operation of STP Units 3 & 4.

Contention 9. The Environmental Report fails to address the environmental impacts associated with the increase in radionuclide concentration in the MCR [specifically increased tritium in groundwater] due to operation of STP Units 3 & 4.

Contention 14. The Environmental Report fails to analyze the environmental impacts of unregulated seepage from the MCR into the adjacent shallow groundwater.<sup>2</sup>

Thus, these contentions allege various omissions of environmental impacts from the ER for STP Units 3 and 4.

On November 12, 2009, STPNOC submitted a notification to the Board regarding Contentions 8, 9, and 14.<sup>3</sup> That notification informed the Board that STPNOC submitted a letter to the Nuclear Regulatory Commission (“NRC”) identifying revisions to the ER for STP Units 3 and 4 on November 11, 2009.<sup>4</sup> The revisions to ER Sections 2.3.1, 5.2, and 5.4 provide

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<sup>1</sup> *South Texas Project Nuclear Operating Co. (South Texas Project Units 3 and 4)*, LBP-09-25, 70 NRC \_\_\_, slip op. at 2-9, 21-25 (Sept. 29, 2009).

<sup>2</sup> *Id.* at 31.

<sup>3</sup> Letter from S. Burdick, Counsel for STPNOC, to the Board, Notification of Filing Related to Contentions 8, 9, and 14 (Nov. 12, 2009) (“Notification Letter”).

<sup>4</sup> Attachment to Notification Letter, Letter from M. McBurnett, STPNOC, to NRC, Proposed Revision to Environmental Report (Nov. 11, 2009) (“ER Letter”).

additional information on the potential environmental impacts associated with the radionuclide concentration in the MCR due to operation of STP Units 3 and 4, the tritium concentration in groundwater due to operation of STP Units 3 and 4, and seepage from the MCR into the adjacent shallow groundwater.<sup>5</sup>

On November 30, 2009, STPNOC requested that the Board dismiss Contentions 8, 9, and 14 as moot based on the ER revisions.<sup>6</sup> This request was opposed by the Intervenors, who requested that the Board revise Contention 8.<sup>7</sup> Thereafter, on December 23, 2009, the Intervenors filed five new contentions related to the ER revisions and the MCR.

### **III. LEGAL STANDARDS**

A petitioner must show that a late-filed contention meets the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi).<sup>8</sup> These requirements are discussed in detail in STPNOC's May 18, 2009 Answer opposing the Intervenors' Petition to Intervene, and a briefer discussion of the important contention admissibility requirements is set forth below.

Under 10 C.F.R. § 2.309(f)(1), a hearing request "must set forth with particularity the contentions sought to be raised." In addition, that section specifies that each contention must: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the

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<sup>5</sup> ER Letter, Attachments 1-3. On November 23, 2009, STPNOC submitted a minor revision to the information in the ER Letter for ER Section 5.4, but this revision did not change any of the conclusions in this ER section. *See* Letter from S. Burdick, Counsel for STPNOC, to the Board, Notification of Filing Related to Contention 8 (Nov. 24, 2009) ("Second ER Letter").

<sup>6</sup> *See* Applicant's Motion to Dismiss Contentions 8, 9, and 14 as Moot, at 1, 8-9 (Nov. 30, 2009).

<sup>7</sup> Intervenors' Answer at 1, 5, 7.

<sup>8</sup> *See Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), CLI-93-12, 37 NRC 355, 362-63 (1993); *see also Crow Butte Res., Inc.* (License Renewal for In Situ Leach Facility, Crawford, Nebraska), CLI-09-09, 69 NRC 331, 364 (2009) (stating that the timeliness of the late-filed contention need not be evaluated because the contention did not satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)).

NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents that support the petitioner’s position and upon which the petitioner intends to rely; and (6) provide sufficient information to show that a genuine dispute exists with regard to a material issue of law or fact.<sup>9</sup>

The purpose of these six criteria is to “focus litigation on concrete issues and result in a clearer and more focused record for decision.”<sup>10</sup> The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”<sup>11</sup>

The Commission’s rules on contention admissibility are “strict by design.”<sup>12</sup> The rules were “toughened . . . in 1989 because in prior years ‘licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.’”<sup>13</sup> As the Commission has stated:

Nor does our practice permit “notice pleading,” with details to be filled in later. Instead, we require parties to come forward at the outset with sufficiently detailed grievances to allow the adjudicator to conclude that genuine disputes exist justifying a commitment of adjudicatory resources to resolve them.<sup>14</sup>

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<sup>9</sup> See 10 C.F.R. § 2.309(f)(1)(i)-(vi).

<sup>10</sup> Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

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

<sup>12</sup> *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)).

<sup>13</sup> *Millstone*, CLI-01-24, 54 NRC at 358 (citing *Oconee*, CLI-99-11, 49 NRC at 334).

<sup>14</sup> *N. Atl. Energy Serv. Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999).

The failure to comply with any one of the six admissibility criteria is grounds for rejecting a proposed contention.<sup>15</sup>

#### IV. NEPA REQUIREMENTS

All of the new and revised contentions submitted by the Intervenors raise environmental issues, and their admissibility depends on the requirements of the National Environmental Policy Act (“NEPA”). NEPA requires that federal agencies, such as the NRC, prepare an Environmental Impact Statement (“EIS”) in conjunction with “every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.”<sup>16</sup> An EIS must discuss “the environmental impact of the proposed action.”<sup>17</sup>

As a general matter, NEPA imposes procedural restraints on agencies, requiring them to take a “hard look” at the environmental impacts of a proposed action.<sup>18</sup> This “hard look,” however, is subject to a “rule of reason.”<sup>19</sup> This means that “the agency’s environmental review, rather than addressing every impact that could possibly result, need only account for those that have some likelihood of occurring or are reasonably foreseeable.”<sup>20</sup> Consideration of “inconsequential small” impacts is not required.<sup>21</sup> As the Commission has explained, “NEPA

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<sup>15</sup> See Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. at 2221; see also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

<sup>16</sup> 42 U.S.C. § 4332(C).

<sup>17</sup> *Id.* § 4332(C)(i)-(ii).

<sup>18</sup> See *La. Energy Servs., L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998); see also *La. Energy Servs., L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005) (citation omitted).

<sup>19</sup> *La. Energy Servs., L.P.* (National Enrichment Facility), LBP-06-8, 63 NRC 241, 258 (2006) (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 836 (1973)).

<sup>20</sup> *National Enrichment*, LBP-06-8, 63 NRC at 258-59 (citing *Shoreham*, ALAB-156, 6 AEC at 836).

<sup>21</sup> See *Vt. Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989) (citing *Limerick Ecology Action v. NRC*, 869 F.2d 719, 739 (3d Cir. 1989)).

also does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts.”<sup>22</sup>

Consistent with these requirements, the Commission has explained:

NEPA’s twin goals are to inform the agency and the public about the environmental effects of a project. At NRC licensing hearings, petitioners may raise contentions seeking correction of significant inaccuracies and omissions in the ER. Our boards do not sit to “flyspeak” environmental documents or to add details or nuances. If the ER (or EIS) on its face “comes to grips with all important considerations” nothing more need be done.<sup>23</sup>

As discussed below, the proposed revisions to Contention 8 and the five new contentions seek to “flyspeak” the ER and therefore should be rejected.

## **V. THE NEW AND REVISED CONTENTIONS SHOULD BE REJECTED**

### **A. Contention MCR-1**

Contention MCR-1 states:

The Environmental Report fails to discuss the actual environmental impacts, including bioaccumulation, bioconcentration, and human health effects, anticipated from radioactive particulates and tritium discharged into the MCR (Main Cooling Reservoir).<sup>24</sup>

The Intervenors rely upon a report from Dr. Arjun Makhijani to support this contention.<sup>25</sup> That report argues that the ER revisions are inadequate because they identify tritium reaching a livestock well 1400 feet offsite, but fail to fully address the health consequences of the use of tritiated water in farming by omitting discussion of Organically Bound Tritium (“OBT”).<sup>26</sup> As

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<sup>22</sup> *La. Energy Servs. L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005).

<sup>23</sup> *Sys. Energy Res., Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005) (footnotes omitted); *see also Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005).

<sup>24</sup> Request at 3.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*, Attachment, Report from Arjun Makhijani, Ph.D, at 1-2 (Dec. 23, 2009) (“Makhijani Report”).

demonstrated below, Contention MCR-1 should be rejected because it does not demonstrate a genuine dispute on a material issue of fact.

ER Sections 5.2.3.1 and 5.2.3.2 address the environmental impacts of tritium in surface water and groundwater, respectively, due to the operation of STP Units 3 and 4.<sup>27</sup> These sections demonstrate that tritium concentrations in surface water and groundwater are less than the Environmental Protection Agency (“EPA”) drinking water standard for tritium of 20,000 pCi/L<sup>28</sup> and less than the NRC reporting limit of 30,000 pCi/L under the Radiological Environmental Monitoring Program.<sup>29</sup> Therefore, these sections conclude that the environmental impacts of tritium are SMALL.<sup>30</sup>

The Makhijani Report focuses on the tritium concentration in the closest offsite well for watering livestock located 1,400 feet from the MCR.<sup>31</sup> ER Section 5.2.3.2 calculates this concentration conservatively assuming that the flow from the MCR goes directly to this well and there is no dilution over time and distance.<sup>32</sup> Even with these conservative assumptions, the tritium concentration at the well would be approximately 1,600 pCi/L, which is well below the EPA drinking water standard and the NRC reporting limit.<sup>33</sup> The Intervenors and Dr. Makhijani do not dispute these calculations.

Because the tritium concentrations are all within regulatory limits, the environmental impacts are SMALL by definition. As stated in 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1, n.3: “For the purposes of assessing radiological impacts, the Commission has

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<sup>27</sup> ER Letter, Attachment 2, at 1-9.

<sup>28</sup> 40 C.F.R. § 141.66(d).

<sup>29</sup> ER Letter, Attachment 2, at 1-9.

<sup>30</sup> *Id.*, Attachment 2, at 5-6, 7-8.

<sup>31</sup> Makhijani Report at 1.

<sup>32</sup> ER Letter, Attachment 2, at 8.

<sup>33</sup> *Id.*

concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small."<sup>34</sup> Because the Intervenors have not disputed that the tritium concentrations would be within regulatory limits, they have not demonstrated a genuine dispute of a material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

In summary, there is no need for the ER to discuss health impacts from tritium releases, because those releases will be within regulatory limits and therefore their environmental impacts will be SMALL by definition. Including a discussion of the health impacts of tritium releases would not affect that conclusion. In short, Intervenors are attempting to "flyspeck" the ER. Accordingly, Contention MCR-1 should be rejected.

**B. Contention MCR-2**

Contention MCR-2 states:

The ER does not include monitoring for MCR relief well discharge quality nor are there minimum water quality standards applied to these discharges.<sup>35</sup>

The Intervenors rely upon a report prepared by Dr. D. Lauren Ross.<sup>36</sup> On this topic, the Ross Report states in its entirety:

TPDES Permit No. WQ001908000 authorizes discharges from reservoir relief wells. There are, however, no requirements, minimum standards, or permit limits for monitoring relief well discharge quality. Section 6.5.1.2 of the Environmental Report (page 6.3-2) makes no reference to groundwater monitoring for the reservoir relief wells. The lack of any requirements to monitor or limit reservoir relief well discharges is in sharp contrast to the effluent limits, monitoring, whole effluent testing, and chronic and

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<sup>34</sup> Although that regulation pertains to licence renewal applications, licensing boards have applied the same principle in COL proceedings. *See, e.g., Tenn. Valley Auth.* (Bellefonte Nuclear Power Plant Units 3 and 4), LBP-08-16, 68 NRC 361, 425 (2008).

<sup>35</sup> Request at 4.

<sup>36</sup> *Id.*

acute biomonitoring requirements for reservoir discharges through Outfall 001.<sup>37</sup>

As demonstrated below, Contention MCR-2 should be rejected because it is immaterial, does not demonstrate a genuine dispute of material fact, and is outside the scope of this proceeding.

The source of water discharged from the relief wells is water that has seeped from the MCR into the shallow aquifer.<sup>38</sup> The ER revisions include analyses of the environmental impacts of the seepage from the MCR into the adjacent shallow groundwater. Specifically, ER Section 5.2.3 evaluates the environmental impacts to the MCR from operation of STP Units 3 and 4, including impacts from constituents such as total dissolved solids, metals, salts, and other chemicals.<sup>39</sup> This evaluation concluded that the environmental impacts of seepage from the MCR, including discharges from the MCR relief wells, are SMALL.<sup>40</sup> Because these impacts are SMALL, there is no basis for imposing standards on the quality of the water discharged from the relief wells or requiring the monitoring of discharges from the relief wells, and the Intervenor has provided no legal or factual basis for requiring such standards or monitoring. Thus, Contention MCR-2 should be rejected under 10 C.F.R. § 2.309(f)(1)(iv) for failure to identify an issue that is material to the adequacy of the ER.

Furthermore, STPNOC does routinely monitor the quality of the water in the MCR.<sup>41</sup> Since this water is the source of the water for the relief wells, STPNOC is indirectly monitoring the quality of the water through the relief wells. Therefore, Intervenor's claim that STPNOC is

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<sup>37</sup> *Id.*, Attachment, Proposed South Texas Plant Expansion: Proposed Revision to Environmental Report, November 11, 2009 and Response to Request for Additional Information, November 23, 2009, at 1 (Dec. 14, 2009) (“Ross Report”).

<sup>38</sup> ER Letter, Attachment 1, at 1. Makeup water to the MCR comes from the Colorado River. ER at 2.3.1-4 (Rev. 3, 2009), available at ADAMS Accession No. ML092931531.

<sup>39</sup> See ER Letter, Attachment 2.

<sup>40</sup> See *id.*, Attachments 2 and 3.

<sup>41</sup> *Id.*, Attachment 2, at 3-4.

not monitoring the quality of the water being discharged by the relief wells is not accurate.

Thus, Contention MCR-2 should be rejected under 10 C.F.R. § 2.309(f)(1)(vi) for failure to raise a genuine dispute of material fact.

In any event, the arguments in Contention MCR-2 raise issues that are beyond the scope of this proceeding. As the Intervenor themselves acknowledge, the discharges from the relief wells (which in turn are directed to surface waters) are expressly governed by the TPDES permit. Specifically, the TPDES permit states:

The discharges from sources such as reservoir relief wells, reservoir spillway gate leakage, condenser box drainage, ground water monitoring wells, and process monitoring instrumentation are authorized. These sources may discharge to the Colorado River, to the West Branch of the Colorado River, to Little Robbins Slough and the East Fork of Little Robbins Slough.<sup>42</sup>

As the Board has previously ruled, the NRC does not have jurisdiction to set new monitoring requirements or standards for discharges regulated by the State of Texas under the TPDES permit:

33 U.S.C. § 1371(c)(2) provides that “[n]othing in the National Environmental Policy Act of 1969 (83 Stat. 852) shall be deemed to . . . authorize any Federal agency . . . to review any effluent limitation or other requirement established pursuant to [the Clean Water Act] . . . ; or . . . authorize any such agency to impose any effluent limitation other than” those set by the Environmental Protection Agency or a state agency that has been delegated such authority — which here means TCEQ [Texas Commission on Environmental Quality]. Petitioners have failed to offer any legal support under the Atomic Energy Act of 1954 (AEA) or 10 C.F.R. Part 50 or 52 contradicting this clear federal prohibition on the NRC regulating effluent discharges subject to TPDES permit limits or mandating that TCEQ adopt discharge limitations different than those TCEQ deems appropriate. Accordingly, this contention fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii) and so is not admissible.<sup>43</sup>

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<sup>42</sup> TPDES Permit W00001908000 issued to STP, at 11 (July 21, 2005) (STP Attachment 1), *available at* ADAMS Accession No. ML052230202.

<sup>43</sup> *South Texas Project*, LBP-09-25, slip op. at 18-19 (footnote omitted).

Thus, Contention MCR-2 raises an issue that is outside the scope of this proceeding and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(iii).

For all of these reasons, Contention MCR-2 should be rejected.

**C. Contention MCR-3**

Contention MCR-3 states:

The ER fails to account for operational impacts on the MCR's water level.<sup>44</sup>

Contention MCR-3 relies upon the Ross Report, which states that “even though the MCR water level remains within the original design level, its operational level is proposed to increase to accommodate plant expansion.”<sup>45</sup> As demonstrated below, Contention MCR-3 should be rejected because it does not demonstrate a genuine dispute of a material fact and is not material.

ER Section 2.3.1.1.2.1 states:

The water level within the MCR during the operation of STP 3 & 4 would remain within the original design levels (49 feet above MSL). Therefore, because the seepage rate is affected by the water level of the MCR and the MCR water level with STP 3 & 4 would remain within original design levels, the addition of STP 3 & 4 would have an insignificant impact on the current MCR seepage rate.<sup>46</sup>

The Ross Report argues that a calculation should be performed to determine the increase in seepage rate with operation of STP Units 3 and 4.<sup>47</sup> However, this ER section provides the seepage rate for a water level of 49 feet above MSL (5700 acre-ft/yr), which is the water level of the MCR during operation of all four units.<sup>48</sup> The evaluation of the environmental impacts of

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<sup>44</sup> Request at 4.

<sup>45</sup> Ross Report at 2.

<sup>46</sup> ER Letter, Attachment 1, at 2.

<sup>47</sup> Ross Report at 2.

<sup>48</sup> ER Letter, Attachment 1, at 1.

four unit operation already includes the entire seepage rate. Therefore, the Ross Report's claim that the increase in seepage rate should be calculated does not demonstrate a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).<sup>49</sup>

Similarly, the Ross Report appears to assume that STPNOC concluded that the environmental impacts of four unit operation are insignificant because the impact on MCR seepage rate is not significant.<sup>50</sup> This is incorrect. The environmental impacts of MCR seepage are discussed in ER Sections 5.2.3 and 5.4.1 and do not rely on the insignificant impact on seepage rate.<sup>51</sup> Instead, as discussed in ER Sections 5.2.3.1 and 5.4.1, the water in the MCR and the corresponding seepage from the MCR are of high quality, and thus there would be no adverse impact from seepage.<sup>52</sup> Thus, it is the high quality of the seepage water, and not the amount of the seepage, that provides the basis for STPNOC's conclusion that the environmental impacts of seepage would be SMALL. The Intervenors have not raised any genuine dispute of material fact with this conclusion in the ER.

Contention MCR-3 also states that the seepage rates should be addressed in the ER in order to determine the overall increases in water consumption.<sup>53</sup> However, the ER revisions that are the subject of this contention do not address water consumption, and therefore this contention is untimely and should be rejected for failure to satisfy 10 C.F.R. § 2.309(c) and (f)(2). In any event, ER Section 5.2.2.1 (which was not recently revised) does address water consumption, and the Intervenors' previous contentions on this matter (Contentions 11 and 15) have been rejected

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<sup>49</sup> If a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine issue. *See, e.g., Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 95-96 (2004).

<sup>50</sup> Ross Report at 2.

<sup>51</sup> ER Letter, Attachments 2 and 3.

<sup>52</sup> *Id.*, Attachments 2 and 3.

<sup>53</sup> Request at 4.

by the Board.<sup>54</sup> The Intervenors have provided no basis for the Board to reconsider its previous rulings.

In summary, Contention MCR-3 is attempting to “flyspeck” the ER section by raising issues related to seepage rates that are not material to the environmental impacts of the MCR. As a result, Contention MCR-3 should be rejected.<sup>55</sup>

**D. Contention MCR-4**

Contention MCR-4 states:

The Environmental Report does not fully evaluate the water quality nor does it account for the environmental impacts of all nonradioactive contaminants, including salinity and total dissolved solids (TDS), in the MCR and the seepage water from the MCR.<sup>56</sup>

The Intervenors rely upon the Ross Report as support for this contention.<sup>57</sup> Contention MCR-4 makes two general arguments. First, it argues that the existing permit requirements for MCR water quality and nonradioactive contaminants are insufficient, and second, it argues that the ER has not adequately evaluated various MCR nonradioactive contaminant water quality parameters.<sup>58</sup> As demonstrated below, Contention MCR-4 should be rejected because it is outside the scope of this proceeding and does not demonstrate a genuine dispute of a material fact.

Contention MCR-4 argues that the TPDES permit “does not assure necessary treatment and monitoring for all nonradioactive contaminants” and identifies various parameters such as TDS, salinity, toxic metals, and radionuclides that should be monitored.<sup>59</sup> The Intervenors’

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<sup>54</sup> *South Texas Project*, LBP-09-25, slip op. at 14-15, 27.

<sup>55</sup> *Grand Gulf*, CLI-05-4, 61 NRC at 13.

<sup>56</sup> Request at 5.

<sup>57</sup> *Id.*

<sup>58</sup> *Id.* at 5-6.

<sup>59</sup> *Id.*

arguments regarding the existing MCR water quality permit requirements are similar to arguments that they previously raised in Contention 12. Contention 12 argued that the TPDES permit parameters were insufficient, including parameters for TDS, specific conductance, metals, and radionuclides.<sup>60</sup> The Board rejected Contention 12 as outside the scope of this proceeding, stating:

We conclude Contention 12 is inadmissible. 33 U.S.C. § 1371(c)(2) provides that “[n]othing in the National Environmental Policy Act of 1969 (83 Stat. 852) shall be deemed to . . . authorize any Federal agency . . . to review any effluent limitation or other requirement established pursuant to [the Clean Water Act] . . . ; or . . . authorize any such agency to impose any effluent limitation other than” those set by the Environmental Protection Agency or a state agency that has been delegated such authority – which here means TCEQ.<sup>61</sup>

Contention MCR-4 should be rejected for these same reasons.<sup>62</sup>

The Intervenor’s other arguments regarding the water quality of the MCR also must fail because ER Sections 5.2.3 and 5.4.1 fully evaluate the environmental impacts of MCR water quality, including MCR seepage. For example, the Intervenor’s claim that the ER lacks adequate characterization of the environmental impacts of radionuclides.<sup>63</sup> However, ER Section 5.2.3.1 evaluates the impacts of tritium in surface water, ER Section 5.2.3.2 evaluates the impacts of tritium in groundwater, and ER Section 5.4.1 evaluates the impacts of other radionuclides in the MCR and resulting discharges.<sup>64</sup> These sections conclude that the radionuclide concentrations

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<sup>60</sup> L. Ross, Water Quality and Quantity Impacts from Proposed South Texas Plant Expansion, at 7-8 (April 2009) (Attachment to the Intervenor’s Original Petition).

<sup>61</sup> *South Texas Project*, LBP-09-25, slip op. at 18.

<sup>62</sup> To the extent the Intervenor’s are making these arguments with respect to discharges from MCR relief wells or other MCR seepage flow paths, their arguments should also be rejected for the reasons set forth above for Contention MCR-2.

<sup>63</sup> Request at 5-6.

<sup>64</sup> ER Letter, Attachments 2 and 3.

will be within regulatory limits and therefore that the corresponding environmental impacts will be SMALL. The Intervenor has not challenged this conclusion.

Additionally, the Intervenor argues that the ER has not adequately evaluated TDS, salinity, and metal concentrations.<sup>65</sup> This argument mischaracterizes the ER. ER Section 5.2.3.1 addresses all of these parameters for the MCR. The ER explains that conductivity is used as an indicator for TDS, and that other constituents such as metals and salts are routinely monitored in the MCR.<sup>66</sup> ER Section 5.2.3.1 further explains that:

Due to the additional reservoir makeup required to offset evaporation and the limited amount of discharge from STP 3 & 4, the concentrations of chemicals and other constituents in the MCR water would be expected to increase only slightly, if at all. Existing constituents in the MCR are comparable to the state drinking water standards, except for aluminum and arsenic which are not attributed to plant operation and introduced from ground and surface water sources. Therefore, the impacts to water quality in the MCR due to addition of STP 3 & 4 are expected to be SMALL.<sup>67</sup>

Similarly, with respect to TDS, ER Section 5.2.3.1 states:

Based on modeling to evaluate the impacts of adding STP 3 & 4 to the MCR system, the amount of TDS would increase slightly. Using historical Colorado River flows, the mean TDS was calculated to increase from 2,178.5 mg/L to 3,076.8 mg/L, and using the proposed Lower Colorado River Authority/San Antonio Water System diversions, the mean TDS was calculated to increase from 2,256.0 mg/L to 3,838.8 mg/L (Reference 5.2-13). However, the number of days of blowdown required to maintain acceptable levels of TDS would change by less than 1% (Reference 5.2-13). The reach of the Colorado River associated with MCR blowdown is within the tidal influence of the Gulf of Mexico. River TDS varies significantly from practically freshwater to saltwater in this area. Additionally, any blowdown to the Colorado River is limited to less than 12.5% of the river flow and to only when river flow is greater than 800 cubic feet per second, so the TDS would be within

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<sup>65</sup> Request at 5-6.

<sup>66</sup> ER Letter, Attachment 2, at 2.

<sup>67</sup> *Id.*, Attachment 2, at 3.

the range normally seen for this reach of the river. Therefore, impacts to the Colorado River from TDS would be SMALL.<sup>68</sup>

The Intervenors state that the ER does not capture TDS concentrations during “critical periods.”<sup>69</sup> Neither the Intervenors nor Dr. Ross identify the “critical periods,” but presumably they are referring to drought conditions. However, as indicated by the passage from the ER quoted above, STPNOC cannot discharge from the MCR during conditions of low river flow. In any event, the river is subject to tidal influences near the STP site and becomes almost entirely saltwater at times. Therefore, variations in TDS in discharges are not significant. The Intervenors have not challenged this conclusion.<sup>70</sup>

Because the ER includes the information that the Intervenors claim is missing, Contention MCR-4 does not demonstrate a genuine dispute of a material fact. Accordingly, Contention MCR-4 does not satisfy 10 C.F.R. § 2.309(f)(1)(vi) and should be rejected.<sup>71</sup>

**E. Contention MCR-5**

Contention MCR-5 states:

The Applicant fails to state how the MCR water seepage rate, quantity, and quality will be monitored and controlled.<sup>72</sup>

The Intervenors claim that this contention is supported by the Ross Report.<sup>73</sup> The contention consists of arguments regarding monitoring and controlling seepage from the MCR, including

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<sup>68</sup> *Id.*, Attachment 2, at 3-4.

<sup>69</sup> Request at 6.

<sup>70</sup> The Intervenors also allege that concentrations of lead, molybdenum, and vanadium in the MCR are significantly higher than EPA screening levels. *Id.* However, neither the Intervenors nor Dr. Ross allege that there would be any significant environmental impacts.

<sup>71</sup> If a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine issue. *See, e.g., Millstone*, LBP-04-15, 60 NRC at 95-96.

<sup>72</sup> Request at 7.

<sup>73</sup> *Id.*

under drought conditions and operational conditions with four operating units.<sup>74</sup> Additionally, the Intervenor's dispute the alleged deletion of two statements from the ER.<sup>75</sup> As demonstrated below, Contention MCR-5 should be rejected because it is not material and does not demonstrate a genuine dispute of a material fact.

The ER demonstrates that the discharges from the MCR to groundwater through seepage will not have an adverse environmental impact.<sup>76</sup> Therefore, there is no legal or factual basis for Intervenor's claim that additional monitoring and control of the seepage to groundwater is needed. Accordingly, the contention does not establish a genuine dispute of material fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor's argue that the ER "fails to show how the concentration of contaminants in the MCR seepage water will be monitored and controlled under various conditions including protracted drought."<sup>77</sup> This allegation mischaracterizes the ER. As discussed in the revision to ER Section 5.2.3.1, STPNOC routinely monitors the constituents in the MCR water (which is the source of water that seeps into the groundwater).<sup>78</sup> The Intervenor's do not contest this monitoring, and do not provide any basis for believing that such monitoring is insufficient for characterizing the quality of the water discharge to the groundwater.<sup>79</sup> Therefore, Contention MCR-5 does not raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

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<sup>74</sup> *Id.*

<sup>75</sup> *Id.* at 7-8.

<sup>76</sup> ER Letter, Attachments 2 and 3.

<sup>77</sup> Request at 7.

<sup>78</sup> ER Letter, Attachment 2, at 3-4.

<sup>79</sup> The Intervenor's also argue that the ER does not attempt to account for water quality variations based on reduced MCR levels. Request at 7. However, as discussed above with respect to Contention MCR-4, STPNOC is restricted from making discharges from the MCR when river flows are low (*e.g.*, during drought conditions), and the reach of the river near the STP site is tidal and subject to saltwater intrusion. Therefore, there is no reason to believe that any increases in the concentrations of TDS and other contaminants in the

The Intervenors also allege that the ER “fails to show how the plant expansion could affect the seepage rate from the MCR.”<sup>80</sup> This is the same argument that the Intervenors make in Contention MCR-3 and it should be rejected for the same reasons.<sup>81</sup> As discussed above, this argument does not demonstrate a genuine dispute because the ER already evaluates the maximum seepage rate, which is then used in the evaluation of environmental impacts.

The remainder of this contention consists of Intervenors’ arguments regarding two sentences that they claim were improperly deleted from the ER.<sup>82</sup> The first sentence states: “Discharge to the environment from the MCR occurs from seepage through the reservoir floor to the groundwater.”<sup>83</sup> The Ross Report claims that this statement was replaced with a contradicting statement that 32% of the MCR leakage that is not collected in relief wells discharges to the Colorado River.<sup>84</sup> While the Intervenors are correct that this statement was replaced, they are incorrect that the statement was replaced with a contradictory statement.

As part of the ER revisions, certain information on MCR seepage was removed from ER Section 2.3.1.2.3.3 and was consolidated with additional information on the MCR in ER Section 2.3.1.1.2.1. The new ER Section 2.3.1.1.2.1 explains that all “seepage acts as a local recharge source to the Shallow Aquifer at the site.”<sup>85</sup> This statement is fully consistent with the deleted statement. Additionally, the new statement identified by the Intervenors simply provides additional detail regarding the flow of seepage water after it enters the Shallow Aquifer. Deleted

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MCR during drought conditions would have any significant environmental impact, and the Intervenors have not provided any information to the contrary.

<sup>80</sup> Request at 7.

<sup>81</sup> *Id.* at 4-5.

<sup>82</sup> *Id.* at 7-8.

<sup>83</sup> *Id.* at 8.

<sup>84</sup> *Id.*; Ross Report at 2.

<sup>85</sup> ER Letter, Attachment 1, at 1.

information in ER Section 2.3.1.2.3.3 explained that 68% of MCR seepage is discharged through the relief wells and the remainder “bypasses the relief wells and continues down gradient.”<sup>86</sup> The new statement explains that the remaining 32% of the MCR seepage that continues down gradient eventually migrates to the Colorado River.<sup>87</sup> Therefore, the Intervenor’s claim of a discrepancy is incorrect and does not support admission of this contention. A petitioner’s imprecise reading of a document cannot be the basis for a litigable contention.<sup>88</sup>

The Intervenor also claim that the following statement was deleted from the ER: “STPNOC periodically monitors the potentiometric head and flow rates at the MCR relief wells to assist in controlling the potentiometric head and seepage within the dike structure.”<sup>89</sup> While the Intervenor are correct that this statement was deleted from ER Section 2.3.1.2.3.3, they failed to recognize that this same sentence was added to ER Section 2.3.1.1.2.1. Specifically, this sentence is the third sentence in the second to last paragraph of ER Section 2.3.1.1.2.1.<sup>90</sup> Therefore, the Intervenor’s claim that a monitoring commitment has been deleted is incorrect and immaterial, and it does not support admission of this contention.

For all of these reasons, Contention MCR-5 should be rejected.

#### **F. Proposed Revisions to Contention 8**

As noted above, in addition to submitting five new contentions, the Intervenor requested that the Board revise Contention 8. Many of the Intervenor’s arguments in the proposed revisions to Contention 8 are fully encompassed within the new Contentions MCR-1 through 5.

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<sup>86</sup> *Id.*, Attachment 1, at 3.

<sup>87</sup> *Id.*, Attachment 1, at 2.

<sup>88</sup> *See Ga. Inst. of Tech.* (Georgia Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300 (1995).

<sup>89</sup> Request at 8.

<sup>90</sup> ER Letter, Attachment 1, at 2.

STPNOC's responses to these arguments are provided above and are not repeated here. These include the following topics.

- The Intervenors argue that “[t]he Applicant has not discussed the actual physical changes to the environment that are the consequences of discharging radioactive particulates into the MCR.”<sup>91</sup> This argument is similar to those made in Contention MCR-1 for tritium and should be rejected for the same reasons discussed above.
- The Intervenors argue that the ER ignores the environmental effects of tritium, including OBT.<sup>92</sup> This argument is similar to those made in Contention MCR-1 and should be rejected for the same reasons discussed above.
- The Intervenors argue that regulation of contaminants entering the MCR is insufficient to analyze the environmental effects of seepage from the MCR into groundwater.<sup>93</sup> This argument is similar to those made in Contention MCR-5 and should be rejected for the same reasons discussed above.
- The Intervenors argue that “[t]he Applicant has not described the effects of gamma radiation from Cobalt-60 on living organisms in the MCR” and “does not discuss bioconcentration or bioaccumulation of radionuclides in the MCR.”<sup>94</sup> This argument is similar to those made in Contention MCR-1 regarding OBT and should be rejected for the same reasons discussed above.

The remaining portions of revised Contention 8 should be rejected as well. First, the Intervenors argue that the ER discusses the quantities and forms of increases of radioactivity, but

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<sup>91</sup> Intervenors' Answer at 5.

<sup>92</sup> *Id.* at 5-6.

<sup>93</sup> *Id.* at 7.

<sup>94</sup> *Id.* at 4.

does not discuss the resulting environmental impacts, such as those from Co-60.<sup>95</sup> This argument mischaracterizes the ER. ER Section 5.4.1 explains that the environmental impacts of these radionuclides will be SMALL because the releases will be within the limits of 10 C.F.R. Part 20.<sup>96</sup> In particular, that section discusses the environmental impacts of Co-60 and demonstrates that the levels of Co-60 in the sediment would be less than the required detection capability.<sup>97</sup> Therefore, the Intervenors' arguments related to Co-60 do not demonstrate a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).<sup>98</sup>

The Intervenors also argue that “there is no quantification of the differences in [the liquid radioactive] discharges between Units 1 & 2 and Units 3 & 4” and that “the Applicant . . . offers no factual support for its position” that “it does not anticipate that radionuclides will be detected in biological samples.”<sup>99</sup> Once again, the Intervenors are attempting to flyspeck the ER. There is no requirement or reason for the ER to identify the differences in the discharges between Units 1 & 2 and Units 3 & 4. In any event, ER Section 5.4.1 explains that the environmental impacts from radiological releases will be SMALL because the releases will be within the limits of 10 C.F.R. Part 20.<sup>100</sup> Additionally, ER Section 5.4.1 states that “[s]ince the anticipated combined annual release rates for Co-58 and Co-60 for STP 1, 2, 3, and 4 would be less than the STP 1 & 2 combined annual release rates shortly after 1992, these radionuclides are not anticipated to be

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<sup>95</sup> *Id.* at 3.

<sup>96</sup> ER Letter, Attachment 3, at 3-4.

<sup>97</sup> Second ER Letter, Attachment, at 3.

<sup>98</sup> If a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine issue. *See, e.g., Millstone*, LBP-04-15, 60 NRC at 95-96.

<sup>99</sup> Intervenors' Answer at 2-3.

<sup>100</sup> ER Letter, Attachment 3.

measurable in biological samples during future four unit operation.”<sup>101</sup> Therefore, the ER clearly indicates that Co-60 would likely not be detectable in the sediment given the historical experience and the small discharges from Units 3 and 4. Since the ER already provides the information claimed to be missing by the Intervenors, and the Intervenors have not challenged this information, their arguments do not demonstrate a genuine dispute of material fact.

The Intervenors next state that ER Section 5.4.1 should have evaluated the concentration of Co-60 in MCR sediment based upon deposition rates rather than mixing rates.<sup>102</sup> This argument does not raise any material issue, because it is not relevant to the conclusions in the ER regarding the environmental impacts of Co-60. ER Section 5.4.1 concludes:

Based on the low concentrations of radionuclides detected in the historical monitoring of the water and sediment in the MCR, the expected minimal radionuclide contributions discharged to the MCR as a result of the addition of STP 3 & 4, and the fact that the radionuclide concentrations in the water of the MCR would be less than the limits in 10 CFR 20, impacts to the water and sediments in the MCR, and from discharges from the MCR to groundwater and surface water, would be SMALL.<sup>103</sup>

The Intervenors do not contest any of these statements. The calculation that is the subject of the Intervenors’ criticism simply provides additional support for this conclusion (rather than the basis for this conclusion). Therefore, the issues identified by the Intervenors and the Ross Report do not raise a genuine dispute of material fact.

The Intervenors further argue that STPNOC does not describe the qualities of the Co-60 in terms of dimensions or weight, and that measuring the health effects from exposures to Co-60 without knowing the actual quantities discharged is not possible.<sup>104</sup> ER Section 5.4.1

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<sup>101</sup> *Id.*, Attachment 3, at 3.

<sup>102</sup> Intervenors’ Answer at 3.

<sup>103</sup> ER Letter, Attachment 3, at 4.

<sup>104</sup> Intervenors’ Answer at 4.

demonstrates that the releases of Co-60 will be within regulatory limits, that the amount of Co-60 in the MCR is not currently detectable and will likely remain below detectable levels after commencement of operation of Units 3 and 4, and that the impacts of radionuclides will be SMALL.<sup>105</sup> Therefore, the dimensions and weight of Co-60 are not material.

The Intervenors next state: “The Applicant makes no attempt to determine whether Cobalt-60 laden sediment particles migrate to groundwater or surface water. There is simply an assumption by the Applicant that once discharged from the plant all Cobalt-60 will remain in-situ in sediment for the duration of its hazardous life.”<sup>106</sup> However, this mischaracterizes the ER. ER Section 5.4.1 states: “Earlier monitoring attempts to measure Co-58 and Co-60 in the MCR water and bottom sediments has shown that cobalt behaves as a particle and precipitates out of the water column and concentrates in the sediments at the bottom of the reservoir. Hence, cobalt has never been detected in MCR water.”<sup>107</sup> The Intervenors have provided no basis for contesting this statement and no reason to believe that Co-60 would become re-suspended in water or migrate to groundwater in any significant quantities. Therefore, they have not provided adequate support for their arguments, contrary to 10 C.F.R. § 2.309(f)(1)(v).

In any event, even if the Co-60 were to become re-suspended in the water, the ER shows that the concentrations would be less than the limits in 10 C.F.R. Part 20. As stated in ER Section 5.4.1:

Of the nuclides discharged besides tritium, Co-60 represents the most activity for a single nuclide and should continue to be the predominant nuclide with STP 3 & 4 operation. Measurements have proven that cobalt added to the MCR does not remain in the water at concentrations exceeding the detection capability of the environmental monitoring program, typically about 2 pCi/liter as

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<sup>105</sup> ER Letter, Attachment 3, at 3-4.

<sup>106</sup> Intervenors’ Answer at 4.

<sup>107</sup> ER Letter, Attachment 3, at 2.

listed in Table 3 of the 2007 Annual Environmental Operating Report for surface water (Reference 5.4-15). The average diluted concentration during discharge to the MCR of Co-60 or other radionuclides is less than the 10 CFR 20 limits and would be diluted further by discharge into an off site body of water like the Colorado River. Consequently, any discharges of Co-60 or any other radionuclides from the MCR to the groundwater or surface water would not exceed 10 CFR 20 regulatory limits and therefore, radiological impacts to the groundwater and offsite surface water bodies, such as Little Robbins Slough, the Colorado River, and their associated tributaries would be SMALL.<sup>108</sup>

The Intervenors have not disputed this statement.

In summary, the revisions to Contention 8 proposed by the Intervenors raise various nuances related to ER Section 5.4.1, but do not dispute the evaluations that demonstrate that the environmental impacts would be SMALL. The Intervenors are requesting that the ER include additional detailed information that is not material. These efforts by the Intervenors to “flyspeck” this ER section should be rejected.<sup>109</sup> The Intervenors have not identified any reasonably foreseeable or significant impacts from discharges from the MCR, and have not raised a genuine dispute of material fact. For all of these reasons, the proposed revisions to Contention 8 should be rejected.

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<sup>108</sup> *Id.*, Attachment 3, at 4.

<sup>109</sup> *Grand Gulf*, CLI-05-4, 61 NRC at 13.

## VI. CONCLUSION

For the foregoing reasons, the new and revised contentions submitted by the Intervenors on environmental impacts related to the MCR should be rejected.

Respectfully submitted,

/s/ Steven P. Frantz

Steven P. Frantz

John E. Matthews

Stephen J. Burdick

Morgan, Lewis & Bockius LLP

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004

Phone: 202-739-3000

Fax: 202-739-3001

E-mail: [sfrantz@morganlewis.com](mailto:sfrantz@morganlewis.com)

*Counsel for STP Nuclear Operating Company*

Dated in Washington, D.C.  
this 25th day of January 2010

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

In the Matter of ) STP NUCLEAR OPERATING COMPANY ) (South Texas Project Units 3 and 4) )	Docket Nos. 52-012-COL 52-013-COL  January 25, 2010
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**CERTIFICATE OF SERVICE**

I hereby certify that on January 25, 2010 a copy of “Applicant’s Answer Opposing New and Revised Contentions Regarding the Main Cooling Reservoir” was served by the Electronic Information Exchange on the following recipients:

Administrative Judge  
Michael M. Gibson, Chair  
Atomic Safety and Licensing Board Panel  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: mmg3@nrc.gov

Administrative Judge  
Dr. Gary S. Arnold  
Atomic Safety and Licensing Board Panel  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: gxa1@nrc.gov

Administrative Judge  
Dr. Randall J. Charbeneau  
Atomic Safety and Licensing Board Panel  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: Randall.Charbeneau@nrc.gov

Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Rulemakings and Adjudications Staff  
Washington, DC 20555-0001  
E-mail: hearingdocket@nrc.gov

Sara Kirkwood  
Michael Spencer  
Jessica Bielecki  
Anthony Wilson  
Office of the General Counsel  
U.S. Nuclear Regulatory Commission  
Mail Stop O-15D21  
Washington, DC 20555-0001  
E-mail: Sara.Kirkwood@nrc.gov  
Michael.Spencer@nrc.gov  
Jessica.Bielecki@nrc.gov  
Anthony.Wilson@nrc.gov

Robert V. Eye  
Counsel for the Intervenors  
Kauffman & Eye  
112 SW 6th Ave., Suite 202  
Topeka, KS 66603  
E-mail: bob@kauffmaneye.com

Office of Commission Appellate  
Adjudication  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16C1  
Washington, DC 20555-0001  
E-mail: ocaamail@nrc.gov

*Signed (electronically) by Steven P. Frantz*

Steven P. Frantz  
Morgan, Lewis & Bockius LLP  
1111 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Phone: 202-739-3000  
Fax: 202-739-3001  
E-mail: sfrantz@morganlewis.com

*Counsel for STP Nuclear Operating Company*

# STP ATTACHMENT 1



TPDES PERMIT NO. WQ0001908000  
[For TCEQ office use only -  
EPA I.D. No. TX0064947]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
P. O. Box 13087  
Austin, Texas 78711-3087

This is a renewal of TPDES Permit No.  
WQ0001908000, issued on November 2,  
2000.

PERMIT TO DISCHARGE WASTES  
under provisions of  
Section 402 of the Clean Water Act  
and Chapter 26 of the Texas Water Code

STP Nuclear Operating Company

whose mailing address is

P. O. Box 289  
Wadsworth, Texas 77483-0289

is authorized to treat and discharge wastes from the South Texas Project Electric Generating Station (SIC 4911)

located on Farm-to-Market Road 521, approximately 10 miles north of Matagorda Bay and 12 miles south-southwest of the City of Bay City, Matagorda County, Texas

to Colorado River Tidal in Segment No. 1401 of the Colorado River Basin

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight on December 1, 2009.

ISSUED DATE: JUL 21 2005

A handwritten signature in black ink, appearing to be "R. White", written over a horizontal line.

For the Commission

OTHER REQUIREMENTS

1. The Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the Coastal Coordination Council (CCC) and has determined that the action is consistent with the applicable CMP goals and policies.
2. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 12, within 24 hours from the time the permittee becomes aware of the violation followed by a written report within five working days to TCEQ Region 12 Office and the Enforcement Division (MC 224):

<u>POLLUTANT</u>	<u>MAL (mg/l)</u>
Copper, Total	0.010
Iron, Total	_____

Test methods utilized shall be sensitive enough to demonstrate compliance with the permit effluent limitations. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit with consideration given to the MAL for the parameters specified above.

When an analysis of an effluent sample for any of the parameters listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero (0) shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero (0) based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form.

"The reported value(s) of zero (0) for \_\_\_\_\_ [list parameter(s)] \_\_\_\_\_ on the self-reporting form for the term of this permit is based on the following conditions: 1) the analytical method used had a method detection level as sensitive as the MAL specified in the permit, and 2) the analytical results contained no detectable levels above the specified MAL."

When an analysis of an effluent sample for a parameter indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that parameter, the level of detection achieved shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. A zero (0) may not be used.

3. The discharges from sources such as reservoir relief wells, reservoir spillway gate leakage, condenser box drainage, ground water monitoring wells, and process monitoring instrumentation are authorized. These sources may discharge to the Colorado River, to the West Branch of the Colorado River, to Little Robbins Slough and the East Fork of Little Robbins Slough.
4. For Outfall 001, the discharge from the cooling pond shall not exceed 12.5% of the flow of the Colorado River at the discharge point and there shall be no discharge from Outfall 001 when the receiving water flow adjacent to the plant is less than 800 cubic feet per second.
5. Total Residual Chlorine:

The term "total residual chlorine" (or total residual oxidants for intake water with bromides) means the value obtained using the amperometric method for total residual chlorine described in 40 CFR Part 136. The permittee may use the DPD spectrophotometric method (EPA Method 330.5) upon written notification of the Executive Director, provided that EPA has modified the existing effluent limitation guidelines (40 CFR Part 423) or has provided the permittee with demonstration that this new method is appropriate for use by steam electric power generating facilities.

Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control.

Simultaneous multi-unit chlorination is permitted.