Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

May 17, 2010
U7-C-STP-NRC-100111

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

South Texas Project
Units 3 and 4
Docket Nos. 52-012 and 52-013
Response to Request for Additional Information

Reference 1: Letter, Scott Head to Document Control Desk, "Response to Request for Additional Information", dated January 4, 2010: U7-C-STP-NRC-100002 (ML100060693).

Reference 2: Letter, Scott Head to Document Control Desk, "Response to Request for Additional Information", dated February 25, 2010: U7-C-STP-NRC-100051 (ML100610277).

This letter provides response to Requests for Additional Information, related to COLA Part 2, Tier 2, Sections 12.2, 12.3, and 12.4. Attachment 1 revises the response originally submitted as Attachment 3 in Reference 1; Attachment 2 revises the response originally submitted as Attachment 1 in Reference 2. Attachment 3 provides response to the NRC staff question in Request for Additional Information (RAI) letter number 337, related to Combined License Application (COLA) Part 2, Tier 2, Section 12.2. Responses to the following questions are provided:

12.03-12.04-14
12.02-17
12.02-18

When a change to the COLA is indicated it will be included in the next routine revision of the COLA submitted after NRC acceptance of the RAI response.

There are no commitments in this letter.

If you have any questions regarding this response, please contact me at (361) 972-7136 or Bill Mookhoek at (361) 972-7274.

D091
NRO

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 5/17/10

Scott Head
Manager, Regulatory Affairs
South Texas Project Units 3 & 4

scs

Attachments:

1. Question 12.03-12.04-14 Revised Response
2. Question 12.02-17 Revised Response
3. Question 12.02-18

cc: w/o attachment except*
(paper copy)

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QUESTION:

In the response to RAI 12.03-12.04-9 (Letter U7-C-STP-NRC-090125, ADAMS Document Number ML092510039), STP included a summary of construction activities and bases of dose calculations, as well as a table containing the calculated person-Sievert dose for each unit. In addition, the response referenced Sections 3.9S, 3.10S, and 4.5 of COLA Part 3 (the STP 3&4 Environmental Report) as containing additional information. With the exception of the calculated annual person-Sievert dose per unit, the STP 3&4 Environmental Report, COLA Part 3, contains the information requested in RAI 12.03-12.04-9. However, the Environmental Report is a separate stand alone document and is not part of the FSAR.

In order to make a determination of reasonable assurance that the FSAR contains sufficient information related to the bases, models, assumptions, and input data used in the assessment and calculation of construction worker dose, the staff requests that the applicant include in FSAR Section 12.3.8 supplemental information equivalent to what is contained in the STP 3&4 Environmental Report (COLA Part 3, Section 4.5) concerning construction worker dose including the following:

1. The calculated annual person-Sievert construction worker dose for each unit.

2. The bases, models, assumptions, and input data used to calculate construction worker dose.

3. Describe any dose reduction measures identified or taken as a result of the construction worker dose assessment process.

4. Indicate if the guidance in RG 8.19 was used to perform the construction worker dose assessment. If RG 8.19 was not used, describe the specific alternative methods used.

5. Clearly indicate whether construction workers will be considered Members of the Public or occupational workers during construction of STP 3&4, and how STPNOC will demonstrate compliance with the applicable requirements of 10 CFR 20 Subpart C or Subpart D.

6. Provide a markup of the proposed FSAR changes in the response.

REVISED RESPONSE:

This revised response replaces the previous response to RAI 12.03-12.04-14 (U7-C-STP-NRC-100002) in its entirety. Revision bars mark the changes. This revised response does not replace the information provided in STPNOC's response to RAI 12.03-12.04-9, but is supplemental information.

1. As requested by the NRC Staff, STPNOC will include, in STP 3&4 COLA Part 2, Tier 2 (FSAR), Subsection 12.3.8, supplemental information equivalent to that contained in the STP 3&4 COLA Part 3 (Environmental Report), Section 4.5 concerning the calculated annual person-Sievert construction worker dose, except that the total body and critical organ doses are reported instead of TEDE doses, consistent with other FSAR sections.

2. FSAR Subsection 12.3.8 will be revised to summarize the bases, assumptions, and methods used to calculate the STP 3&4 construction worker dose.
STPNOC's response to RAI 12.03-12.04-9 detailed the STP 3&4 construction activities, including the projected number of workers during any one period of time. This projected number of persons in the workforce was provided for information, but is a level of detail that is considered inappropriate for inclusion in the FSAR and is excluded.

3. As discussed in FSAR Subsection 12.3.8, the STP 3 & 4 site will be continually monitored during the construction period and appropriate actions taken to ensure that doses to the construction workers remain as low as reasonably achievable (ALARA). In addition, the Operational Radiation Protection Program described in FSAR Section 12.5S will be in place during the time that Unit 3 is operating and when Unit 4 is still under construction. Thus, there will be ample oversight to ensure that doses to construction workers remain ALARA during the construction period.

4. The objective of Regulatory Guide (RG) 8.19, June 1979, is to describe a method acceptable to the NRC Staff for performing an assessment of collective occupational radiation dose as part of the ongoing design review process involved in designing a light-water-cooled power reactor (LWR) so that occupational radiation exposures during normal plant operations will be ALARA. Accordingly, although the guidance was considered for ALARA during normal plant operations, this RG for the design stage was not explicitly used to perform STP 3&4 construction worker dose assessment.

   STPNOC's response to RAI 12.03-12.04-9 discussed the methods used to assess the construction worker doses. The methods include an assessment of onsite activities prior to and after issuance of the COL. The assessment includes the category of workers, the projected number of workers and their duration of time onsite, and the expected schedule for construction. The methods and results are discussed in items 1 and 2 above, and are also included in an addition to FSAR Subsection 12.3.8 below.

5. STP 3 & 4 construction workers are considered members of the public in the context of 10 CFR 20 Subpart D, Radiation Dose Limits for Individual Members of the Public. At the time of STP 3 operation with STP 4 under construction, STPNOC will reassess the potential for construction workers' doses and as necessary, implement controls as discussed in item 3 above to ensure limits are below those in 10 CFR 20 Subpart C, Occupational Dose Limits.

6. The following will be added to FSAR Subsection 12.3.8 in a future revision. In addition, new Table 12.3-8 will be added in STP 3&4 COLA Part 2, Tier 2, Section 12.3, following Table 12.3-7. Gray highlighting shows the changes from COLA Revision 3.

12.3.8 Radiation Exposure to Construction Workers During Plant Construction

The following site specific supplement provides information to address RG 1.206, CIII Subsection 12.3.5, dealing with dose to construction workers for multi-unit sites.

Regulatory Guide 1.206, Section C.III.12.3.5, states in part, for multi unit sites, the COL applicant will provide estimated annual dose to construction workers in a new construction area, as a result of radiation from on-site radiation sources from the existing operating plant(s).

During the construction of STP 3 & 4, workers will be exposed to several potential sources of radiation. This section identifies the potential sources of radiation and estimates the doses that workers would receive during the construction of STP 3 & 4 due to the operation of STP 1 & 2. In addition, with STP 3 scheduled to be operational one year earlier than STP 4, STP 3 will be a source of radiation for STP 4 construction workers during that year. Thus, the dose contribution from STP 3 sources of radiation is also evaluated.

Three types of sources are considered: direct radiation, gaseous effluents, and liquid effluents. The maximum annual doses from all three pathways during any year of the construction of STP 3 & 4 occur during the year that STP 3 is operational and STP 4 is under construction. This is further discussed later in this subsection. A comparison of these calculated doses for this time period shows that the limits in 10 CFR 20.1301 and 40 CFR 190.10 for members of the public are satisfied. For 10 CFR 20.1301 the calculated annual dose is 18 mrem TEDE and the limit is 100 mrem TEDE.~~; the unrestricted area calculated dose rate is 0.0088 mrem/hr and the limit is 2 mrem/hr. For 40 CFR 190.10 the calculated annual doses for whole body, thyroid and other organ are all 18 mrem and the limits are whole body (25 mrem), thyroid (75 mrem) and other organ (25 mrem).~~

Annual Doses for Individuals Working on Unit 4

	Construction Worker Annual Dose (mrem)	
	From Unit 3	**From Units 1, 2 & 3**
Whole body dose from liquid effluents	00026	0.032
Organ dose from liquid effluents	0.00043	0.032
Whole body dose from gaseous effluents	6.6	8.3
Skin dose from gaseous effluents	16	17
Organ dose from radioactive iodine and radioactive material in particulate form from gaseous effluents	12	18

These calculated doses assume a full power equilibrium core with power history for the entire year. It is not expected that Unit 3 will be at 100% power during the full year that STP 4 is still under construction. During this period, STP 3 will be undergoing startup testing. Full power operation is likely to occur only for about 25% of this first year, resulting in decreased annual doses from those presented in the table.

The STP 3 & 4 site will be continually monitored during the construction period and appropriate actions taken to ensure that doses to the construction workers remain ALARA. In addition, the Operational Radiation Protection Program described in Section 12.5S will be in place while Unit 3 is operating with Unit 4 still under construction. Thus, there will be ample oversight to ensure that doses to construction workers remain ALARA during the construction period.

The bases, assumptions, and methods used to calculate the construction worker dose are given below with the maximum annual dose (person-Sieverts) shown in Table 12.3-8.

Dose rates at the construction site are estimated based on dose rate measurements and calculations. Although the construction workers will occupy a large area over the course of the construction period, dose rates are estimated based on average distances from radiation sources.

- Direct radiation: The direct radiation dose rates from STP 1 & 2 sources are based on TLD measurements taken at various onsite locations from 2002 through 2006. This 5-year period provides sufficient data to be representative of plant conditions. Since the construction location for STP 3 & 4 is farther away from STP 1 & 2 than are the respective TLD stations where dose rates are measured from each source, the STP 1 & 2 Offsite Dose Calculation Manual (ODCM) is used to extrapolate the dose rates from the TLD locations to the STP 3 & 4 location. In determining direct radiation dose rates, it is assumed that the worker is located in the center of the construction area of the unit (either STP 3 or 4) nearest to the source. Given that workers will move about the construction area over the course of a year, it is reasonable to select the center of the area as a representative location for occupancy. No credit is taken for any shielding provided by structures under construction. The estimated total body dose rate to Units 3 and 4 construction workers due to operation of Units 1 and 2 is 2.4 mrem/yr. The estimated total body dose rate to Unit 4 construction workers due to operation of Units 1, 2 and 3 is 9.3 mrem/yr.

- Gaseous effluents: The annual dose rates from release of gaseous effluents to the maximally exposed member of the public are based on the STP 1 & 2 REMPs for 2002 to 2006. The composite maximum annual dose rate for each organ over these 5 years was calculated using the methodology found in the STP 1 & 2 ODCM. These offsite dose rates are used to estimate construction worker doses. The ratio of the total body dose onsite to that offsite was used to estimate the organ doses onsite for the years 2002 through 2006, yielding the maximum annual onsite doses to construction workers from STP 1&2 over the 5-year period. This maximum dose was doubled to address measurement uncertainty. Using the atmospheric dispersion factors in FSAR

Section 2.3, the estimated total body dose rate to construction workers from operation of Units 1&2 is 1.7 mrem/yr and 6 mrem/yr to the critical organ and operation of Units 1,2 and 3 is 8.3 mrem/yr total body dose rate and 18 mrem/yr to the critical organ.

- Liquid effluents: The annual dose rates from release of liquid effluents to the maximally exposed member of the public are due to sport fish ingestion and shoreline exposure. Although construction workers would not be exposed to these pathways at the construction site, it was conservatively assumed that the construction workers receive the same doses as the maximally exposed member of the public. Furthermore, the doses are doubled to address measurement uncertainty. These liquid effluents are based on the STP 1 & 2 REMPs for 2002 to 2006. The composite maximum annual dose rate for each organ over these 5 years was calculated using the methodology found in the STP 1 & 2 ODCM. The offsite dose rates from STP 1, 2, and 3 are calculated at the Little Robbins Slough area due to sport fish ingestion and shoreline exposure. These dose rates are used to estimate construction location doses. The estimated total dose rate to construction workers from operation of Units 1,2 and 3 is 0.032 mrem/yr to both total body and the critical organ.

The calculated annual person-Sievert construction worker doses for total body and critical organ are provided in Table 12.3-8. For the calculation, the manpower estimates are for the timeframe when construction on both Units 3 and 4 is in progress for both units, as it is not feasible to break down the workforce estimates by unit. The estimated doses for each of the three construction phases shown in the table are based on the maximum average annual workforce during that phase.

Table 12.3-8 Maximum Annual Dose (Person-Sieverts) to Construction Workers

	Unit 3 Construction Only[i]		Unit 3 & 4 Construction[ii]		Unit 4 Construction Only[i]	
	Total Body	Critical Organ	Total Body	Critical Organ	Total Body	Critical Organ
Direct Radiation	0.076	-	0.142	-	0.175	-
Gaseous Effluents	0.054	0.190	0.101	0.356	0.156	0.339
Liquid Effluents	0.001	0.001	0.002	0.002	0.001	0.001
Total	0.131	0.191	0.245	0.358	0.332	0.340

[i] Dose for construction of one unit.
[ii] Dose for construction of two units.

RAI 12.02-17:

QUESTION:

For compliance with the provisions of EPA's environmental radiation standards in 40 CFR 190, as specified in 10 CFR 20.1301(e):
The Total Body Dose listed under Units 3 and 4 (ABWR) for Liquid Pathway Doses in Table 12.2-30 should be two times the calculated value for one unit of 2.63E-4 mrem, to represent the dose from both uranium fuel cycle operations cited in the table. The dose from Table 12.2-29 lists 2.63E-4 mrem as the Total Body Dose from one unit, or one uranium fuel cycle operation. The staff requests that the applicant revise this table accordingly.

The Thyroid Dose listed under Units 3 and 4 (ABWR) for Liquid Pathway Doses should be two times the calculated value for one unit of 2.03E-4 mrem to represent the dose from both uranium fuel cycle operations cited in the table. The dose from Table 12.02-7-2 lists 2.03E-4 mrem as the Maximum Exposed Individual (MEI) thyroid dose for one unit, or one uranium fuel cycle operation. The staff requests that the applicant revise this table accordingly.

REVISED RESPONSE:

This response replaces in its entirety the original response to this question submitted in letter U7-C-STP-NRC-100051, dated February 25, 2010; (ML100790282). This revised response is submitted as the result of a telephone call with the NRC staff on May 5, 2010. It corrects Table 12.2-30, submitted in response to RAI 12.02-7 in letter U7-C-STPNRC-090196 on November 9, 2009; (ML093170679). Revision bars indicate the changes in this revised response.

Table 12.2-30

Comparison of Pathway Bounding Maximally Exposed Individual Doses with 10 CFR 20.1301(e) Criteria [1] – (millirem per year)

		Units 3 and 4 (ABWR)			Units 1 and 2 (Existing) [6]				
	Direct Radiation	Liquid	Gaseous	Total	Liquid	Gaseous	Total	**Site Total**	**Regulatory Limit**
Total body	5.0	0.00053 [2]	0.70 [4]	5.70	0.0042	0.0080	0.012	5.71	25
Thyroid	NA	0.00041 [2]	4.54 [5]	4.54	0.0041	0.0097	0.014	4.55	75
Other organ - bone	NA	0.0023 [3]	1.94 [4]	1.94	0.00077	0.0011	0.0019	1.94	25

[1] Compliance with 40 CFR 190 specified in 10 CFR 20.1301(e).
[2] Teenager using Little Robbins Slough for shoreline activities and fishing.
[3] Child using Little Robbins Slough for shoreline activities and fishing.
[4] Residence with meat animal and vegetable garden, dose to child, 2.18 miles WSW of new units.
[5] Residence with meat animal and vegetable garden, dose to child, 3.03 miles NNW of new units.
[6] References 12.2-1, 12.2-3, and 12.2-4. Same receptor locations as STP 3 & 4.

ER Table 5.4-8 will be replaced with the following new table:

Table 5.4-8. Comparison of Pathway Bounding Maximally Exposed Individual Doses with 10 CFR 20.1301(e) Criteria [1] – (millirem per year)

	Units 3 and 4 (ABWR)				Units 1 and 2 (Existing) [6]			Site Total	Regulatory Limit
	Direct Radiation	Liquid	Gaseous	Total	Liquid	Gaseous	Total		
Total body	5.0	0.00053 [2]	0.70 [4]	5.70	0.0042	0.0080	0.012	5.71	25
Thyroid	NA	0.00041 [2]	4.54 [5]	4.54	0.0041	0.0097	0.014	4.55	75
Other organ - bone	NA	0.0023 [3]	1.94 [4]	1.94	0.00077	0.0011	0.0019	1.94	25

[1] Compliance with 40 CFR 190 specified in 10 CFR 20.1301(e).
[2] Teenager using Little Robbins Slough for shoreline activities and fishing.
[3] Child using Little Robbins Slough for shoreline activities and fishing.
[4] Residence with meat animal and vegetable garden, dose to child, 2.18 miles WSW of new units.
[5] Residence with meat animal and vegetable garden, dose to child, 3.03 miles NNW of new units.
[6] References 12.2-1, 12.2-3, and 12.2-4. Same receptor locations as STP 3 & 4.

RAI 12.02-18

QUESTION:

In the response to RAI 11.02-7 (Letter U7-C-STP-NRC-090219, ADAMS Document Number ML100050183), STP provided additional information concerning the maximum expected radioactivity concentration, radioactivity inventory, and external dose rates for the STP 3 and 4 Condensate Storage Tanks (CST), as well as additional information about CST design features to mitigate releases and the spread of contamination. The response discussion included the statement; "The MUWC System contains lines that are used to transfer condensate quality water between the CST and systems in the Radwaste Building, Turbine Building and Reactor Building. All of the piping is routed in trenches or tunnels (there is no buried pipe). These trenches and tunnels provide the capability to identify and collect any leakage from the lines handling CST water and to transfer this water to the LWMS for processing." However, the response did not include a proposed COL FSAR revision to; 1) include the CST as a radiation source in Chapter 12, 2) include information concerning a tank containing radioactive material being located outdoors, or 3) include the CST design feature information about CST piping being routed in trenches or tunnels.

In order to ensure that radiation sources associated with STP 3 & 4 are adequately characterized in the COL FSAR, and to demonstrate compliance with 10 CFR 20.1201, 20.1301, 20.1302, and 20.1406, the staff requests that the applicant provide the following additional information concerning the Condensate Storage Tank:

1. Revise Chapter 12, Tables 12.2-5a, 12.2-5b, and 12.2-5c of the STP 3 & 4 COL FSAR identifying the CST as a radiation source, including source geometry and shielding information.
2. Revise Chapter 12 of the STP 3 & 4 COL FSAR to include the CST radioactive source term information provided in the above referenced response letter.
3. Revise Chapter 12 of the STP 3 & 4 COL FSAR to include the CST design feature information about CST piping being routed in trenches or tunnels, with leak collection and return to the LWMS, that was provided in the above referenced response letter.
4. Revise the applicable Chapter 12 STP 3 & 4 COL FSAR drawings to identify the location of the CST, including identifying the tank as a radiation source.
5. Provide additional information in the STP 3 & 4 COL FSAR concerning the design features of the dike that will surround the CST to prevent runoff. For example, will it be earthen, concrete, lined, routing of tank leakage piping, specific volume held by the installed dike, etc.
6. Provide additional information in the STP 3 & 4 COL FSAR concerning any planned additional radiation protection control requirements, or provisions, for control and monitoring of radioactive materials or radioactive tanks located outdoors.
7. Provide a markup of the proposed FSAR revision in the response.

RESPONSE:

STPNOC does not agree that the information identified in this question should be added to the FSAR because the Condensate Storage Tank (CST) is within the scope of the ABWR DCD, and its design has received final NRC approval. In fact, the addition of the information identified in this question would constitute a new departure from the DCD. As explained further below, the NRC has already determined that the CST design complies with 10 CFR Part 20, and that determination has finality in accordance with 10 CFR 52.63, 52.83 and Appendix A, Section VI.

As explained in the response to RAI 11.02-7, the CST is part of the Makeup Water-Condensate (MUWC) System, which is described in Subsection 9.2.9 of the DCD. In particular, Subsection 9.2.9 specifies the CST capacity (2110 m^3) and the sources from which water can be sent to the CST (Makeup Water Preparation (MWP) pumps, Control Rod Drive (CRD) system, Radwaste disposal system, and Condensate demineralizer system effluent). The STP 3 & 4 COLA incorporates by reference DCD Subsection 9.2.9 without any departures or supplements. The STP 3 & 4 COLA also incorporates by reference DCD Subsection 12.2, with several departures and supplements. None of those departures and supplements affects the CST design or the sources of water that may be stored in the CST, and none would increase the potential radioactive content of the CST.

Section VI.A of Appendix A states that the "The Commission has determined that the structures, systems, components, and design features of the U.S. ABWR design comply with the provisions of the Atomic Energy Act of 1954, as amended, and the applicable regulations identified in Section V of this appendix . . .." The regulations identified in Section V of Appendix A include 10 CFR Part 20.

Section VI.D of Appendix A states that:

> D. Except in accordance with the change processes in Section VIII of this appendix, the Commission may not require an applicant or licensee who references this appendix to:
>
> 1. Modify structures, systems, components, or design features as described in the generic DCD;
>
> 2. Provide additional or alternative structures, systems, components, or design features not discussed in the generic DCD; or

3. Provide additional or alternative design criteria, testing, analyses, acceptance criteria, or justification for structures, systems, components, or design features discussed in the generic DCD.

For these reasons, STPNOC believes that no additional information regarding the CST should be added to the COLA.

Notwithstanding the above, the information below provides design features of the CST and associated piping:

The CST has a capacity of 2110 m^3 and is located outside in the yard at STP 3 & 4. Specifically, it is located adjacent to and just north of the Radwaste Building and to the west of the Turbine Building (see Figure 1.2-37 – Plot Plan). It is a right cylinder with a radius of approximately seven meters and a height of approximately 14 meters. It is located inside a dike of approximately 19 meters square and 11 meters in height designed to contain the entire contents of the CST. Outside wall thickness of the dike is approximately 0.3 meters on all four sides.

In order to maintain the quality of the CST water, inputs to the CST are limited. The primary makeup water source is purified water from the Makeup Water Purified (MUWP) System.

Three potentially contaminated inputs to the CST exist:

- Recycled water from the Control Rod Drive (CRD) System is routed back to the CST. The design of the CRD System ensures that the recycle water is not contaminated by other water systems so that the recycled water is the same quality as the CST water.

- In the event that water level in the condenser is too high, condensate reject will be sent back to the CST. The point at which condensate is transferred to the CST is located downstream of the condensate filters and demineralizers so that water rejected to the CST has the same quality as the condensate demineralizer effluent.

- Treated water from the Liquid Waste Management System may also be recycled to the CST to minimize liquid releases from the plant.

To establish a bounding source term, the activity concentrations for each isotope for condensate reject and LWMS recycle were compared. The largest value for each isotope from either the LWMS recycle or condensate reject was then selected to establish a bounding source term activity in the CST for use in the dose calculation. The condensate reject activity concentration was estimated by taking the reactor water source terms in DCD Section 11.1, except for noble gas and N-16, and adjusting them by the main steam carryover fractions and the condensate demineralizer removal parameters from DCD Table 11.1-7. The LWMS recycle activity in the CST was estimated by transferring the activity in the Low Conductivity Waste (LCW) Sample Tanks in COLA Table 12.2-13d to the CST at a rate of 55 m^3/day; the normal LCW System influent rate from COLA Table 11.2-2. This transfer was continued for a period of time long

enough to ensure that equilibrium concentrations were reached in the 2110 m^3 CST. Tritium activity was assumed to be 3.7E-04 MBq/g in accordance with DCD Section 11.1.2.3. This is conservative because it does not account for dilution due to makeup from the MUWP System. The resulting activity concentrations were then multiplied by the volume of the CST, 2110 m^3, to obtain the total activity in the CST. The resulting activity for each isotope is shown in Table 1 in the response to RAI 11.02-7. These activities are primarily from condensate reject and are actually expected to be much smaller because of decay and dilution in the CST. The dose rate is low enough that no radiation shielding is required.

The CST is provided with design features to ensure there are no releases to the environment and to prevent the spread of contamination. As stated previously, the CST is surrounded by a concrete dike that is sized to hold the entire contents of the CST. The drain from the diked area is routed to the LWMS for processing, if required. The CST is provided with alarms in the control room and the Radwaste Building in order to provide early indication of abnormally high level, to prevent overflow. Any overflow that may occur is routed to the LWMS. The Makeup Water Condensate System contains lines that are used to transfer condensate quality water between the CST and systems in the Radwaste Building, Turbine Building and Reactor Building. All of the piping is routed in trenches or tunnels. There is no buried piping. These trenches and tunnels provide the capability to identify and collect any leakage from the lines handling CST water and to transfer this water to the LWMS for processing.

In summary, the STP 3 & 4 CST did not depart from the Certified Design; therefore this question challenges finality of the design, and is inappropriate. Additionally, the CST offers no challenge to personnel safety or contamination of the facility or environment, as shown above.

No change to the COLA is required as a result of this response.