Item No.	Section No.	Page No.	Comment
1.	2.1.2.1	2-3	List of bullets:
			This list of bullets is appropriate and applies to both stations. However, the Surry application has an additional bullet that applies only to Surry. Therefore, the following fifth bullet should be added.
			 Equipment relied on to maintain its pressure-retaining capability in order to maintain adequate intake canal level for design basis events. (Surry only)
2.	2.1.2.2	2-5	List of numbered items:
			This list is appropriate and applies to both stations. However, the Surry application has an additional item that applies only to Surry. Therefore, the following fifth item needs to be added for Surry.
			5) Equipment relied on to maintain its pressure retaining capability in order to maintain adequate intake canal level for design basis events (Surry only)
3.	2.1.2.3.1	2-6	Last paragraph, last line:
			Change first "components" to "systems"
4.	2.1.3.2	2-16	<u>"Mechanical Components," 2nd paragraph</u> :
			Add a finding at the end, such as: "The audit team did not identify any discrepancies between the methodology documented and the implementation results."
5.	2.3.1.1.1	2-25	5 th paragraph:
			Correct reference to "Section 2.3.3.10" of the SER for neutron shield tank cooling to reference "Section 2.3.3.11".
6.	2.3.1.3.2	2-31	Last paragraph, 2 nd sentence:
			Correct the reference to "Section 2.3.1.1" to read "Section 2.3.1.3" which is the Reactor Vessel Internals section for each LRA.
7.	2.3.1.4.2	2-34	4 th paragraph, last sentence:
			Sentence states, "The table providesand a reference to the AMR results section" Table 2.3.1-4 does not provide this reference. The reference is actually provided in the last paragraph of Section 2.3.1.4 of the LRA.
8.	2.3.1.5.1	2-35	1 st paragraph, last sentence:
			Include nickel-based alloys as a corrosion protection (cladding). The tubesheets are clad with inconel.

Item No.	Section No.	Page No.	Comment
9.	2.3.1.5.2	2-37	3 rd and 4 th paragraph, last sentence each paragraph:
			The last sentence states, "the table provides a reference to the AMR results section" Table 2.3.1-5 does not provide this reference. The reference is actually provided in the last paragraph of Section 2.3.1.5 of the LRA.
10.	2.3.1.5.3	2-37	1 st sentence:
			The section number in the first sentence should be changed to 2.3.1.5, rather than 2.3.1.4. Section 2.3.1.5 is the LRA section for steam generators.
11.	2.3.3.1	2-51	Last line:
			The UFSAR chapters for NAS and SPS are reversed.
12.	2.3.3.1	2-52	1 st paragraph:
			"Section 2.3.2.4" should be changed to "Section 2.3.3.1."
13.	2.3.3.12.2	2-83	Last paragraph:
			Change "CW" to "PG."
14.	2.3.3.13.1	2-84	1 st paragraph, 3 rd sentence:
			Sentence states, "In each LRA Sections 2.3.3.13, the applicant" The sentence should be revised to read, "In North Anna LRA, Section 2.3.3.10, and the Surry LRA, Section 2.3.3.11, the applicant"
15.	2.3.3.13.2	2-86	3 rd paragraph, 1 st sentence:
			Change "CW" to "AAC".
16.	2.3.3.14.1	2-87	1 st paragraph, 2 nd and 4 th sentences:
			Sentences do not include the emergency generator (EG) system for North Anna. The emergency generator (EG) system needs to be added to the list of systems for completeness.
17.	2.3.3.19.2	2-99	Drawing list following the 3 rd paragraph:
			The North Anna drawing list is incorrect. Delete the existing 3 drawings for North Anna Units 1 and 2, and add two drawings as follows:
			Delete: 11715-LRM-079C, Sh. 1 for Unit 1 11715-LRM-092A, Sh. 2 for Unit 1 12050-LRM-092A, Sh. 2 for Unit 2 Add: 11715-LRM-082F, Sh. 1 for Unit 1 12050-LRM-082F, Sh. 2 for Unit 2

Item No.	Section No.	Page No.	Comment
18.	2.3.3.20	2-100 2-101 2-102	Section 2.3.3.20 of the SER has the wrong LRA Section number referenced for containment vacuum. It should reference LRA "Section 2.3.3.17" not "Section 2.3.3.20".
19.	2.3.3.20.2	2-101	After 5 th paragraph:
			The Surry drawing list is incorrect. Delete the Surry Unit 1 & 2 drawing and add the correct drawings.
			Delete: 11448-LRM-075G, Sh. 1 for Unit 1 11548-LRM-075E, Sh. 1 for Unit 2 Add: 11448-LRM-085A, Sh. 1 for Unit 1 11448-LRM-085A, Sh. 2 for Unit 1 11548-LRM-085A, Sh. 1 for Unit 2 11548-LRM-085A, Sh. 2 for Unit 2
20.	2.3.3.21	2-102 2-103 2-104	Section 2.3.3.21 of the SER has the wrong LRA Section number referenced for leakage monitoring. It should reference LRA "Section 2.3.3.18" not "Section 2.3.3.21".
21.	2.3.3.22	2-104 2-105 2-106	Section 2.3.3.22 of the SER has the wrong LRA Section number referenced for secondary vents. It should reference LRA "Section 2.3.3.19" not "Section 2.3.3.22".
22.	2.3.3.23	2-106 2-107 2-108	Section 2.3.3.23 of the SER has the wrong LRA Section number referenced for vacuum priming. It should reference LRA "Section 2.3.3.20" not "Section 2.3.3.23".
23.	2.3.3.3	2-57	The UFSAR section references are incorrect. SPS should be "Chapter 7.6.1" and NAS should be "Chapter 7.7.1.9."
24.	2.3.3.35	2-133	2 nd sentence:
			Sentence states: "The system is further described in Section 11.2.5 of the SPS UFSAR." The sentence should read, "The system is further described in Section 9.7 of the SPS UFSAR."
25.	2.3.3.37.1	2-137	Last paragraph: (related to NAS 1/2)
			Table 2.3.3-31 does not include "fuel oil system". It is not a Fire Protection system component.
			Table 2.3.3-31 does not include "pressure tank". (It does list "tanks" and other component groups.)

2.3.3.37.1	2-138	
	2-130	1 st paragraph: (related to SPS1/2)
		For Surry, the table number should be 2.3.3-30 not 2.3.3-31.
		Table 2.3.3-30 does not include "fuel oil system". It is not a Fire Protection system component.
		Table 2.3.3-30 does not include "pressure tank". (It does list "tanks" and other component groups.)
		2 nd paragraph:
		Last sentence should identify Table 2.3.3-30 for NAS 1/2 and Table 2.3.3-30 for SPS1/2.
2.3.3.37.1	2-140	<u>1st paragraph</u> :
		"Table 2.3.3-30" should be "Table 2.3.3-31" in the NAS discussion.
2.3.3.4	2-59	Last sentence:
		The Surry UFSAR reference is incorrect. It should be "Chapter 11.3.1."
2.3.3.5.1	2-62	2 nd and 3 rd paragraphs:
		The reference to "Section 2.3.3.5 for each LRA" is not correct. The SPS LRA section should be changed to 2.3.3.4.
		The reference to "Table 2.3.3-5 for each LRA" is not correct. The SPS LRA table should be changed to Table 2.3.3-4. (this comment also applies to the third paragraph).
		Note:
		The above comments are also applicable to the following sections:
		2.3.3.5.2: 1 st , 2 nd , 3 rd , and 5 th paragraphs.
		2.3.3.5.3: 1 st sentence.
2.3.3.7.1	2-67	3 rd Paragraph, 2 nd sentence:
		This sentence incorrectly states that there are four emergency SW pumps are available under abnormal conditions. There are only 3 diesel-driven emergency SW pumps at Surry. (Reference Surry UFSAR Section 9.9.1.2.)
	2.3.3.4	2.3.3.4 2-59 2.3.3.5.1 2-62

ltem No.	Section No.	Page No.	Comment
31.	2.3.4.6.2	2-161	Listing of drawings:
			 The following listed drawing were not referenced in the LRA for the SD system and should be removed from the list of LRA drawings listed for the SD system:
			11715-LRM-070A, Sh. 1 11715-LRM-070A, Sh. 2 11715-LRM-072A, Sh. 1 12050-LRM-070A, Sh. 1 12050-LRM-070A, Sh. 2 12050-LRM-072A, Sh. 1
32.	2.4.12.1	2-201	1 st paragraph, 2 nd sentence:
			Delete the words <i>"in Table 2.2-1"</i> since the table does not list the in- scope cranes in the table. They are listed in Section 2.4.12 as stated in the 3 rd sentence of this paragraph.
33.	2.4.3.1	2-171	Main Steam Valve House, 1 st paragraph, 4 th sentence:
			Sentence should read "The valve house has a <u>roof</u> slab and an intermediate floor slab."
34.	2.4.3.1	2-172	Auxiliary Feed-water Pump House (NAS 1/2), 3 rd sentence:
			Sentence should read "One cubicle houses the two <u>motor</u> -driven auxiliary feed-water pumps and the other cubicle houses one turbine- driven auxiliary feed-water pump.
35.	2.4.5	2-179	Last sentence:
			Revise referenced SPS UFSAR Section "9.4.10" to correctly state "9.10.4".
36.	2.4.5	2-179	List of Bullets:
			Add the following:
			Radwaste Facility (Surry plant)
			Maintenance Building (North Anna plant)
			These buildings are added to the scope by the response to RAI 2.3.3.31-2.
37.	2.4.7	2-187	List of structures:
			The SPS UFSAR references for the Surry plant are not correct. The Sections should be "6.3.1.3, <u>8.4.5, 8.5,</u> 9.10.2, 9.10.4, and 10.3.5."

ltem No.	Section No.	Page No.	Comment
38.	2.4.7	2-187	List of structures:
			Add the following:
			 containment mat sub-surface pump access shaft
			This structure was added via response to RAI 3.5-1.
39.	2-1	Variou	General Comment, Section 2.1:
		S	In various places throughout Section 2.1, the term "non-safety-related quality" has been used instead of the defined Dominion term of "NSQ" or "non-safety-related with special quality/regulatory requirements." To avoid potential conflicts of definition, the Dominion terminology needs to be used consistently or the SER needs to define that the term it uses is equivalent to the NSQ definition provided on Page xxii of the SER.
40.	3.3.1.15	3-60	6 th paragraph, Detection of Aging Effects:
			Change the word "AMA" to "augmented inspection activity."
41.	3.3.1.5	3-18	3 rd line from top of page:
			In the "Chemistry Parameters" entry for Main Steam, delete the word "hotwell" from the description of dissolved oxygen.
42.	3.3.2	3-83	1 st sentence, Section A2.0, Programs and Activities, FSAR Supplement:
		3-84	The reference to the UFSAR supplement section should be to Chapter 18, not 17 which is the QA Topical Report section.
			3 rd sentence, Conclusion:
			The reference to the UFSAR supplement section should be to Chapter 18, not 17 which is the QA Topical Report section.
43.	3.3.3.2.2	3-88	List of bullets under "Parameters inspected or monitored":
			Add the following to the top portion of the list which is applicable to both SPS and NAS:
			Loss of AC Power
44.	3.3.3.2.4	3-90	Last sentence:
			Remove the reference to the BWR plant component - "torus structure components".
45.	3.4.3.2	3-133	Item 11 response, last paragraph:
			Add the finding, "The staff finds this to be acceptable."

ltem No.	Section No.	Page No.	Comment
46.	3.4.4.2.1	3-144	3 rd paragraph, 2 nd sentence:
			The reference to Table 4.1.4-1 is incorrect. Change the table number to "3.1.4-1".
47.	3.4.4.2.2	3-145	List of bullets:
			Include the following in bulleted list on this page:
			Examination Category B-P (All pressure-retaining components)
			Examination Category B-H (Integral attachment for vessels)
			•
48.	3.4.5.2	3-149	1 st paragraph on page:
			The SER implies that in the future we will be modifying our S/G Inspections AMA to implement the recommendations of GL 97-06. The WCAPs referenced refer to multiple SG types, Therefore, add ",as appropriate," followingintends to implement In this paragraph.
49.	3.4.5.2.1	3-149	Last paragraph:
			Add the finding, "The staff finds this to be acceptable."
50.	3.5.2.1	3-157	2 nd bullet on this page:
			The information is correct for North Anna only. For Surry, however, the Containment Spray (CS) nozzles are stainless steel.
51.	3.6.1.1	3-161	2 nd paragraph of this section:
			With the exception of the CH system, the LRA section numbers are plant specific because Surry does not have a separate HRSS. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the following:
			SPS LRA Sections (Systems)
			2.3.3.1 Chemical Volume and Control (CH) system
			2.3.3.2 Incore Instrumentation (IC) system
			2.3.3.3 Reactor Cavity Purification (RL) system
			2.3.3.4 Sampling System (SS) system

ltem No.	Section No.	Page No.	Comment
			NAS LRA Sections (Systems) 2.3.3.1 Chemical Volume and Control (CH) system
			2.3.3.2 High Radiation Sampling System (HRSS) system
			2.3.3.3 Incore Instrumentation (IC) system
			2.3.3.4 Refueling Purification (RL) system 2.3.3.5 Sampling System (SS) system
52.	3.6.2.1	3-163	In Section 3.6.2.1:
52.	5.0.2.1	5-105	"Summary of Technical Information in the Application" for the Open Water Systems, the second paragraph lists the locations of the applicable system descriptions. The list is only for the NAPS references. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the following:
			SPS LRA Sections (Systems)
			2.3.4.2 Blowdown (BD) system
			2.3.3.5 Circulating Water (CW) system
			2.3.3.6 Service Water (SW) system
			2.3.3.20 Vacuum Priming (VP) system
			2.3.3.21 Ventilation (VS) system
			NAS LRA Sections (Systems)
			2.3.3.21 Heating and Ventilation (HV)
			2.3.3.14 Instrument Air (IA)
			2.3.3.6 Service Water (SW)
53.	3.6.3.1	3-166	2 nd paragraph:
			"Summary of Technical Information in the Application" for the Closed Water Systems, the second paragraph lists the locations of the applicable system descriptions. The list is only for the NAPS references. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the

Item No.	Section No.	Page No.	Comment
No.	No.	No.	following: <u>SPS LRA Sections (Systems)</u> 2.3.3.7 Bearing Cooling BC) system 2.3.3.8 Component Cooling (CC) system 2.3.3.14 Instrument Air (IA) system 2.3.3.9 Neutron Shield Tank Cooling (NS) system 2.3.3.10 Primary Grade Water (PG) system 2.3.1.1 Reactor Coolant (RC) system 2.3.3.21 Ventilation (VS) system <u>NAS LRA Sections (Systems)</u> 2.3.3.7 Chilled Water (CD) system
			2.3.3.8 Component Cooling (CC) system
			2.3.3.17 Containment Vacuum (CV) system
			2.3.3.21 Heating and Ventilation (HV) system
			2.3.3.9 Neutron Shield Tank Cooling (NS) system
			2.3.1.1 Reactor Coolant (RC) system
54.	3.6.5.1.1	3-170	1 st paragraph of this section:
			1 st sentence identifies "cast iron" as a material. This should be deleted since there is no cast iron material for the air and gas systems at Surry or North Anna.
55.	3.6.7.1	3-173	2 nd paragraph, needs to be re-written as follows: "Summary of Technical Information in the Application" for the Drain and Liquid Processing Systems, the second paragraph lists the locations of the applicable system descriptions. The list is only for the SPS references. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the following:

Item No.	Section No.	Page No.	Comment
			SPS LRA Sections (Systems)
			2.3.3.22 Boron Recovery (BR) system
			2.3.3.23 Drains - Aerated (DA) system
			2.3.3.24 Drains - Gaseous (DG) system
			2.3.3.25 Plumbing (PL) systems
			NAS LRA Sections (Systems)
			2.3.3.22 Boron Recovery (BR) system
			2.3.3.23 Drains - Aerated (DA) system
			2.3.3.24 Drains - Building Services (DB) system
			2.3.3.25 Drains - Gaseous (DG) system
			2.3.3.26 Liquid and Solid Waste (LW) system
			2.3.3.27 Radwaste (RW) system
56.	3.6.8.1	3-175	2 nd paragraph, needs to be re-written as follows:
			"Summary of Technical Information in the Application" for the Vent and Gaseous Processing Systems, the second paragraph lists the locations of the applicable system descriptions. The list is only for the SPS references. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the following:
			SPS LRA Sections (Systems)
			2.3.3.26 Gaseous Waste (GW) system
			2.3.3.27 Radiation Monitoring (RM) system
			2.3.3.28 Vents - Aerated (VA) system
			2.3.3.25 Vents – Gaseous (VG) systems
			NAS LRA Sections (Systems)
			2.3.3.28 Post-Accident Hydrogen Removal (HC) system
			2.3.3.29 Radiation Monitoring (RM) system
			2.3.3.30 Vents – Gaseous (VG) systems

ltem No.	Section No.	Page No.	Comment
			et et e
57.	3.6.9.1	3-177	1 st paragraph, 1 st sentence:
			The LRA "Section 3.6.9" reference should be "Section 3.3.6.9."
			2 nd paragraph:
			The list is only for the SPS references. It is recommended that the two stations be listed separately to clearly identify the applicable LRA sections for each station. Propose the following:
			SPS LRA Sections (Systems)
			2.3.3.30 Fire Protection (FP) system
			2.3.3.31 Hydrogen Gas (HG) system
			NAS LRA Sections (Systems)
			2.3.3.31 Post-Accident Hydrogen Removal (HC) system
			2.3.1.1 Reactor Coolant (RC) system: RCP oil collection
58.	3.8.2.1	3-193	Yard Structures:
			Add under yard structures at SPS and NAPS the containment mat sub-surface pump access shaft, since this structure was added via RAI 3.5-1.
59.	3.8.2.1	3-193	List of bullets:
			Add " maintenance building " to Miscellaneous Structures - North Anna.
			Add "radwaste facility" to Miscellaneous Structures - Surry.
			These structures are included in the scope of miscellaneous structures by the response to RAI 2.3.3.31-2.
60.	3.8.2.2.1	3-197	4 th paragraph, 1 st Sentence:
			The first sentence should read as follows:
			For the loss of material aging effect, the applicant identified the following plausible aging mechanisms: (1) aggressive chemical attack, (2) freeze-thaw, (3) elevated temperatures, (4) corrosion of embedded steel, and (5) <u>abrasive erosion and cavitation.</u>
61.	3.8.2.2.2	3-203	Last paragraph, next to last sentence:
			Correct references to Section 3.6.1.6. The sentence should read as follows: "This commitment made by the applicant is noted in Section

ltem No.	Section No.	Page No.	Comment
			3.3.1.6 of this SER as Confirmatory Action 3.3.1.6.1."
62.	3.8.4.2.1	3-214	Paragraph titled "Bronze":
			The sentence, "Only the Surry RHR pump support bearing plate is made of bronze," is not a correct statement. The paragraph should be reworded as follows: "The applicant identified loss of material due to borated water leakage as the only aging effect requiring management for bronze. The Surry RHR pump support bearing plate is the only component made of bronze that is exposed to a boric acid environment. The staff concurs with the applicants finding."
63.	4.1.1	4-1	List of Bullets:
			Remove bullet "concrete containment pre-stress calculations" Table 4.1-1 of the LRA does not identify these as TLAAs for SPS or NAS
64.	4.1.1	4-1	List of Bullets:
			Revise bullet "containment liner and penetration analyses" to "containment liner analyses." Containment penetrations are identified as not being a TLAA in Table 4.1-1.
65.	4.2	4-3	1 st paragraph, Item (b):
			Delete " <i>or a steam line break</i> " from item (b). The evaluation for PTS bounds several transients including but not limited to a main steam line break.
66.	4.6.2	4-25	1 st complete sentence:
			Revise "20 design basis earthquake cycles" to "30 design basis earthquake cycles" to reflect the extrapolation to 60 years of operation.
67.	Appendix A	A-2	1 st reference to October 11, 2001:
			Change "and B2.2.9 of North Anna and" to "and B2.2.19 of North Anna and"
68.	General	N/A	Several references are made to e-mails as the source of applicants responses. For example: <u>Page 2-178, Section2.4.4.2, 1st paragraph</u> :
			Paragraph refers to an e-mail (which is not traceable) on September 24, 2001, in which applicant responded to the staff's questions. The applicant's responses to these staff questions are documented in the NRC notes of Telecom Letter dated October 25, 2001.
			Shouldn't telecom letter (traceable) be used as a reference?

ltem No.	Section No.	Page No.	Comment
69.	General	N/A	The term commodity is routinely used in the context of the mechanical component groups. References to mechanical "commodity groups" should be identified and corrected to "component groups." For example:
			Section 2.3.2.1.1, page 2-26, 2 nd paragraph, 2 nd sentence:
			Sentence states, "mechanical component commodity groups." It should state, "mechanical component groups" (delete the word "commodity").
			Also replace the word "commodity" in the last sentence of this paragraph with "component".
			Recommend a search of the term "commodity" be performed to address this concern.