



Serial: NPD-NRC-2009-148
July 8, 2009

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

**SHEARON HARRIS NUCLEAR POWER PLANT, UNITS 2 AND 3
DOCKET NOS. 52-022 AND 52-023
ROADMAP OF CHANGES IN REVISION 1 OF THE ENVIRONMENTAL REPORT**

Reference: Letter from Garry D. Miller dated June 26, 2009, "Submittal of Revision 1 to the Environmental Report," Serial NPD-NRC-2009-124

Ladies and Gentlemen:

This letter provides information supporting the recent Progress Energy revision 1 of the Combined License Application (COLA) Environmental Report for Shearon Harris Nuclear Power Plant, Units 2 and 3. Attached is a "roadmap" of the changes included in the reference letter which is provided as a reviewers aid for the COLA Environmental Report.

If you have any questions, or need additional information, please contact me at (919) 546-6992.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert H. Kitchen".

Robert H. Kitchen
Manager – Nuclear Plant Licensing

Enclosure/Attachment

cc (w/ Enclosure/Attachment):

Mr. Brian Hughes, U.S. NRC Project Manager
Dr. Donald Palmrose, U.S. NRC Environmental Project Manager
U.S. NRC Region II, Regional Administrator
U.S. NRC Resident Inspector, SHNPP Unit 1

**Shearon Harris Nuclear Power Plant Units 2 and 3 COLA – Environmental Report
Revision 1 Change Roadmap by Column**

Column	Explanation
Change ID #	Unique identifier for tracking purposes
COLA	Identifies the change as STD (standard) or HAR specific
COLA Part	Identifies the COLA part, Part 3 (PT03)
Chapter	ER Chapter
Section / Page	Section of the document being revised
Basis for Change	The source of the change
Change Summary	Short description of the change

Attachment 1
Shearon Harris Nuclear Power Plant Units 2 and 3 COLA - Environmental Report Revision 1 Change Roadmap

Change ID#	COLA	COLA Part	Chapter	Section / Page	Basis for Change	Change Summary
HAR-184	HAR	PT03	ER01	T1.2-1	Editorial	Clarifications to permits table 1.2-1.
HAR-190	HAR	PT03	ER01	1.0	NPD-NRC-2009-080	Purpose and need added to Section 1.0.
HAR-191	HAR	PT03	ER01	1.1.2	Editorial	Section 1.1.2 Para 5: Harris Lake Area and Auxiliary Res. areas updated.
HAR-197	HAR	PT03	ER01	1.1	Editorial	Added footnote on bottom of page 1-1, "Throughout the text of this document, values are generally presented in both metric and English units. (Exceptions are sometimes made in areas where the accepted standard in the discipline is expressed in English units.) For the most part, measurements and calculations were originally made in English units and subsequently converted to metric. The number of significant figures given in a metric conversion is not meant to imply greater or lesser accuracy than that implied in the original English value."
HAR-198	HAR	PT03	ER01	Chapter 1	Editorial	Revised text in Chapter 1 to refer to DCD Rev. 17. Rev. 17 only appears in text of Chapter 1 and does not appear in any other chapters. All other references are made generically to "DCD".
HAR-199	HAR	PT03	ER01 - ER10	Chapters 1 - 10	Editorial	Revise DCD Revision 16 to remove Revision 16 from text Revised in Acronym list of Chapter 1 Revised in Acronym list and text of Chapter 2 Deleted Revision 16 from text in Chapter 2 Revised in Acronym list and text of Chapter 3 Deleted Revision 16 from text in Chapter 3 Revised in Acronym list and text of Chapter 4 Deleted Revision 16 from text in Chapter 4 Revised in Acronym list and text of Chapter 5 Deleted Revision 16 from text in Chapter 5 Revised in Acronym list and text of Chapter 7 Deleted Revision 16 from text in Chapter 7 Revised in Acronym list and text of Chapter 10 Deleted Revision 16 from text in Chapter 10
HAR-201	HAR	PT03	ER01 - ER10	Chapters 1 - 10	Editorial	Revisions to references as shown on the 12/19/2007 document.
HAR-109	HAR	PT03	ER02	T2.7-61	NPD-NRC-2008-036; (INR MET-4)	Table 2.7-61: Average temperature values for 1994-1999 corrected per INR MET-4
HAR-110	HAR	PT03	ER02	T2.7-69	NPD-NRC-2008-036; (INR MET-5) and RAI 2.7-1 (H-293) per NPD-NRC-2009-017	Table 2.7-69: Table revisions made per ER RAI 2.7-1 (H-293)
HAR-111	HAR	PT03	ER02	2.7	NPD-NRC-2008-036; (INR MET-8) and RAI 2.7-2 (H-453) per NPD-NRC-2009-082	Section 2.7.2 revised per ER RAI 2.7-2 (H-453) to reflect current status of Wake County (2nd and 3rd paragraphs)
HAR-132	HAR	PT03	ER02	2.5.2	NPD-NRC-2008-036; (INR SE-3)	Corrected error regarding percentage of contribution to overall Wake County general fund.
HAR-133	HAR	PT03	ER02	2.4.2.2	NPD-NRC-2008-036; (INR TE-4) and RAI 2.4.2-2 (H-326) per NPD-NRC-2009-017	Incorrect reference to presence of vernal pools deleted from ER Section 2.4.2.2 (two instances) Reference 2.4-032 has been marked as "Not used". Chapters 4, 5 and 10 do not contain reference to Vernal Pools. This is also addressed in supplemental RAI 2.4.2-2 response
HAR-134	HAR	PT03	ER02	T2.4-2	NPD-NRC-2008-036 (INR AQ-1, AQ-3, AQ-4, AQ-5, AQ-7, AQ-9, AQ-A) and RAI 2.4.2-3 (H-327) per NPD-NRC-2009-017	Table 2.4-2 replaced with Table in ER RAI 2.4.2-3 (H-0327)
HAR-135	HAR	PT03	ER02	T2.7-63	NPD-NRC-2008-027; FSAR RAI 2.3.2-2 (H-0015)	Table 2.7-63: revised minimum daily temp for Feb/Charlotte from 3.5 deg-F to 33.5-deg F per FSAR RAI 2.3.2-2 (H-0015)
HAR-136	HAR	PT03	ER02	T2.7-69	NPD-NRC-2008-027; FSAR RAI 02.03.02-4 (H-0017)	Table 2.7-69 revised per ER RAI 2.7-1 (H-0293) and FSAR RAI 02.03.02-4 (H-0017)
HAR-137	HAR	PT03	ER02	2.7.4.1.7	NPD-NRC-2008-027; FSAR RAI 02.03.02-7 (H-0020)	Section 2.7.4.1.7: Added new paragraph after 3rd paragraph in Section 2.7.4.1.7 per FSAR RAI 02.03.02-7 (H-0020)
HAR-139	HAR	PT03	ER02	2.7.6.2 and 2.7.7.2	NPD-NRC-2008-030; FSAR RAI 02.03.05-1 (H-0035)	Section 2.7.6.2: Add reference to DCD figure for building cross-section and containment height per FSAR RAI 02.03.05-1 (H-0035). Section 2.7.7.2: Add reference to subsection 2.7.6.2 to "Building Wake Effects" per FSAR RAI 02.03.05-1 (H-0035)

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Shearon Harris Nuclear Power Plant Units 2 and 3 COLA - Environmental Report Revision 1 Change Roadmap

Change ID#	COLA	COLA Part	Chapter	Section / Page	Basis for Change	Change Summary
HAR-140	HAR	PT03	ER02	2.7.7.2	NPD-NRC-2008-030; FSAR RAI 02.03.05-1 (H-0035)	Section 2.7.7.2: Added reference to subsection 2.7.6.2 to "Building Wake Effects" per FSAR RAI 02.03.05-1 (H-0035)
HAR-141	HAR	PT03	ER02	2.7.7.1	NPD-NRC-2008-030; FSAR RAI 02.03.05-2 (H-0036)	Section 2.7.7.1: Added sentence clarifying reference location for distances to receptors per FSAR RAI 02.03.05-2 (H-0036)
HAR-142	HAR	PT03	ER02	T2.7-77	NPD-NRC-2008-030; FSAR RAI 02.03.05-3 (H-0037)	Table 2.7-77 (sheet 2 of 3). Revised D/Q values at nearest residence locations in first 8 rows of table per FSAR RAI 02.03.05-3 (H-0037).
HAR-143	HAR	PT03	ER02	2.7.1.1 and 2.7.8	NPD-NRC-2008-035; FSAR RAI 02.03.01-1 (H-0001)	Section 2.7.1.1: Add sentence to the end of first paragraph per FSAR RAI 02.03.01-1 (H-0001). Reference for this statement (ref -028) also added to Section 2.7.8 per the same RAI.
HAR-144	HAR	PT03	ER02	T2.7-2 sheet 1of2 and 2.7.8	NPD-NRC-2008-035; FSAR RAI 2.3.1-2 (H-0002)	Table 2.7-2 (Sheet 1 of 2): Updated wind speed per FSAR RAI 2.3.1-2 (H-0001). Added new reference to table, and reference list in Section 2.7.8 (Ref 2.7-029) per same RAI. Added "missing" reference (a) to Table 2.7-2 (not included in RAI description, but noted in equivalent FSAR change)
HAR-145	HAR	PT03	ER02	T2.7-2 sheet 2of2 and 2.7.8	NPD-NRC-2008-035; FSAR RAI 2.3.1-2 (H-0002)	Table 2.7-2 (Sheet 2 of 2): Updated annual maximum precipitation per FSAR RAI 2.3.1-2 (H-0002). Added new reference to table and reference list in Section 2.7.8 (Ref 2.7-030)
HAR-146	HAR	PT03	ER02	2.7.3.3	NPD-NRC-2008-035; FSAR RAI 02.03.01-5 (H-0005)	Section 2.7.3.3. In paragraph 3, revised 2nd and 3rd sentences per FSAR RAI 02.03.01-5 (H-0005).
HAR-147	HAR	PT03	ER02	2.7.3.4	NPD-NRC-2008-035; FSAR RAI 02.03.01-6 (H-0006) item (a)	Section 2.7.3.4: Revised first two sentences and deleted last sentence of the paragraph per FSAR RAI 02.03.01-6 (H-0006) (item (a)).
HAR-148	HAR	PT03	ER02	2.7.3.4	NPD-NRC-2008-035; FSAR RAI 02.03.01-6 (H-0006) item (b)	Section 2.7.3.4: Added new paragraph to the end of the section and new references 2.7-031 and 2.7-032 added per FSAR RAI 02.03.01-6 (H-0006) (item (b)).
HAR-149	HAR	PT03	ER02	2.7.3.1	NPD-NRC-2008-031; FSAR RAI 02.03.01-11 (H-0013)	Section 2.7.3.1: Added text to the end of the 3rd paragraph per FSAR RAI 02.03.01-11 (H-0013).
HAR-150	HAR	PT03	ER02	2.5.2.8; T2.5-27; 2.5.5; T2.5-27; and Fig 2.5-8	NPD-NRC-2008-033; FSAR RAI 2.2.1/2.2.2-1 (H-0039)	Revised based on FSAR RAI 2.2.1/2.2.2-1 (H-0039) Subsection 2.5.2.8: revised the fifth paragraph with text in RAI regarding public airports. Updated Table 2.5-27 title in list of tables Section 2.5.5: Revised reference description for Ref 2.5-127 Section 2.5.5: Marked reference 2.5-128 as Not Used Table 2.5-27 replaced with table in RAI Replace Figure 2.5-8 with updated figure.
HAR-151	HAR	PT03	ER02	2.5.2.8	NPD-NRC-2008-033; FSAR RAI 2.2.1/2.2.2-2 (H-0040) & (NRC FSAR RAI 2.2.1/2.2.2-1 (H-0039))	Subsection 2.5.2.8: revised distance for Sanford-Lee County airport per FSAR RAI 2.2.1/2.2.2-2 (H-0040). Table revision described in FSAR RAI (NRC FSAR RAI 2.2.1/2.2.2-1 (H-0039)).
HAR-152	HAR	PT03	ER02	Fig 2.5-9	NPD-NRC-2008-033; FSAR RAI 2.2.1/2.2.2-4 (H-0042)	Figure 2.5-9: Replaced with updated figure in Chapter 2 figures based on RAI.
HAR-154	HAR	PT03	ER02	2.4.2.2 and 4.1.2	Editorial	Total changed to 218,100 ft in section 2.4.2.2 and 4.1.2.
HAR-155	HAR	PT03	ER02	2.0; Fig 2.0-3; Fig 2.1-2; T2.7-73; and T2.7-75	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 2.0: Exclusion Zone description updated, Figures 2.0-3 and 2.1-2 were revised to show new EAB. ER Tables 2.7-73 and 2.7-75 revised per FSAR RAI 15.00.03-1 (H-0249)
HAR-157	HAR	PT03	ER02	2.1	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 2.1: Paragraph 4 - updated text with description of EAB per FSAR RAI 15.00.03-1 (H-0249)
HAR-158	HAR	PT03	ER02	2.5.1.1	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 2.5.1.1: Paragraph 4 - updated description of EAB per FSAR RAI 15.00.03-1 (H-0249)
HAR-159	HAR	PT03	ER02	2.7.6.2; T2.7-73; and T2.7-75	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 2.7.6.2: Paragraph 1 - updated description of EAB ER Tables 2.7-73 and 2.7-75 revised per FSAR RAI 15.00.03-1 (H-0249)
HAR-164	HAR	PT03	ER02	2.3 and T2.3-16	Editorial	ER Sections 2.3 and T2.3-16 revised to clarify expected minimum flow of 20 cfs.
HAR-170	HAR	PT03	ER02	2.7.4.1.4; and T2.7-3 Sheet 2 of 2	NPD-NRC-2009-017; ER RAI 2.7-1 (H-0293)	Section 2.7.4.1.4. Replaced last two sentences of the second paragraph with text from ER RAI 2.7-1 (H-0293). Also revised Table 2.7-69 per same RAI.

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HAR-171	HAR	PT03	ER02	2.7.2; and T2.7-3 Sheet 2 of 2	NPD-NRC-2009-017; ER RAI 2.7-2 (H-0453)	Section 2.7.2 text (2nd and 3rd paragraphs) revised to update attainment status of Wake County per ER RAI 2.7-2 (H-0453). Table 2.7-3 (sheet 2 of 2) also revised to remove reference to Wake County per same RAI.
HAR-178	HAR	PT03	ER02	T2.4-2	NPD-NRC-2009-017; ER RAI 2.4.2-3 (H-0327)	Table 2.4-2 replaced with Table in ER RAI 2.4.2-3 (H-0327)
HAR-182	HAR	PT03	ER02	2.7.7.2 and T2.7-76; T2.7-77; T2.7-78; and T2.7-79	NPD-NRC-2009-025; FSAR RAI 2.3.5-4 (H-0415)	Subsection 2.7.7.2: last paragraph revised the site characteristic maximum annual average dispersion factor from 8.80E-06 TO 6.00E-06 sec/m3 per FSAR RAI 2.3.5-4 (H-0415). Tables 2.7-76, -77, -78, AND -79: First sheet of each table, revised the EAB distances to 1600 m and the X/Q and D/Q values in the seven southerly sectors (ESE through WSW) to reflect the changes made to FSAR Tables 2.3.5-201, -202, -203, AND -204. (per FSAR RAI 2.3.5-4 (PGN RAI H-0415))
HAR-183	HAR	PT03	ER02	2.7.4.1.6	NPD-NRC-2009-032; FSAR RAI 2.3.2-9 (H-0411)	In the 5th sentence of the 2nd paragraph of ER Section 2.7.4.1.6, the words "moderately stable (B)" were revised to read "moderately unstable (B)" per FSAR RAI 2.3.2-9 (H-0411).
HAR-185	HAR	PT03	ER02	T2.1-1	Editorial	Revised ER Table 2.1-1 to correct typo with the reactor center points reversed.
HAR-186	HAR	PT03	ER02	2.2.2 and Figure 2.2-3	NPD-NRC-2009-082; ER RAI 3.7-1 (H-0452)	Sections have been revised as stated in RAI Response. The majority of changes are to state the correct lengths of the transmission lines and adjust the area associated with the land use impacts based on a 50 foot buffer on either side of the transmission lines. Figure has been revised in accordance with RAI.
HAR-192	HAR	PT03	ER02	2.3.1.2.1; 2.3.1.2.2; and 2.4	Editorial	Section 2.3.1.2.1 Para 1: Existing and proposed lake areas updated Section 2.3.1.2.2 Para 1: Aux res area updated Section 2.4 Para 5: Existing lake and aux res areas updated. Section 2.4 paragraph 6: Existing lake area updated
HAR-203	HAR	PT03	ER02	Appendix 2.4-1	NPD-NRC-2009-082; ER RAI 4.3.1-2 (H-0448)	Revised Appendix 2.4-1 to include updated information on streams and wetlands as per RAI.
HAR-204	HAR	PT03	ER02	2.4.2.2 and Tables 2.4-8, 2.4-9, and 2.4-10	NPD-NRC-2009-082; ER RAI 4.3.1-2 (H-0448)	Revised text and tables to update ephemeral, intermittent, and perennial stream lengths based on recently completed wetlands delineations.
HAR-208	HAR	PT03	ER02	2.3.3.3	Editorial	Deleted last sentence of section for clarity.
HAR-209	HAR	PT03	ER02	T 2.3-54	Editorial	Revised NC Standard column for Chloride, and Nitrogen nitrite-nitrate to 250, 11 respectively.
HAR-210	HAR	PT03	ER02	2.3.1.3.1	Editorial	On Page 2-33 revised down-hole pressure tests results units to feet per year
HAR-211	HAR	PT03	ER02	2.5.2.2	NPD-NRC-2009-017; RAI 2.5.2-1 (H-336)	Section 2.5.2.2, page 2-339, 1 st full paragraph: Revise this paragraph as needed to clarify the changes provided in RAI # 2.5.2-1 (H-336) and to correct the percentage of Wake County revenue coming from HNP.
HAR-212	HAR	PT03	ER02	Table 2.7-4 (Sheet 2 of 2)	Editorial	Table 2.7-4 (Sheet 2 of 2), page 2-465: inserted change bar to denote where Wake Co. was deleted from list of non-attainment counties.
HAR-214	HAR	PT03	ER02	List of Appendices	Editorial	Chapter 2, List of Appendices: the actual title of Appendix 2.4-1 has been changed to, "Delineated Areas Related to the HAR Project."
HAR-168	HAR	PT03	ER03	3.8	NPD-NRC-2009-017; ER RAI 7.4-1 (H-0287)	Section 3.8 replaced with new section in ER RAI 7.4-1 (H-0287)
HAR-187	HAR	PT03	ER03	3.7.1.1 and 3.7.1.2	NPD-NRC-2009-082; ER RAI 3.7-1 (H-0452)	Sections have been revised as stated in RAI Response. The majority of changes are to state the correct lengths of the transmission lines and adjust the area associated with the land use impacts based on a 50 foot buffer on either side of the transmission lines.
HAR-193	HAR	PT03	ER03	3.4.1.1	Editorial	Section 3.4.1.1 paragraph 2: Existing Lake and aux res areas updated.
HAR-202	HAR	PT03	ER03	Figure 3.3-5	NPD-NRC-2009-099; ER RAI 4.3.2-4 (H-0455)	Updated Figure 3.3-5 to revise water depth
HAR-107	HAR	PT03	ER04	4.4.1.1	NPD-NRC-2008-036; (INR HP-13)	Text has been added to Section 4.4.1.1 describing why the 29 CFR 1910 is the applicable regulations for noise impacts.

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HAR-156	HAR	PT03	ER04	Fig 4.0-3	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Figure 4.0-3 revised to show new EAB.
HAR-177	HAR	PT03	ER04	4.5.2 through 4.5.5	NPD-NRC-2009-017; ER RAI 4.5-1 (H-0307)	Subsections 4.5.2 through 4.5.4 replaced with new text in ER RAI 4.5-1 (H-0307)
HAR-180	HAR	PT03	ER04	4.6.2; and T4.6-2	NPD-NRC-2009-017; ER RAI 4.1-1 (H-0349)	Text added to section 4.6.2 regarding cumulative impacts and Table 4.6-2 added as described in ER RAI 4.1-1 response
HAR-188	HAR	PT03	ER04	4.1.2, 4.1.2.2, 4.1.2.6.2.1 and 4.3.1.5	NPD-NRC-2009-082; ER RAI 3.7-1 (H-0452)	Sections have been revised as stated in RAI Response. The majority of changes are to state the correct lengths of the transmission lines and adjust the area associated with the land use impacts based on a 50 foot buffer on either side of the transmission lines.
HAR-194	HAR	PT03	ER04	4.1.2; 4.3.1.2; 4.3.1.2.1; 4.3.1.2.3; 4.3.2.2; 4.4.2.6; and 4.6.2	Editorial	Section 4.1.2 paragraph 2: Area of inundation updated. Section 4.3.1.2 paragraph 1: Area of inundation updated. Section 4.3.1.2.1 paragraph 20/last: Area of inundation updated. Section 4.3.1.2.3 paragraph 1: Area of inundation updated. Section 4.3.2.2 paragraph 1: Area of inundation updated. Section 4.3.2.2 paragraph 2: Existing lake and aux res areas updated Section 4.4.2.6 paragraph 4: Area of inundation updated. Section 4.6.2 paragraph 1: Area of inundation updated.
HAR-205	HAR	PT03	ER04	4.1.2, 4.3.2.2.1, and 4.3.2.2.3	NPD-NRC-2009-082; ER RAI 4.3.1-2 (H-0448)	Revised text to update ephemeral, intermittent, and perennial stream lengths based on recently completed wetlands delineations.
HAR-213	HAR	PT03	ER04	4.3.1.2.1	Editorial	Section 4.3.1.2.1, page 4-62, last paragraph before section 4.3.1.2.2: Typo in middle of paragraph, "56.6 m ² " changed to "5.6 m ² ".
HAR-215	HAR	PT03	ER04	List of Tables	Editorial	Chapter 4, List of Tables: Table 4.6-2 has been added
HAR-100	HAR	PT03	ER05	T5.8-2	Editorial	Table 5.8-2 has been deleted. The information in the table is not called out in the text and information provided in ER RAI 2.5.2-1 and 10.4.1-1 has made the table out of date.
HAR-101	HAR	PT03	ER05	5.8.2.8	Editorial	Updated hyperlink in Section 5.8.2.8. Changed from Subsection 5.1.1.2.3 to Subsection 5.1.1.2.2.4
HAR-108	HAR	PT03	ER05	5.9	NPD-NRC-2008-036; (INR HP-A)	Section 5.9 third paragraph has been revised to add a reference to the Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities. NUREG-0586 as requested in Information Need HP-A
HAR-112	HAR	PT03	ER05	5.3.3.1.1	NPD-NRC-2008-036; (INR MET-12) and RAI 5.3.3.1-2 (H-296) per NPD-NRC-2009-017	Text on number of towers has been added per RAI 5.3.3.1-2 (H-0296). Section 5.3.3.1.1, Paragraph 2 was revised to reflect the cooling tower evaporation rate of 13,510 gpm per tower.
HAR-113	HAR	PT03	ER05	5.3.3.1.2	NPD-NRC-2008-036; (INR MET-13)	Text in 5.3.3.1.2 regarding fog has been replaced with text from ER Section 2.7.4.1.5 as indicated in Information Need MET-13
HAR-138	HAR	PT03	ER05	5.3.3.1.2	NPD-NRC-2008-027; FSAR RAI 02.03.02-8 (H-0021)	Section 5.3.3.1.2: Added first four sentences of paragraph 3 per FSAR RAI 02.03.02-8 (H-0021)
HAR-160	HAR	PT03	ER05	5.0; Fig 5.0-3 and 5.4 List of Contents; and T5.4-22	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 5.0: Exclusion Zone description updated. Chapter 5 references Figure 4.0-3 that was updated to show the new EAB. List of tables updated to included new table 5.4-22 - "Sector Average Atmospheric Dispersion Factors Input to GASPAR"
HAR-162	HAR	PT03	ER05	T5.4-10	NPD-NRC-2009-019; FSAR RAI 11.02-2 (H-0410)	H-132 includes changes to FSAR Table 11.2-206. This table is reproduced in ER Table 5.4-10, which is amended by PGN RAI H-0410.
HAR-163	HAR	PT03	ER05	T5.4-1; T5.4-6; T5.4-8; and T5.4-11	NPD-NRC-2008-065; FSAR RAI 11.02-3 (H-0169) and NPD-NRC-2009-020 FSAR RAI 11.03-2 (H-0417)	Section 5.4: Revised MEI data for cesium. Table 5.4-1 Updated Table 5.4-6 Replaced Table 5.4-8 Updated Table 5.4-11 Updated Liquid Effluent Data All changes per FSAR RAI 11.02-3 (H-0169) Table 5.4-11 Updated Gaseous Effluent Data per PGN RAI H-0417)
HAR-165	HAR	PT03	ER05	5.2.1.1; 5.2.2.2; T5.2-1; 5.4; and T5.4-1	Editorial	ER Sections 5.4, 5.2.1.1, 5.2.2, and T5.2-1, T5.4-1 revised to clarify expected minimum flow of 20 cfs.
HAR-166	HAR	PT03	ER05	5.4	NPD-NRC-2009-019; FSAR RAI 11.02-2 (H-0410)	Clarified Liquid Radwaste System
HAR-167	HAR	PT03	ER05	5.4	NPD-NRC-2008-065; FSAR RAI 11.02-3 (H-0169)	Clarified Liquid Radwaste System

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HAR-172	HAR	PT03	ER05	5.3.3.1.1	NPD-NRC-2009-017; ER RAI 5.3.3.1-2 (H-0296)	Section 5.3.3.1.1 has been revised to clarify one tower each for Units 2 and 3 per ER RAI 5.3.3.1-2 (H-0296). No changes were made to Section 5.3.4 as the statements made are correct with reference to the number of towers.
HAR-176	HAR	PT03	ER05	5.4.1.2 and T5.4-3; T5.4-7; T5.4-9; T5.4-22	NPD-NRC-2009-017; ER RAI 5.4.2-1 (H-0306)	Revise the first sentence of the last paragraph of ER Subsection 5.4.1.2 to include reference to Table 5.4-22 per ER RAI 5.4.2-1 (H-0306). Replace existing ER Tables 5.4-3, 5.4-7 and 5.4-9 and add new Table 5.4-22 per the same RAI.
HAR-195	HAR	PT03	ER05	5.1.1.1.1; 5.1.1.1.1.1; 5.2; 5.2.1; 5.2.1.2; 5.2.2.2; 5.2.2.2.1; and 5.3.2.1	Editorial	Section 5.1.1.1.1 paragraph 2: Area of inundation updated. Section 5.1.1.1.1 paragraphs 1, 2 and 3: Area of inundation updated. Section 5.2 paragraph 2: Existing lake area updated Section 5.2.1 paragraph 3: Inundation and proposed lake area updated Section 5.2.1.2 paragraph 1: existing lake area, inundation area, and proposed lake area updated. Section 5.2.2.2 paragraph 1: Existing lake area updated, Section 5.2.2.2.1 paragraph 1: Inundation and proposed lake area updated. Section 5.3.2.1 paragraph 9: Area of inundation updated.
HAR-206	HAR	PT03	ER05	5.2.1.1	NPD-NRC-2009-082; ER RAI 4.3.1-2 (H-0448)	Revised text to update ephemeral, intermittent, and perennial stream lengths based on recently completed wetlands delineations.
HAR-102	HAR	PT03	ER06	6.7.2.2; 6.7.7	Editorial	Section 6.7.2.2 Para 1, Page 6-92: Changed "Reference 6.7-003" to "Reference 6.7-002" Section 6.7.7, Page 6-102. Replaced description of Reference 6.7-003 with "Not Used"
HAR-207	HAR	PT03	ER06	6.2.3.6.3	Editorial	Added statement on Industry Ground Water Protection Initiative (NEI 07-07)
HAR-161	HAR	PT03	ER07	7.0; 7.1.3; and T7.1-2 through T7.1-12.	NPD-NRC-2008-069; FSAR RAI 15.00.03-1 (H-0249)	Section 7.0: EAB description revised per FSAR RAI 15.00.03-1 (H-0249) Section 7.1.3: Sentence 3, paragraph 2- revised X/Q values per ER RAI 7.1-1 (H-297) Tables 7.1-2 through 7.1-12: Tables revised per ER RAI 7.1-1 (H-297).
HAR-169	HAR	PT03	ER07	7.4	NPD-NRC-2009-017; ER RAI 7.4-1 (H-0287)	Section 7.4 replaced with new section in ER RAI 7.4-1 (H-0287)
HAR-173	HAR	PT03	ER07	7.1.3 and T7.1-2 through T7.1-12	NPD-NRC-2009-017; ER RAI 7.1-1 (H-0297)	Section 7.1.3: Edited hours in sentence 3 of second paragraph. Replaced Table 7.1-2 to 7.1-12 with tables in ER RAI 7.1-1 (H-0297). Tables checked for consistency with FSAR update.
HAR-103	HAR	PT03	ER08	8.3.3	Progress Energy Letter Serial No. NPD-NRC-2008-036; (Information Needs Request (INR) ALT-1)	Added sentence to Subsection 8.3.3 from INR ALT-1 (1) explaining purchase power.
HAR-114	HAR	PT03	ER08	8.3.3	NPD-NRC-2008-036; (INR NP-1)	New text is incorporated in ER Chapter 8, Rev1, Subsection 8.3.3.
HAR-115	HAR	PT03	ER08	8.1.4; and T8.1-2 and T8.1-3	NPD-NRC-2008-036; (INR NP-1)	The capacity marginal variability information used in ER Tables 8.1-2 and 8.1-3 in ER Chapter 8 of the HAR ER was compiled from the December 2007 PEC Integrated Resource Plan (IRP) to the North Carolina Utilities Commission (NCUC). According to Tables 1-1 and 1-2 in the 2007 IRP, the summer capacity margin for the years 2008 through 2022 is forecasted to range from 11 - 21 percent. The winter capacity margin for the time period is forecasted to range from 25 - 33 percent. The 11-17 percent capacity margin variability presented in the text of ER Chap08, Rev1, Subsection 8.1.4 is from PEC's North Carolina IRP dated September 2007. This discrepancy was corrected in the subsection and revised to reflect the December 2007 PEC IRP.
HAR-116	HAR	PT03	ER08	8.1.4 and T8.1-2 and T8.1-3	NPD-NRC-2008-036; (INR NP-1)	Additional text and tables developing further information on wholesale purchase power and power sales commitments is presented in Subsection 8.1.4 and in new Tables 8.1-2 and 8.1-3 respectively.
HAR-117	HAR	PT03	ER08	8.4.1	NPD-NRC-2008-036; (INR NP-1)	The 2803 MW summer undesignated generation additions data value used in ER Chapter 8 Rev0 was from the December 2007 PEC IRP, while the 3643 MW summer undesignated generation additions data used in ER Section 8.4.1 and 8.4.2 was a holdover from RevE that contained data from the draft September 2007 PEC IRP. Chap08 Subsection 8.4.1 Rev1 revised to reflect data from undesignated installed generation values from the December 2007 PEC IRP.

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HAR-118	HAR	PT03	ER08	8.2.2	NPD-NRC-2008-036; (INR NP-1)	The 1578 MW value for undesignated peaking additions was from the September 2007 PEC IRP. The undesignated peaking additions value in the December 2007 PEC IRP is 633 MW with an additional undesignated base value of 2170 MW expected in service in 2018-19. This discrepancy was corrected in the subsection and revised to reflect the December 2007 PEC IRP.
HAR-119	HAR	PT03	ER08	8.1.4	NPD-NRC-2008-036; (INR NP-1)	New text is incorporated into ER Chap08 Subsection 8.1.4.
HAR-120	HAR	PT03	ER08	8.3.3	NPD-NRC-2008-036; (INR NP-1)	The following sentence is incorporated into ER Chap08 Subsection 8.3.3. Rev1: "Additionally, no merchant plants are currently located within the PEC service territory."
HAR-121	HAR	PT03	ER08	8.3.1	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.3.1. Rev1: "Currently, SERC has surplus capacity, most of which is in Entergy; however, transmission capabilities are the limiting factor. PEC is in the process of adding approximately 1000 MW of additional transmission import capability into the PEC system, but 800 MW are currently reserved in PEC's Open-Access Same-Time Information System (OASIS) according to FERC regulations."
HAR-122	HAR	PT03	ER08	8.2.2.2	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.2.2.2 Rev1: "The energy efficiency/demand reduction shown on Table 8.1-4 is not considered to be an addition. Firm obligation is the minimal total load after meeting efficiencies."
HAR-123	HAR	PT03	ER08	8.1.4	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.1.4 Rev1: "As of December 2007, PEC's IRP includes purchased power from two municipal solid waste (MSW) facilities and contracts with landfill gas facilities. PEC is also actively engaged in a variety of projects to develop new alternative sources of energy, including solar, hydrogen, biomass, and landfill gas technologies. In addition, wind and solar, as well as other renewables, such as hog waste and other plant and animal wastes, are being evaluated for their ability to meet renewable energy requirements on a case-by-case basis and included as a resource option if appropriate. PEC is committed to meeting to the North Carolina Renewable Energy Portfolio Standards (RPS)."
HAR-124	HAR	PT03	ER08	8.2.2	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.2.2 Rev1: "Wholesale sales have become more uncertain due to the 1992 Energy Policy Act, subsequent FERC initiatives related to the wholesale market, the continuing evolution of the wholesale market, and market conditions. As expectations for the various wholesale contracts change, PEC wholesale forecasts will appropriately reflect those expectations. Generally, growth in the standard of living as reflected in personal income and Gross Domestic Product (GDP) per capita is expected to slow modestly over the long term relative to historical levels. PEC uses real dollar prices to enhance model reliability during periods of varying inflation. While long-run economic trends exhibit considerable stability, short-run economic activity is subject to substantial variation. The exact nature, timing and magnitude of such short-term variations are unknown years in advance of their occurrence (Reference 8.0-002)."
HAR-125	HAR	PT03	ER08	8.1.4	NPD-NRC-2008-036; (INR NP-1)	Text was added to chap08 Subsection 8.1.4 Rev1 to clearly discuss PURPA entities (see response to Commitment (6)).
HAR-126	HAR	PT03	ER08	8.4.2	NPD-NRC-2008-036; (INR NP-1)	Final bullet in Chap08 Subsection 8.4.2 Rev1 revised to read: "Given pending and future state and federal legislation related to climate change and carbon emissions, the effect of HAR operations potentially serves another important need by reducing carbon emissions in the state. The operation of the HAR will potentially reduce the need for construction of additional fossil-fuel power generation facilities within the PEC service territory. The effect of HAR operations then could result in a reduction of significant amounts of carbon and other emissions."
HAR-127	HAR	PT03	ER08	8.2.2	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.2.2 Rev1: "PEC currently has no firm plans for retiring any of its generating units. PEC is adding environmental controls and maintaining existing generating units as necessary to keep them operational and in compliance with environmental requirements."
HAR-128	HAR	PT03	ER08	8.3.3	NPD-NRC-2008-036; (INR NP-1)	Verified that supplemental text was added to Subsection 8.3.3 after the July 2008 audit. Text revised in Section 8.3.3 to reflect current status.
HAR-129	HAR	PT03	ER08	8.3.3	NPD-NRC-2008-036; (INR NP-1)	See response for Commitment (9)(h)

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HAR-130	HAR	PT03	ER08	8.2.2.3.3	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.2.2.3.3 Rev1: "As noted in ER Subsection 8.1.4, PEC is committed to meeting renewable energy requirements associated with PEC's North Carolina RPS. By the year 2020, PEC will be required to meet 12.5 percent of sales by a mixture of renewables, DSM, or renewable credit energy purchases."
HAR-131	HAR	PT03	ER08	8.2.2.3.3	NPD-NRC-2008-036; (INR NP-1)	The following text is incorporated into ER Chap08 Subsection 8.2.2.3.3 Rev1: "PEC has 18 percent of their power commitments in firm contracts and that is through power authority co-ops and municipal power companies."
HAR-104	HAR	PT03	ER09	9.2.2.10; T9.2-3; 9.2.3.1.1; and 9.2.3.2.3	Progress Energy Letter Serial No. NPD-NRC-2008-036; (Information Needs Request (INR) ALT-1)	Supplemental text for ER Subsection 9.2.2.10 discussing both coal burning technologies incorporated into Table 9.2-3 and Subsection 9.2.3.1.1. Added sentences to ER Chap09 Subsections 9.2.3.2 and 9.2.3.2.3 to better clarify consumptive water use comparison of natural gas fired analysis to traditional steam only bottoming cycle units. Added text and validation to clarify acreage discrepancies in ER Subsection 9.2.3.2.3 to reflect correct acreage numbers.
HAR-105	HAR	PT03	ER09	9.4.1.1.1	NPD-NRC-2008-036; (INR ALT-B)	Section 9.4.1.1.1: Para 6, last sentence. Text revised from "7.4 in. heat generating assembly" to "7.4 inches of mercury (absolute)"
HAR-174	HAR	PT03	ER09	9.2.3.1.1	NPD-NRC-2009-017; ER RAI 9.2-1 (H-0303)	Section 9.2.3.1.1, including Table 9.2-3, has been updated by providing air emission calculations predicated on a conventional pulverized coal fired plant.
HAR-175	HAR	PT03	ER09	9.3.1.1	NPD-NRC-2009-017; ER RAI 9.4-1 (H-0454)	Text has been added to Section 9.3.1.1 detailing the site selection process used to identify the 11 potential sites.
HAR-181	HAR	PT03	ER09	9.3.2.3	NPD-NRC-2009-023; USACE RAI 26 (H-0376)	Changed \$600 Million to \$300 million as per USACE RAI 26 (H-0376)
HAR-106	HAR	PT03	ER10	T10.1-2	NPD-NRC-2008-036; (INR G-A)	First Bullet on Page 10-22 changed from Clearing to Operation First Bullet on Page 10-23 replaced with text from Table 6.7-10 "Potential monitoring to determine effects of water withdrawal on population dynamics in the Cape Fear River from the intake structure and pumphouse as required by specific permit conditions or consultations with resource agencies"
HAR-153	HAR	PT03	ER10	10.4.2.2	NPD-NRC-2008-039	Text has been added to Section 10.4.2.2 to include the overnight capital costs of the two HAR units based on the Levy cost estimated as discussed in NPD-NRC-2008-039. Reference added to text.
HAR-179	HAR	PT03	ER10	10.4.2.3	NPD-NRC-2009-017; ER RAI 10.4.2.2 (H-0345)	Text revisions have been added to Section 10.4.2.3 to include the operating costs of \$0.0168 cents per kWh.
HAR-189	HAR	PT03	ER10	10.2.1.1 and 10.3.1.8	NPD-NRC-2009-082; ER RAI 3.7-1 (H-0452)	Sections have been revised as stated in RAI Response. The majority of changes are to state the correct lengths of the transmission lines and adjust the area associated with the land use impacts based on a 50 foot buffer on either side of the transmission lines.
HAR-196	HAR	PT03	ER10	10.1.1; 10.1.2; T10.1-1; 10.2.1.1; T10.2-1; 10.3.1.1; 10.3.1.6; and 10.4.2.4.1	Editorial	Area of inundation updated in the following sections: Section 10.1.1 paragraphs 2 and 5 Section 10.1.2 Para 5 Table 10.1-1 Sheets 1 and 4 of 7 Section 10.2.1.1 paragraph 8 Table 10.2-1 Section 10.3.1.1 paragraph 6 Section 10.3.1.6 paragraph 4 Section 10.4.2.4.1 paragraph 1.
HAR-200	HAR	PT03	ER10	10.2.1.2	Editorial	Corrected inconsistency in service water net consumptive usage to be consistent with ER Section 3.3.2.1.