

PMNorthAnna3COLPEmails Resource

From: Dozier, Tamsen
Sent: Monday, January 24, 2011 7:51 AM
To: Tony Banks
Subject: clarification of context of audit items
Attachments: Draft North Anna Rev 3 Environmental Audit Items 20Jan11.docx

Tony

I apologize that these latest items were not able to be sent on Friday. Something came up that diverted my attention and I was unable to return to getting these sent.

Note that it has been brought to my attention that it may not be clear in the wording of these items, that we will be looking at all of these items in the context of ensuring that anything new and potentially significant has been identified and properly evaluated for significance. I will be adjusting the wording of these items to clarify that. The only variation of that clarification is in the area of our NHPA and ESA consultation responsibilities.

Tami

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"Tony Banks" <tony.banks@dom.com>
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DRAFT Audit Items

North Anna Power Station Unit 3 New and Significant Audit February 2-3, 2011

Info Needs #	Audit Item	NRC SME(s)
G-	General	
G-1	Provide a knowledgeable expert(s) to discuss the current status of authorizations from consultations with Federal, State, Regional, and local governments as well as affected Native American tribal agencies	B. Sandusky/A. Davis
H-	Hydrology	
H-1	Make available information detailing the approximate locations of the two to three domestic wells described in Revision 3 of the Environmental Report (ER) Section 4A.6 and the expected pumping rates and duration of pumping for these wells.	M. Masnik / L. Vail / P. Meyer
H-2	Provide a knowledgeable expert(s) to discuss the methods and data used to determine the impact of tritium discharge on the tritium concentration in Lake Anna. (see RHH-4)	M. Masnik / L. Vail / P. Meyer
H-3	Make available a diagram(s) of all plant water use, including rates, for anticipated plant operational modes for the proposed Unit 3.	M. Masnik / L. Vail / P. Meyer
H-4	Provide a knowledgeable expert(s) to discuss the operation of the Unit 3 Wet/Dry Tower cooling system to manage water use, with consideration of reservoir management and the instream flow incremental methodology (IFIM) study results. (see AE-1)	M. Masnik / L. Vail / P. Meyer

Info Needs #	Audit Item	NRC SME(s)
AE-	Aquatic Ecology	
AE-1	Provide a knowledgeable expert(s) to discuss the terms and conditions of the final reservoir management agreement with VDGIF/ Virginia Department of Environmental Quality (VDEQ).	M. Masnik / J. Ward
AE-2	Provide a knowledgeable expert(s) to discuss how the water budget estimates were developed with respect to a) consumptive water use for Unit 3, and b) projections of low flow (20 cfs) releases over the North Anna dam under existing (two unit) and proposed (three unit) operation.	M. Masnik / J. Ward
AE-3	Provide a knowledgeable expert(s) to discuss any aquatic monitoring that has been conducted in Lake Anna, the Waste Heat Treatment Facility (WHTF), or the North Anna River since the development of Rev. 2 of the ER (e.g., 2008-2010), or monitoring that will be required based on the final IFIM report and resulting reservoir management agreement between Dominion and VDGIF/VDEQ.	M. Masnik / J. Ward
AE-4	Provide a knowledgeable expert(s) to discuss the potential impacts to ephemeral streams in the vicinity of the cooling tower area from construction of Unit 3.	M. Masnik / J. Ward
TE-	Terrestrial Ecology	
TE-1	Provide a knowledgeable expert(s) to discuss any correspondence with U.S. Fish and Wildlife Service (USFWS), Virginia Department of Game and Inland Fisheries (VDGIF), and Virginia Natural Heritage Program (VNHP) to determine if new information is available regarding important species?	M. Masnik / M. Sackschewsky

Info Needs #	Audit Item	NRC SME(s)
TE-2	Provide a knowledgeable expert(s) to discuss the results of the springtime survey for Eppling's hedge-nettle.	M. Masnik / M. Sackschewsky
TE-3	Provide a knowledgeable expert(s) to discuss any evaluation of the potential presence of endangered, threatened, or otherwise rare species along the transport route or at the barge unloading site on the Mattaponi River. Make available any correspondence with State (VDGIF and VNHP) and federal (USFWS and National Marine Fisheries Service [NMFS]) agencies with regard to this evaluation.	M. Masnik / M. Sackschewsky
<u>TE-4</u>	<u>Make available GIS shapefiles of the haul road and a copy of any ecological survey results for the purposes of using overlays to determine whether there is potential for impacts to endangered species that have been reported to occur in the Walkerton area along the heavy haul route</u>	<u>M. Masnik / M. Sackschewsky</u>
TE-45	Provide a knowledgeable expert(s) to discuss the expected quantity and pattern of salt deposition from the Ultimate Heat Sink (UHS) cooling towers – including interactions with the main cooling tower.	M. Masnik / M. Sackschewsky
TE-56	Provide a knowledgeable expert(s) to discuss the status of coordination with the U.S. Army Corps of Engineers (USACE) regarding onsite and additional property wetlands and the 404 permit.	M. Masnik / M. Sackschewsky
TE-67	Provide a knowledgeable expert(s) to discuss the status of coordination with the USACE regarding wetlands potentially affected by lake level changes due to increased operating elevation (i.e., 250.25 ft) or operation of Unit 3.	M. Masnik / M. Sackschewsky

Info Needs #	Audit Item	NRC SME(s)
S/EJ-	Socioeconomics/Environmental Justice	
S/EJ-1	Provide a knowledgeable expert(s) to discuss local roads and traffic in the North Anna vicinity. Specifically, Route 208 and 606 and any updates on construction or future plans.	D. Mussatti / M. Niemeyer
S/EJ-2	Provide a knowledgeable expert(s) to discuss the implications of the large component transport road and any related construction.	D. Mussatti / M. Niemeyer
S/EJ-3	Provide a knowledgeable expert(s) to discuss the construction workforce estimate for Unit 3.	D. Mussatti / M. Niemeyer
S/EJ-4	Provide a knowledgeable expert(s) to discuss the aesthetic impacts and recreational implications of the 500kV transmission lines.	D. Mussatti / M. Niemeyer
CB / NFP	Cost Benefit / Need for Power	
CB-1	Provide a knowledgeable expert(s) to discuss updated cost estimates for Unit 3 and how it compares to recently published estimates such as the U.S. Department of Energy/ Energy Information Administration (DOE/EIA) recently published costs.	D. Mussatti / M. Niemeyer
NFP-1	Provide a knowledgeable expert(s) to discuss the updated power demand, supply forecasts, and the reserve margin provided in the need for power analysis.	D. Mussatti / M. Niemeyer

Info Needs #	Audit Item	NRC SME(s)
CR-	Cultural Resources	
CR-1	Make available any new consultation correspondence and/or cultural resources reports that have been generated by the applicant and any responses to these from Tribes, SHPO and interested parties regarding the COLA since the last letter received by NRC from the SHPO (2/3/ 2009) that has not already been provided to the NRC (ER Table 1.2-1). Specifically, in regards to avoidance plan for archaeological site 44SP0618, be prepared to discuss the assessment of eligibility and effect to architectural resources 088-054, 088-0169, and 088-0133, the status of avoidance plans for 44LS0233, and any formal cultural resources surveys, analysis and consultation completed for the heavy haul road.	J. Cushing / T. O'Neil
CR-2	Provide a knowledgeable expert to discuss any increase in land acreage to be disturbed and the effect on cultural resources.	J. Cushing / T. O'Neil
<u>CR-3</u>	<u>Provide a knowledgeable expert to discuss any changes to Dominion's management plans or procedures for those assertions made in their August 2008 letter to the NRC regarding .</u>	
MET-	Meteorology	
MET-1	Provide a knowledgeable expert(s) to discuss the new and significant information review for Section 2.3 (Meteorology and Air Quality), including any changes to the Exclusion Area Boundary (EAB), low population zone (LPZ), or site receptors (nearest garden, goat, cow) distances that might change the site χ /Qs or D/Qs.	V. Ramsdell / J. Flaherty

Info Needs #	Audit Item	NRC SME(s)
MET-2	Make available any updated evaluation of air quality attainment status for counties in the vicinity of North Anna.	V. Ramsdell / J. Flaherty
MET-3	Provide a knowledgeable expert(s) to discuss the locations of release points for design basis accidents (DBAs) for the Advanced Pressure Water Reactor (APWR) relative to those assumed for an Economic Simplified Boiling Water Reactor (ESBWR). How were the distances to the EAB and LPZ affected by the change in reactor designs.	V. Ramsdell / J. Flaherty
MET-4	Make available all electronic input and output files for XOQDOQ used to calculate updated long-term χ/Q and D/Q.	V. Ramsdell / J. Flaherty
MET-5	Provide a knowledgeable expert(s) prepared to discuss the applicant's approach to the new and significant information review of those calculations in the revised ER which used the 1996-1998 data."	V. Ramsdell / J. Flaherty
MET-6	Provide a knowledgeable expert(s) to discuss whether there are any changes in expected air-related emissions, either from the cooling towers or supplementary systems related to the change from ESBWR to APWR.	V. Ramsdell / J. Flaherty
MET-7	Provide a knowledgeable expert(s) to discuss details regarding the confirmatory study discussed in ER Rev. 3 Section 5.3.	V. Ramsdell / J. Flaherty
RHH-	Radiological Human Health/Fuel Cycle/Waste Management	
RHH-1	Provide a knowledgeable expert(s) to discuss the routine liquid radioactive effluent source term for the APWR provided in Table 3.1-10 and Table 5.4-1 in ER Rev. 3.	R. Emch / G. Stoetzel

Info Needs #	Audit Item	NRC SME(s)
RHH-2	Provide a knowledgeable expert(s) to discuss the sources of direct radiation from the existing two units and Independent Spent Fuel Storage Installation (ISFSI) to include data from protected area thermoluminescent dosimeters (TLDs) for the past two years.	R. Emch / G. Stoetzel
RHH-3	Provide a knowledgeable expert(s) to discuss the orientation of the proposed APWR unit on the ESP site.	R. Emch / G. Stoetzel
RHH-4	Provide a knowledgeable expert(s) to discuss the impact of the “greater than plant parameter envelope (PPE)” tritium liquid effluent release source term on Lake Anna tritium concentrations. <u>(see H-2)</u>	R. Emch / G. Stoetzel
RHH-5	Provide a knowledgeable expert(s) to discuss the gaseous effluent release points for the APWR.	R. Emch / G. Stoetzel
RHH-6	Provide a knowledgeable expert(s) to discuss the calculation of dose to the maximally exposed individual from routine gaseous effluents provided in Tables 5.4-4, 5.4-5, and 5.4-6 in ER Rev. 3.	R. Emch / G. Stoetzel
RHH-7	Provide a knowledgeable expert(s) to discuss the assumptions used to determine the gaseous effluent contribution to biota dose.	R. Emch / G. Stoetzel
RHH-8	Provide a knowledgeable expert(s) to discuss how low level radwaste will be handled and disposed of.	R. Emch / G. Stoetzel
<u>RHH-9</u>	<u>Provide a knowledgeable expert(s) to discuss the calculation of dose to the maximally exposed individual from routine liquid effluents provided in Tables 5.4-2 and 5.4-6 in ER Rev. 3.</u>	<u>R. Emch / G. Stoetzel / R. Clement</u>
<u>RHH-</u>	<u>Make available all electronic input and output files for the LADTAP II code</u>	<u>R. Emch / G.</u>

Info Needs #	Audit Item	NRC SME(s)
<u>10</u>	<u>calculation of annual liquid effluent doses to the maximally exposed individual.</u>	<u>Stoetzel / R. Clement</u>
<u>RHH-11</u>	<u>Make available all electronic input and output files for the GASPAR II code calculation of annual gaseous effluent doses to the maximally exposed individual.</u>	<u>R. Emch / G. Stoetzel / R. Clement</u>
<u>RHH-12</u>	<u>Make available the assessment of the dose contribution from the Interim Radwaste Storage Facility (IRSF) designed for on-site storage of radiological waste generated during 10 years of normal operation including the methodology, basis, and assumptions used to develop the source term and calculate the doses.</u>	<u>R. Emch / G. Stoetzel / R. Clement</u>
<u>RHH-13</u>	<u>Make available the reports on the liquid and gaseous dose contributions from existing units mentioned in Notes 2 and 3 of Table 5.4-6 in ER Rev. 3.</u>	<u>R. Emch / G. Stoetzel / R. Clement</u>
<u>RHH-14</u>	<u>Provide a knowledgeable expert(s) to discuss the potential for exposure by construction workers to radioactive materials due to material buried under 10 CFR 20.304 or 10 CFR 20.2002, or as a result of construction activities at approved release points.</u>	<u>R. Emch / G. Stoetzel / R. LaVera</u>
<u>RHH-15</u>	<u>Provide a knowledgeable expert(s) to discuss the sources of direct radiation not currently described, such as; the steam generator storage facility, the south side of the existing Units 1 and 2, near at the proposed Unit 3 discharge structure, onsite shielded storage container (OSSC) storage locations, and replaced Reactor Head storage areas.</u>	<u>G. Stoetzel / R. LaVera</u>
<u>RHH-16</u>	<u>Provide a knowledgeable expert(s) to discuss the potential for exposure by construction workers to migration of radioactive materials deposited from</u>	<u>G. Stoetzel / R. LaVera</u>

Info Needs #	Audit Item	NRC SME(s)
	<u>leakage or spills at the existing units to the construction site.</u>	
ACC-	Accidents	
ACC-1	Provide a knowledgeable expert(s) to discuss the US-APWR DBA analyses.	R. Emch / V. Ramsdell
ACC-2	Provide a knowledgeable expert(s) to discuss the 0 to 2 hr isotopic release rates for APWR DBAs presented in Tables 3.0-3a, 3.0-3b, 3.0-4, 3.0-5, 3.0-6, 3.0-7a, 3.0-7b, 3.0-8, and 3.0-9 in ER Rev. 3.	R. Emch / V. Ramsdell
ACC-3	Provide a knowledgeable expert(s) to discuss severe accident consequence assessments based on updated site information and severe accident source terms for the US-APWR.	R. Emch / V. Ramsdell
ACC-4	Make available the input to and output from a revised severe accident consequence assessment (MACCS runs).	R. Emch / V. Ramsdell
ACC-5	Provide a knowledgeable expert(s) to discuss the site and regional population , land use, and economic data used to evaluate the severe accident consequences for Unit 3.	R. Emch / V. Ramsdell
ACC-6	Provide a knowledgeable expert(s) to discuss the use of core damage frequencies for internally initiated events, internal flood events, internal fire events, and low power and shutdown events to estimate severe accident risks.	R. Emch / V. Ramsdell
ACC-7	Provide a knowledgeable expert(s) to discuss the consequences and risks associated with externally initiated events.	R. Emch / V. Ramsdell
ACC-8	Provide a knowledgeable expert(s) to discuss the surface water pathway severe	R. Emch / V.

Info Needs #	Audit Item	NRC SME(s)
	accident consequences for a US- APWR at the NAPS site.	Ramsdell
ACC--9	Provide a knowledgeable expert(s) to discuss the groundwater pathway severe accident consequences for an US-APWR at the NAPS site.	R. Emch / V. Ramsdell
NRHH-	Non-Radiological Human Health	NRHH-
NRHH-1	Make available any update of communications with VDEQ and VDH regarding etiological agents (disease-causing microorganisms) in the receiving waters (i.e. beach closures).	A.Williamson / L.Aston

The NRC staff did not have any information needs for alternatives, land use, or transportation.