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Ref. # 10 CFR 52

February 28, 2013

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555
ATTN: David B. Matthews, Director
Division of New Reactor Licensing

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 3 AND 4
DOCKET NUMBERS 52-034 AND 52-035
COMBINED LICENSE APPLICATION PART 10 REVISION 3, UPDATE TRACKING REPORT REVISION 1

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein Update Tracking Report (UTR) Revision 1 for Part 10 of the Combined License Application (COLA) for Comanche Peak Nuclear Power Plant Units 3 and 4, Revision 3. The UTR reflects changes made as a result of the Integrated Seismic Closure Plan (ISCP). The UTR revision list provides a summary of and a reason for each change, and addresses any differences in page numbers between COLA Revision 3 and the UTR.

In the ISCP update of September 21, 2012 (ML12268A413), Luminant stated that the ITAAC would be updated to include "ITAAC for backfill that is placed laterally adjacent to seismic Category I structures," if needed. Luminant has determined that ITAAC for this backfill is unnecessary because the characteristics of the backfill are not a key element of the seismic analysis and are not major contributors to the seismic response. The assumed design parameters for this backfill are verified by the normal backfill quality control measures described in FSAR Subsection 2.5.4.5.4. This backfill is not treated the same as the backfill under Seismic Category I structures, which is a critical design input.

Should you have any questions regarding the UTR, please contact Don Woodlan (254-897-6887, Donald.Woodlan@luminant.com) or me.

There are no commitments in this letter.

I state under penalty of perjury that the foregoing is true and correct. Executed on February 28, 2013.

Sincerely,

Luminant Generation Company LLC

Donald R. Woodlan for

Rafael Flores

D090
NRO

Attachment: COL Application Part 10, ITAAC and Proposed License Conditions, Revision 3
Update Tracking Report, Revision 1

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February 26, 2013

Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application

Part 10

ITAAC and Proposed License Conditions
Revision 3

Update Tracking Report

Revision 1

Revision History

Revision	Date	Update Description
-	6/28/2012	COLA Revision 3 Transmittal See Luminant Letter no. TXNB-12023 Date 6/28/2012
-	05/31/2012	Updated Section: Appendix A.1 See Luminant Letter no. TXNB-12016 Date 05/31/2012 Incorporated responses to following RAIs No. 251
-	06/21/2012	Updated Section: Appendix A.1 See Luminant Letter no. TXNB-12022 Date 06/21/2012 Incorporated responses to following RAIs No. 254
-	07/16/2012	Updated Section: Appendix A.1 See Luminant Letter no. TXNB-12025 Date 07/16/2012 Incorporated responses to following RAIs No. 56 Supplemental 01
-	07/24/2012	Updated Sections: 2.6, 3 See Luminant Letter no. TXNB-12027 Date 07/24/2012 Incorporated responses to following RAIs No. 261
-	09/14/2012	Updated Sections: Appendix A.1, Appendix A.3 See Luminant Letter no. TXNB-12032 Date 09/14/2012 Incorporated responses to following RAIs No. 250

-	09/24/2012	Updated Sections: Appendix A.1, Appendix A.2 See Luminant Letter no. TXNB-12034 Date 09/24/2012 Incorporated responses to following RAIs No. 254 S01
-	09/26/2012	Updated Sections: 3, Appendix A.7 See Luminant Letter no. TXNB-12035 Date 09/26/2012 Incorporated responses to following RAIs No. 262
0	08/27/2012	Updated Section: Appendix A.2
1	02/26/2013	Updated Section: Appendix A.3

Tracking Report Revision List

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
RCOL2_09.02.01-10	Appendix A.1 Table A.1-1 (Sheet 6 of 7)	9 16	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Clarified that water hammer is prevented in the ESWS as well as the UHS, including testing of the as-built.	-
RCOL2_14.03.07-38	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7)	11 [10] 18 [17]	Response to RAI No. 254 Luminant Letter no.TXNB-12022 Date 6/21/2012	Added ITAAC to address UHS fan qualification against tornado effects. Added ITAAC to address cooling tower spray nozzle size.	-
RCOL2_14.03.03-1 S01	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7)	11 18	Supplemental 01 Response to RAI No. 56 Luminant Letter no.TXNB-12025 Date 7/16/2012	An additional ITAAC (#21) was added to Table A.1-1 to verify the "design" of ASME Section III Piping and Components.	-
RCOL2_01.05-3	2.6 3	3 7	Response to RAI No. 261 Luminant Letter no.TXNB-12027 Date 7/24/2012	Added description regarding a potential condition to the license. Added a proposed licensing condition.	-

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
RCOL2_03.03.02-9	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7) Appendix A.3 A.3.1 A.3.1.1	 11 18 32 32, 33	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	-
RCOL2_14.0 3.07-38 S01	Figure A.1-1	22	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to show the newly introduced drain lines for freeze protection.	-
RCOL2_14.0 3.07-38 S01	Table A.2-2 (Sheet 1 of 2)	28	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Following SSCs for freeze protection are added to the table. - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_14.0 3.07-38 S01	Table A.2-3	30	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Alarms, displays and control functions of the following SSCs are added to the table. - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_14.0 3.07-38 S01	Figure A.2-1	31	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to add newly introduced dampers.	-
RCOL2_03.06.01-1	3	7 [8]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised the Proposed Licensing condition reflecting changes in COL 3.6(1) and 3.6(4).	-

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
RCOL2_03.06.01-1	Appendix A.7 A.7.1 A.7.2 Table A.7-1	47 [49]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised the Design Description and ITAAC reflecting changes in COL 3.6(1) and 3.6(4).	-
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 1.b	25	NRC reviewer comment from a view point of consistency with S-COLA	Added ", considering postulated dynamic effects (i.e., missile and pipe break hazard), internal flooding and fire" to the last sentence of the Acceptance Criteria.	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 3.b	26	NRC reviewer comment from a view point of consistency with S-COLA	The last word in the Design Commitment, "cable", changed to "cables"	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 3.b	26	NRC reviewer comment from a view point of consistency with S-COLA	Wording in the Acceptance Criteria after "RG 1.75" changed to: ", between the as-built cables of redundant UHS ESW pump house ventilation systems Class 1E divisions"	0

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 5.a	26	NRC reviewer comment from a view point of consistency with S-COLA	Deleted "exist" and "to" from the Acceptance Criteria.	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 6	26 [27]	NRC reviewer comment from a view point of consistency with S-COLA	Deleted "of the parameters" from the Design Commitment.	0
CTS-01504	Appendix A.2 Figure A.2-1	31	NRC reviewer comment from a view point of consistency with S-COLA	Revised the figure to add a backdraft damper at each room inlet/outlet duct.	0
CTS-01511	Appendix A.3, A.3.1	32, 33, 34, 37 [35,38]	To reflect updates on the Technical Report MUAP-10006(Rev3)	The term"R/B complex" is used to collectively PCCV, PS/Bs, and A/Bs.	1

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
CTS-01511	Appendix A.3 Table A.3-1	35, 36, 37 [38]	To reflect updates on the Technical Report MUAP-10006(Rev3)	The wording in the title of the ITAAC Table A.3-1 is changed replacing "USHRS, ESPWT and PSFSV" with "Plant specific structures".	1
CTS-01512	Appendix A3 Table A3-2 (sheet 1, 2, 3 [4])	38, 39 and 40 [41, 42]	To reflect changes in Plot Plan and AIA.	Floor elevations and wall thicknesses revised.	1
CTS-01512	Appendix A.3 Figure A.3-1 [Sheet 1 and 2 of 2]	41 [43, 44]	To reflect changes in Plot plan	Overall General Arrangement plan replaced with the updated version; and minor editorial correction.	1

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

PART 10 - APPENDIX A.3

PLANT-SPECIFIC STRUCTURES

A.3.1 Design Description

The site-specific structures are comprised of the UHS related structures (UHSRS), ESW pipe tunnel (ESWPT) and power source fuel storage vault (PSFSV), which are seismic Category I structures. The seismic Category I structures are designed and constructed to withstand design-basis loads without loss of structural integrity. Design basis loads are:

- Normal plant operation (including dead loads, live loads, lateral earth pressure loads, equipment loads, hydrodynamic loads temperature and equipment vibration)
- External events (including rain, snow, flood, tornado, hurricane, tornado generated missiles, hurricane generated missiles and safe shutdown earthquake) RCOL2_03.0 3.02-9
- Internal events (including flood, pipe rupture, equipment failure, and equipment failure generated missiles).

Seismic ~~e~~Category I buildings and structures~~,~~ including the R/B Complex ~~-PCCV containment internal structure on a common mat, the PS/Bs,~~(which includes the A/B that is a seismic Category II building), the UHSRS, ESWPT, and PSFSV~~s~~ are founded directly on solid limestone or on fill concrete. Fill concrete is used as 'dental' fill in any areas where additional removal of materials below the nominal top of limestone is required in order to reach competent limestone. CTS-01511

A.3.1.1 UHSRS

The UHSRS consists of an UHS cooling tower enclosure, UHS ESW pump houses, and an UHS basin. These structures are described below.

UHS cooling tower enclosures - Each UHS basin has one cooling tower with two cells. Each cell is enclosed by reinforced concrete structures that house the equipment required to cool the water used by the ESWS. The reinforced concrete wall separates the two cell enclosures. A reinforced concrete wall, running eastwest, separates the cell enclosure portion of the basin from the rest of the UHS basin. Air intakes serving the cooling towers are configured to protect the safety-related substructures and components from tornado missiles and hurricane missiles. RCOL2_03.0 3.02-9

UHS ESW pump house - The pump house is an integral part of the UHS basin supported by UHS basin exterior and interior walls. Each pump house contains

one ESW pump and one UHS transfer pump with associated auxiliaries. The pump bay (lowest portion of the pump house required for the pump suction) is deeper than the rest of the UHS basin. A reinforced concrete wall divides the pump house basin from the rest of the UHS basin and is configured to prevent postulated direct or deflected design basis tornado missiles and hurricane missiles from impacting safety related components located within the structure. There is a fire barrier between the UHS transfer pump and the UHS ESW pump of each UHS ESW pump house. RCOL2_03.0 3.02-9

UHS Basin - There are four basins for each unit and each basin has one cooling tower with two cells. Each basin is constructed of reinforced concrete and serves as a reservoir for the ESWS. Two basins share a common foundation mat and a reinforced concrete wall divides them.

A.3.1.2 ESWPT

The ESWPT is a reinforced concrete structure that runs from ~~beneath the T/B~~the Essential Service Water Pipe Chase (ESWPC) in the R/B Complex to the UHSRS. The ESWPT is divided into two sections by a concrete wall. Each section contains both ESWS supply and return lines. The ESWPT structure is isolated from other structures to prevent seismic structural interaction. CTS-01511

A.3.1.3 PSFSV

The PSFSVs are reinforced concrete structures, which house the safety-related and non safety-related fuel oil tanks for the emergency power generators. There is one vault for each PS/B founded on separate reinforced concrete basemats. The vault contains three oil tanks, two safety-related and one non safety-related. Each tank is contained in a separate compartment separated by reinforced concrete walls. The top of the roof slab is at the finished plant grade elevation, with a concrete curb. The curb is provided to prevent vehicular traffic on the roof.

1. The structural configurations of the UHSRS, ESWPT and PSFSV are as described in the Design Description of Section A.3, in Table A.3-2, and as shown in FSAR Figures 3.8-201 through 3.8-214.

2.a Divisional flood barriers are provided in the UHSRS, ESWPT and PSFSV to protect against internal flooding.

2.b Deleted

3. Deleted

4. For the UHSRS, ESWPT and PSFSV, external walls below flood level are as indicated in Table A.3-2 to protect against water seepage.

5.a Deleted

5.b Deleted

6. Penetrations in the external walls of the UHSRS, ESWPT and PSFSV that are at or below design basis flood level are fitted with wate-tight seals to protect against external flooding.

7. Redundant safe shutdown components and associated electrical divisions of the UHSRS, ESWPT and PSFSV are separated by 3-hour rated fire barriers to preserve the capability to safely shutdown the plant following a fire.

8. Penetrations and openings through the fire barriers of the UHSRS, ESWPT and PSFSV are protected against fire.

9. The UHRS, ESWPT and PSFSV can withstand design-basis loads.

10. SSCs that require evaluation in the seismic fragilities task of a seismic margin analysis have high confidence of low probability of failure (HCLPF) values equal to or greater than the review level earthquake.

11. The R/B Complex, ~~PCCV, PS/Bs,~~ PSFSVs, ESWPT and UHSRS are founded directly on bedrock or fill concrete. | CTS-01511

A.3.2 Inspections, Tests, Analyses, and Acceptance Criteria

Table A.3-1 describes the ITAAC for the UHS related structure (UHSRS), ESW pipe tunnel (ESWPT), and power source fuel storage vault (PSFSV).

Appendix A.3

Table A.3-1 (Sheet 1 of 3)

~~UHSRS, ESWPT and PSFSV~~Plant-specific structures Inspections, Tests, Analyses, and Acceptance Criteria | CTS-01511

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The structural configurations of the UHSRS, ESWPT and PSFSV are as described in the Design Description of Section A.3, in Table A.3-2, and as shown in FSAR Figures 3.8-201 through 3.8-214.	1. Inspections will be performed to verify that the as-built UHSRS, ESWPT and PSFSV conform to the structural configurations as described in the Design Description of Section A.3, Table A.3-2, and as shown in Figures 3.8-201 through 3.8-214 .	1. The as-built UHSRS, ESWPT and PSFSV conform to the structural configurations as described in Table A.3-2 and as shown in FSAR Figures 3.8-201 through 3.8-214 with the following construction tolerances. 1) Thickness of exterior walls below plant grade: +12 inches/- 1inch 2) Thickness of exterior walls above plant grade, and interior walls: +1/-1 inch 3) Thickness of floors: +1/-1 inch 4) Floor level: +1/-1 inch.
2.a Divisional flood barriers are provided in the UHSRS, ESWPT and PSFSV to protect against internal flooding as shown in Figure A.3-1.	2.a An inspection will be performed to verify that the as-built divisional flood barriers for the UHSRS, ESWPT and PSFSV are as shown in Figure A.3-1 to protect against internal flooding.	2.a For the UHSRS, ESWPT and PSFSV, the as-built divisional flood barriers are as shown in Figure A.3-1 to protect against internal flooding.
2.b Deleted	2.b Deleted	2.b Deleted
3. Deleted	3. Deleted	3. Deleted
4. For the UHSRS, ESWPT and PSFSV, external walls below flood level are as indicated in Table A.3-2 to protect against water seepage.	4. An inspection will be performed to verify that the as-built external walls below flood level for the UHSRS, ESWPT and PSFSV are as indicated in Table A.3-2.	4. For the UHSRS, ESWPT and PSFSV, the as-built external wall below flood level are as indicated in Table A.3-2 to protect against water seepage.
5.a Deleted	5.a Deleted	5.a Deleted
5.b Deleted	5.b Deleted	5.b Deleted
6. Penetrations in the external walls of the UHSRS, ESWPT and PSFSV that are at or below design basis flood level are fitted with water-tight seals to protect against external flooding.	6. An inspection will be performed to verify that as-built penetrations in the external walls of the UHSRS, ESWPT and PSFSV that are at or below design basis flood level are fitted with water-tight seals.	6. The as-built penetrations in the external walls of the UHSRS, ESWPT and PSFSV that are at or below design basis flood level are fitted with water-tight seals to protect against external flooding.

Appendix A.3

Table A.3-1 (Sheet 2 of 3)

~~UHSRS, ESWPT and PSFSV~~Plant-specific structures Inspections, Tests, Analyses, and Acceptance Criteria | CTS-01511

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7. Redundant safe shutdown components and associated electrical divisions of the UHSRS, ESWPT and PSFSV are separated by 3-hour rated fire barriers to preserve the capability to safely shutdown the plant following a fire.	7. An inspection will be performed to verify that the as-built 3-hour rated fire barriers are placed as required by the FHA.	7. Redundant safe shutdown components and associated electrical divisions of each as-built UHSRS, ESWPT and PSFSV are separated by 3-hour rated fire barriers to preserve the capability to safely shutdown the plant following a fire. The 3-hour rated as-built fire barriers are placed as required by the FHA.
8. Penetrations and openings through fire barriers of the UHSRS, ESWPT and PSFSV are protected against fire.	8. An inspection will be performed to verify that the as-built penetrations and openings through fire barriers identified in the FHA are sealed or can be closed with fire rated components consistent with the fire resistance rating of the associated barrier.	8. As-built penetrations and openings through fire barriers identified in the FHA of the UHSRS, ESWPT and the PSFSV are protected against fire with 3-hour fire rated components (e.g. fire doors in door openings and penetration seals) consistent with the fire resistance rating of the associated barrier.
9. The UHRS, ESWPT and PSFSV can withstand design-basis loads.	9.i An analysis will be performed to reconcile each as-built UHSRS with the design basis loads.	9.i Reports exist and conclude that each as-built UHSRS can withstand design-basis loads.
	9.ii An analysis will be performed to reconcile each as-built ESWPT with the design basis loads.	9.ii Reports exist and conclude that each as-built ESWPT can withstand design-basis loads.
	9.iii An analysis will be performed to reconcile each as-built PSFSV with the design basis loads.	9.iii Reports exist and conclude that each as-built PSFSV can withstand design-basis loads.

Appendix A.3

Table A.3-1 (Sheet 3 of 3)

~~UHSRS, ESWPT and PSFSV~~Plant-specific structures Inspections, Tests, Analyses, and Acceptance Criteria

CTS-01511

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
10. SSCs that require evaluation in the seismic fragilities task of a seismic margin analysis have high confidence of low probability of failure (HCLPF) values equal to or greater than the review level earthquake.	10.a Analyses will be performed to verify that the SSCs requiring evaluation in the seismic fragilities task of a seismic margin assessment have HCLPF values equal to or greater than the review level earthquake.	10.a Reports exist and conclude that the SSCs evaluated in the seismic fragilities task of the seismic margin assessment have HCLPF values equal to or greater than the review level earthquake.
	10.b Inspection and analysis will be performed to verify that as-built SSCs requiring evaluation in the seismic fragilities task of a seismic margin assessment are bounded by conditions used in the seismic margin assessment.	10.b A report exists and concludes that the as-built SSCs requiring evaluation in the seismic fragilities task of a seismic margin assessment are bounded by the conditions used in the seismic margin assessment.
11. The R/B Complex~~, PCCV, PS/Bs,~~ PSFSVs, ESWPT and UHSRS are founded directly on bedrock or fill concrete.	11. Inspections will be performed on the as-built foundation beneath the R/B Complex~~, PCCV, PS/Bs,~~ PSFSVs, ESWPT and UHSRS.	11. Bedrock or fill concrete is used for the as-built foundation beneath the R/B Complex~~, PCCV, PS/Bs,~~ PSFSVs, ESWPT and UHSRS.

CTS-01511

Appendix A.3

Table A.3-2 (Sheet 1 of 4)

Definition of Wall Thicknesses for Safety-Related Structures: UHSRS

Wall or Section Description	Column Lines	Floor Elevation or Elevation Range	Concrete Thickness	Applicable	
Upper Cooling Tower Wall (East and West Walls)	-	From 8456.00' to 885.00'	2'-0"	No	CTS-01512
Upper Cooling Tower Wall (East)	-	From 846.00' to 856.00'	5'-0"	No	CTS-01512
Upper Cooling Tower Wall (West)	-	From 846.00' to 856.00'	3'-0"	No	
Upper Cooling Tower Wall (North and South Walls)	-	From 824.00' to 885.00'	2'-0"	No	
Lower Cooling Tower Wall (North)	-	From 791.00' to 824.00'	~~3~~4'-0"	No	CTS-01512
Cooling Tower Below Grade Wall (South)	-	From 791.00' to 824.00'	4~~3~~5'-0"	No	CTS-01512
Cooling Tower Below Grade Wall (East)	-	From 791.00' to 846.00'	4~~3~~5'-0"	No	CTS-01512
Cooling Tower Interior Wall	-	From 791.00' to 885.00'	4'-0"	No	CTS-01512
Basin Exterior Wall	-	From 791.00' to 826.00'	4~~3~~5'-0"	No	
Basin Interior Wall	-	From 791.00' to 826.00'	~~3~~4'-0"	No	
Pump Room Upper Wall (North~~,~~ and South ~~and West~~ Walls)	-	From 828.00' to 846.00'	2'-0"	No	CTS-01512
Pump Room Upper Wall (West)	-	From 828.00' to 846.00'	5'-0"	No	
Pump Room Upper Wall (East Wall)	-	From 828.00' to 846.00'	3'-0"	No	
Pump Room Lower Wall (North ~~and East~~ Wall~~s~~)	-	From 7~~7~~91.00' to 828.00'	~~3~~4'-0"	No	CTS-01512

NOTE:
Dash (-) indicates not applicable.

Appendix A.3

Table A.3-2 (Sheet 2 of 4)

Definition of Wall Thicknesses for Safety-Related Structures: UHSRS

Wall or Section Description	Column Lines	Floor Elevation or Elevation Range	Concrete Thickness	Applicable	
Pump Room Lower Wall (North)	-	From 779.00' to 791.00'	5'-0"	No	CTS-01512
Pump Room Lower Wall (East)	-	From 779.00' to 828.00'	5'-0"	No	
Pump Room Lower Wall (South and West Walls)	-	From 779.00' to 828.00'	45'-0"	No	
Pump Room Extension Walls (East, West and South)	-	From 809.75' to 838.50'	2'-0"	No	CTS-01512
Pump Room Vestibule Wall (West)	-	From 809.75' to 838.50'	2'-0"	No	
Circular Wall at Fan	-	From 856.00' to 863.00'	2'-0"	No	
Mat Slab	-	779.00' and 791.00'	45'-0"	No	CTS-01512
Floor and Roof Slabs	-	~~828.00', 836.00', 846.00', 856.00', 876.00', 878.00', 885.00'~~820.00', 822.00' 824.00', 828.00', 833.00', 838.50', 842.00', 846.00', 856.00', 876.00', 885.00'	2'-0"	No	
Pipe Chase in UHSRS Exterior Wall (South)	-	From 793.08' to 809.75'	2'-0"	No	
Pipe Chase in UHSRS Interior Wall	-	From 793.08' to 809.75'	2'-0"	No	
Pipe Chase in UHSRS Roof Slab	-	809.75'	2'-0"	No	
Pipe Chase in UHSRS Mat Slab	-	793.08'	7'-1"	No	

NOTE:
Dash (-) indicates not applicable.

Appendix A.3

Table A.3-2 (Sheet 3 of 4)

Definition of Wall Thicknesses for Safety-Related Structures: ESWPT

Wall or Section Description	Column Lines	Floor Elevation or Elevation Range	Concrete Thickness	Applicable
Outer Wall	-	From 793.08' to 8093.75'	2'-0"	No
Interior Wall	-	From 793.08' to 8093.75'	1'-0"	No
Roof Slab	-	8093.75'	2'-0"	No
Mat Slab	-	793.08'	2'-0"	No

CTS-01512

NOTE:
Dash (-) indicates not applicable.

Appendix A.3

Table A.3-2 (Sheet 4 of 4)

Definition of Wall Thicknesses for Safety-Related Structures: PSFSV

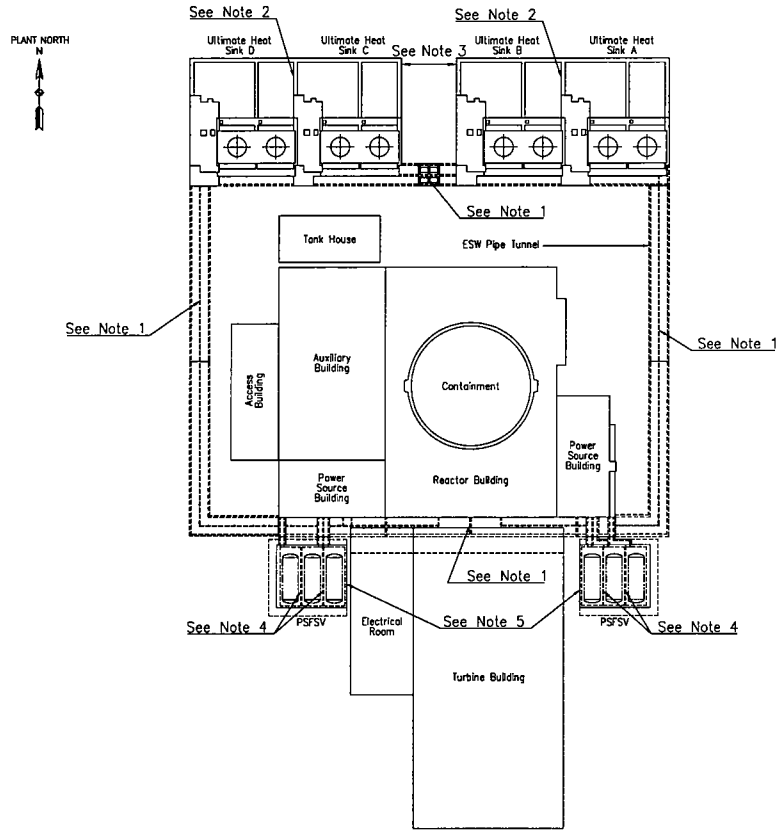
Wall or Section Description	Column Lines	Floor Elevation or Elevation Range	Concrete Thickness	Applicable	
Exterior Wall (North)	-	From 788.50' to 822.00~~3.60~~'	2'-6"	No	CTS-01512
Exterior Wall (South)	-	From 788.50' to 822.6~~0~~0'	2'-6"	No	
Exterior Wall (East Wall of East Vault and West Wall of West Vault)	-	From 788.50' to 822.00~~3.60~~'	~~From 2'-6" to 4~~'-6"	No	
Exterior Wall (West Wall of East Vault and East Wall of West Vault)	-	From 788.50' to 822.00~~3.60~~'	2'-6"	No	CTS-01512
Roof Slab	-	From 822.00'~~ to 823.60'~~	2'-0"	No	CTS-01512
Mat Slab	-	788.50'	6'-6"	No	

NOTE:
Dash (-) indicates not applicable.

Appendix A.3

Figure A.3-1 (Sheet 1 of 2) General Arrangement Plan of UHSRS, ESWPT, and PSFSV Identifying Internal Flood Barriers

CTS-01512



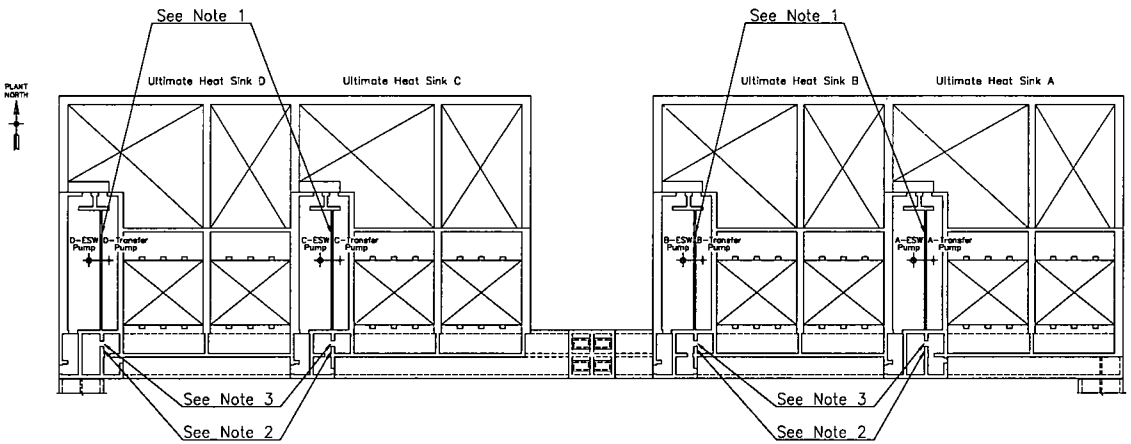
NOTES:

1. CONCRETE WALL BARRIER PROVIDES DIVISIONAL SEPARATION AND PREVENTS FLOODING BETWEEN ESWPT DIVISIONS.
2. CONCRETE WALLS BETWEEN EACH ULTIMATE HEAT SINK RELATED STRUCTURE PREVENT FLOODING COMMUNICATION BETWEEN THEM.
3. ULTIMATE HEAT SINK BASINS 'B' AND 'C' ARE PHYSICALLY SEPARATED WITH EXTERIOR CONCRETE WALL TO PREVENT FLOODING COMMUNICATION BETWEEN THEM.
4. CONCRETE WALLS BETWEEN EACH FUEL STORAGE TANK ENCLOSURE PREVENT FLOODING COMMUNICATION BETWEEN THEM.
5. POWER SOURCE FUEL STORAGE VAULTS ARE PHYSICALLY SEPARATED WITH EXTERIOR CONCRETE WALLS TO PREVENT FLOODING COMMUNICATION BETWEEN THEM.

Appendix A.3

Figure A.3-1 (Sheet 2 of 2) General Arrangement Plan of UHSRS, ESWPT, and PSFSV Identifying Internal Flood Barriers

CTS-01512



NOTES:

1. CONCRETE WALLS BETWEEN ESW PUMP ROOMS AND TRANSFER PUMP ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.
2. CONCRETE WALLS BETWEEN ESW PIPING ROOMS AND UHS TRANFER PIPING ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.
3. WATER-TIGHT DOORS ARE PROVIDED IN DOOR OPENINGS BETWEEN ESW PIPING ROOMS AND UHS TRANFER PIPING ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.