



Nuclear Regulatory Commission
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Docket # - 05200011
Identified: 03/24/2009

Admitted: 03/24/2009
Rejected:

Withdrawn:
Stricken:



SNC000077
Vogtle ESP Mandatory Hearing Presentation #5
Environmental Topic #5

LWA and Site Redress Plan
Dale Fulton
Environmental Specialist
Southern Nuclear Operating Company

Dale Fulton

◆ Professional Experience

- ◆ Over 10 years experience in environmental consulting field as a Project Manager with focus on site contamination assessments and remediation, Environmental Site Assessments and NEPA assessments for Federal, State, and local agencies and private sector.
- ◆ Experience in preparing NEPA documents with Federal Aviation Administration (FAA), Federal Transit Administration (FTA), Federal Highway Administration (FHWA), and U.S. Department of Transportation (DOT); state and local experience in Mississippi with MSDOT.
- ◆ Experience in development of Environmental Management Systems (EMS) under ISO Standards.
- ◆ Served as the Environmental Project Manager for SNC in Vogtle License Renewal project and has worked on Vogtle 3 and 4 ESP and COL since January 2006.

◆ Education

- ◆ B.S. Geology, Auburn University, 1997

Exhibit SNC000078

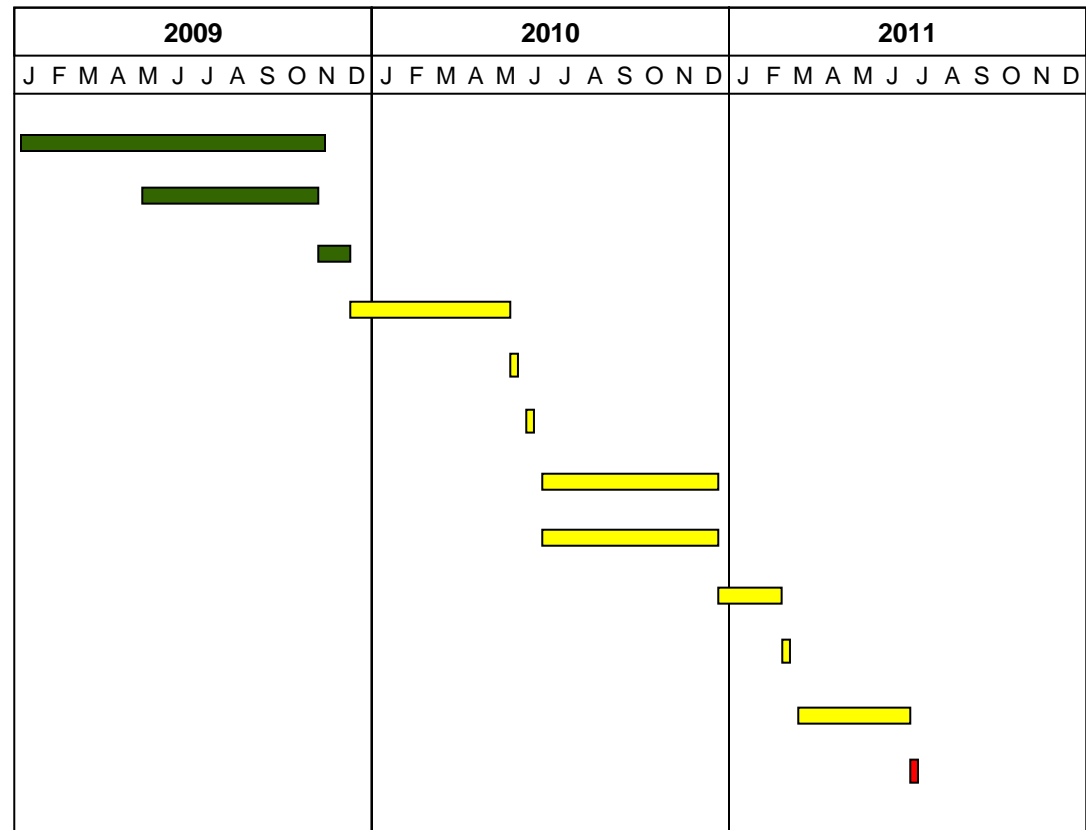
Limited Work Authorization (LWA)

LWA Application Submittal

- ◆ Initial LWA-1 Request – ESP Revision 0, August 2006
- ◆ LWA-2 was included in ESP Revision 2, Supplement 1, August 2007
- ◆ Updated LWA Request to new rule 10 CFR 50.10 - ESP Revision 3, November 2007

Vogtle Construction Schedule Activities Associated with LWA Request

Activity Description	Finish Date
Site Preparation / Preconstruction	04/01/09
Excavate power block	11/10/09
Perform geological mapping	12/03/09
Backfill to base of NI	5/19/10
Prep for MSE wall installation	5/21/09
Place first mud mat	6/21/10
Construct MSE wall to grade	12/27/10
Backfill behind MSE to grade for Unit 3	12/27/10
Apply membrane to mudmat and wall	2/07/11
Place second mudmat	2/09/11
Place rebar for NI	6/28/11
Place first concrete for Nuclear Island	7/01/11



NOTES

All activities shown are for Unit 3. Unit 4 activities lag the Unit 3 activities and have a similar duration.

Schedule shown is based on LWA date of November 1, 2009 and COL date of June 30, 2011.

LEGEND

- █ Pre-Construction Scope
- █ LWA Scope
- █ COL Scope

Exhibit SNC000079

Limited Work Authorization (LWA)



Pre-Construction Activities (Non-LWA)

- ◆ Road and Rail Construction
- ◆ Security Construction
- ◆ Temporary Utilities
- ◆ Temporary Construction Facilities (offices, warehouses, concrete batch plant, etc.)
- ◆ Lay-down, Fabrication, Shop Area Preparation
- ◆ Clearing, Grubbing and Grading
- ◆ Erosion and other environmental mitigation measures
- ◆ Underground Pipe Installation
- ◆ Docking and Unloading Facilities Installation
- ◆ Intake/Discharge Cofferdams and Piling Installation
- ◆ Power Block Earthwork (Excavation)
- ◆ Module Assembly
- ◆ Potable water systems
- ◆ Sanitary sewerage treatment facilities



Pre-Construction Activities (Non-LWA)

Excavation Details

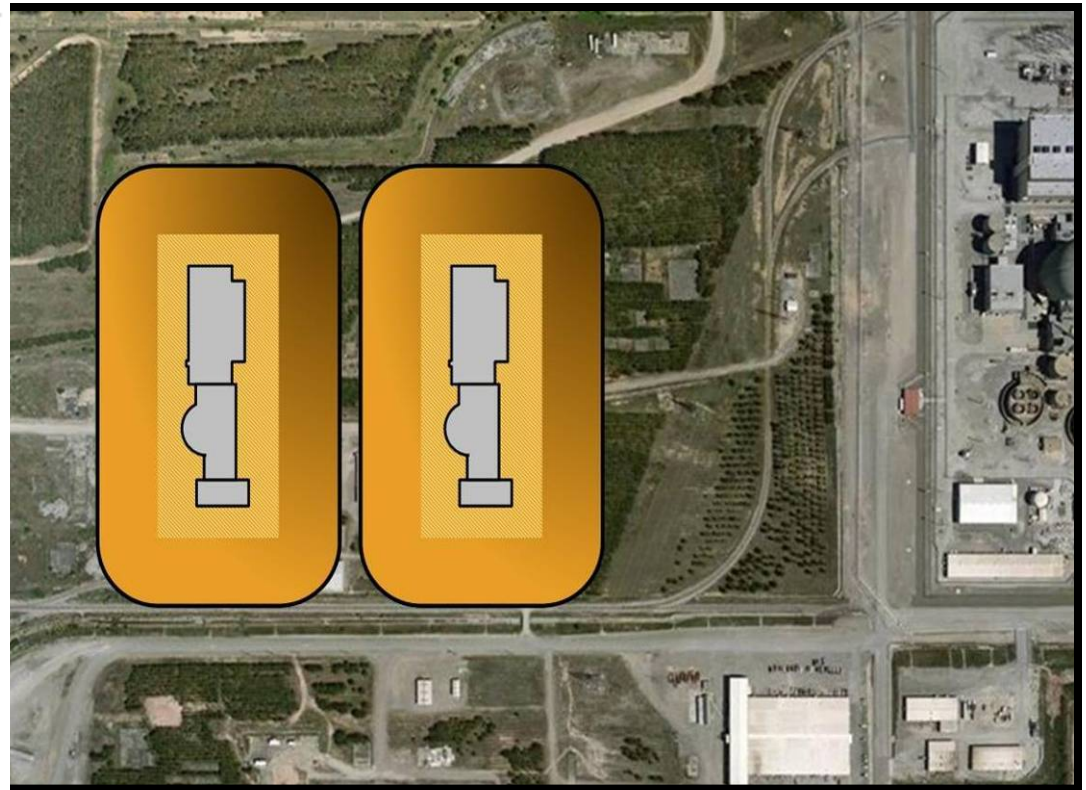
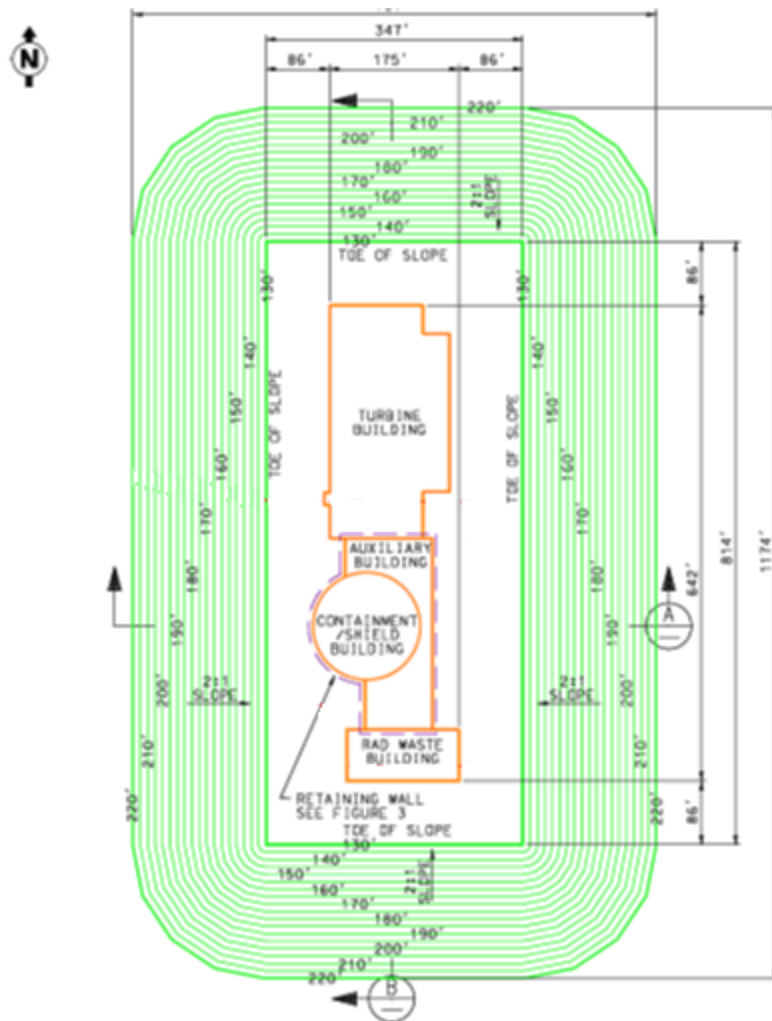


Exhibit SNC000080, Figure 2.5.4-15

Limited Work Authorization (LWA)

SNC proposes to conduct multiple site-preparation (non-safety related) activities and LWA activities (safety related) prior to receipt of the COL. The following activities will be conducted in accordance with 10 CFR 52.17 and 10 CFR 50.10 and will consist of the following:

Activities Covered Under The LWA

- ◆ Engineered Backfill
- ◆ Retaining Walls (mechanically stabilized earth walls)
- ◆ Mudmats
- ◆ Waterproof Membrane
- ◆ Lean Concrete Fill

Programs Covered Under The LWA

- ◆ Fitness For Duty (FFD)
- ◆ Quality Assurance (QA)
- ◆ Problem, Identification & Resolution (PI&R) Program

Limited Work Authorization (LWA)



Nuclear Island Excavation and Backfill Limits

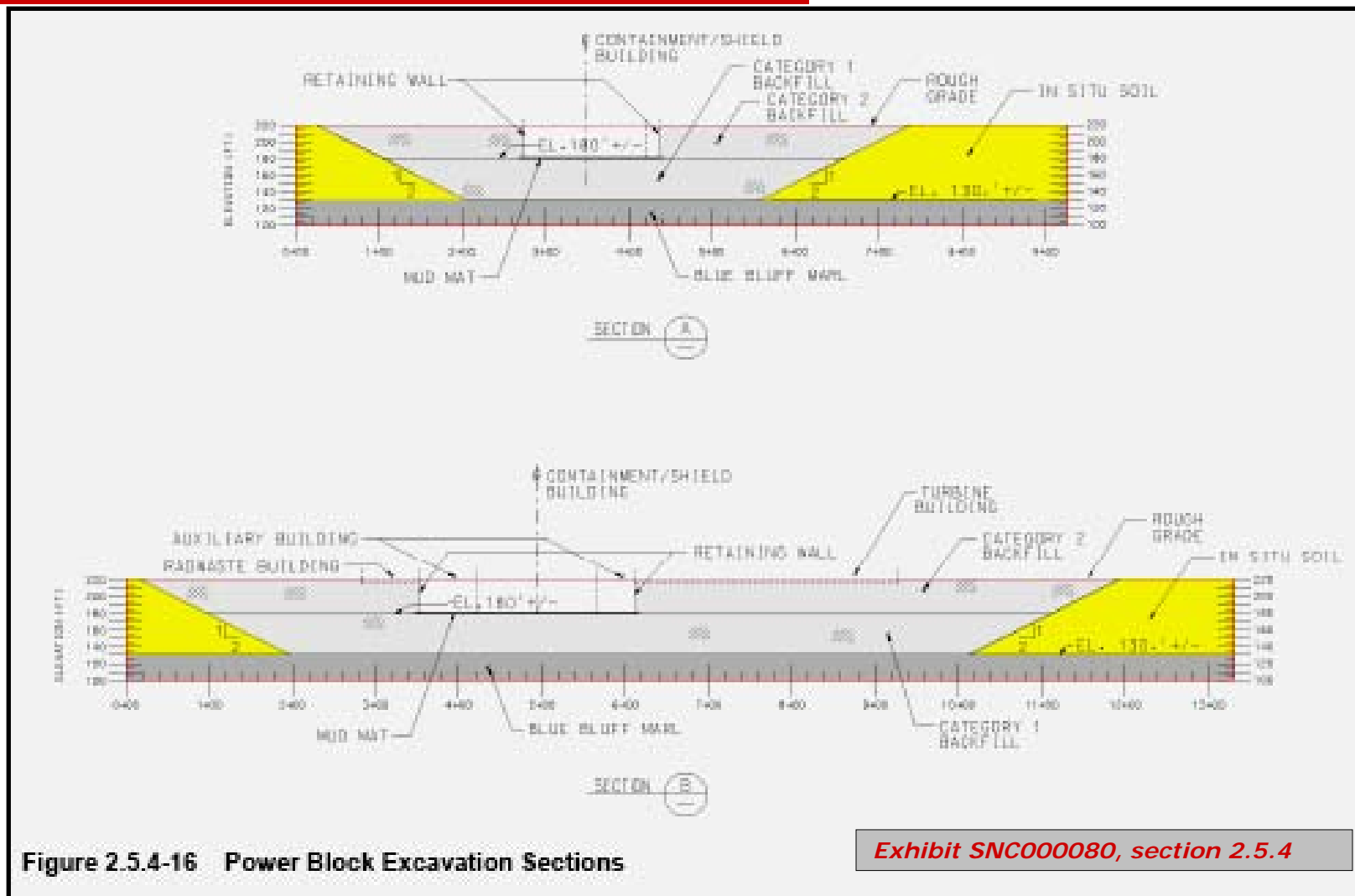


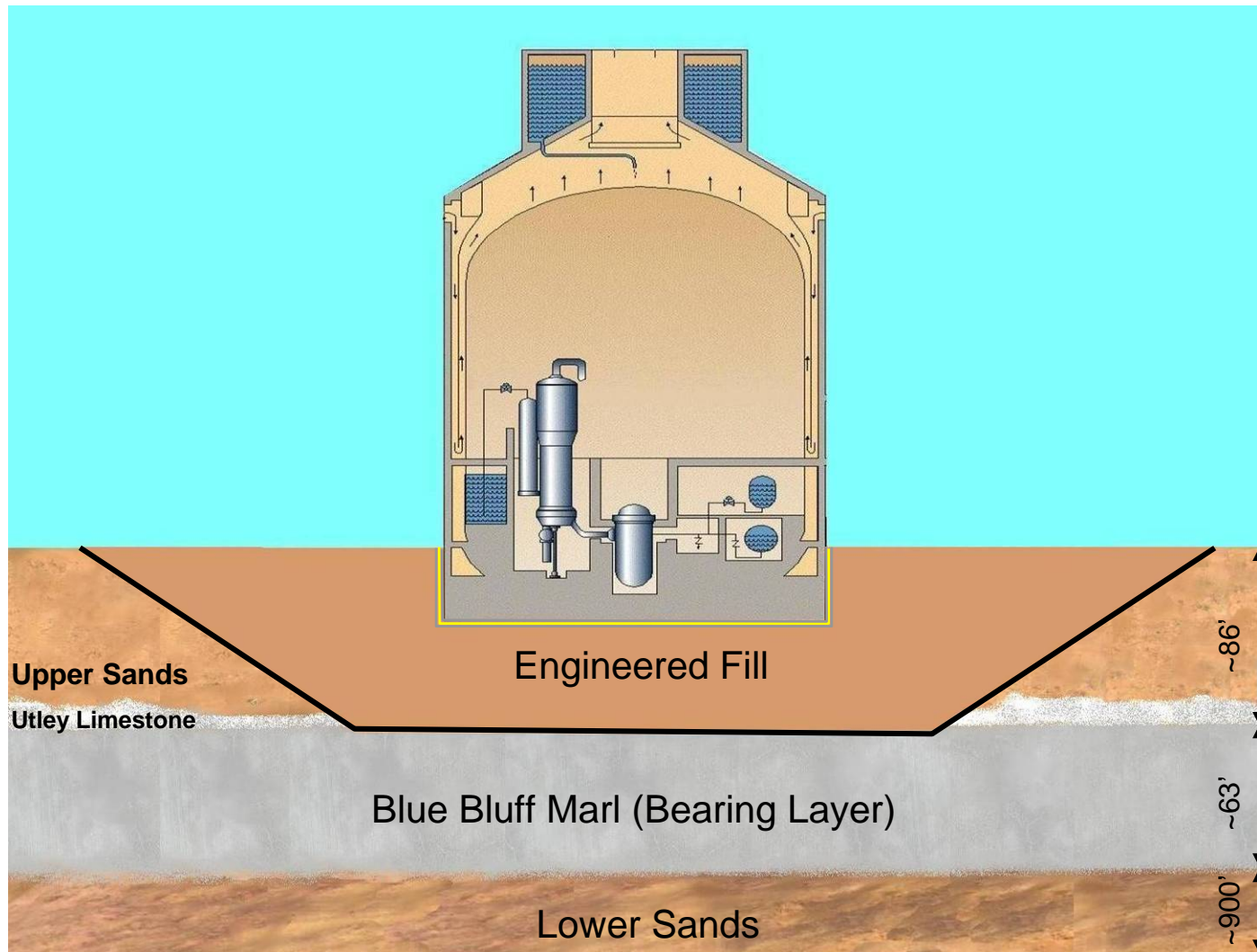
Figure 2.5.4-16 Power Block Excavation Sections

Exhibit SNC000080, section 2.5.4

Limited Work Authorization (LWA)



LWA Activities - Placement of Engineered Fill for Nuclear Island



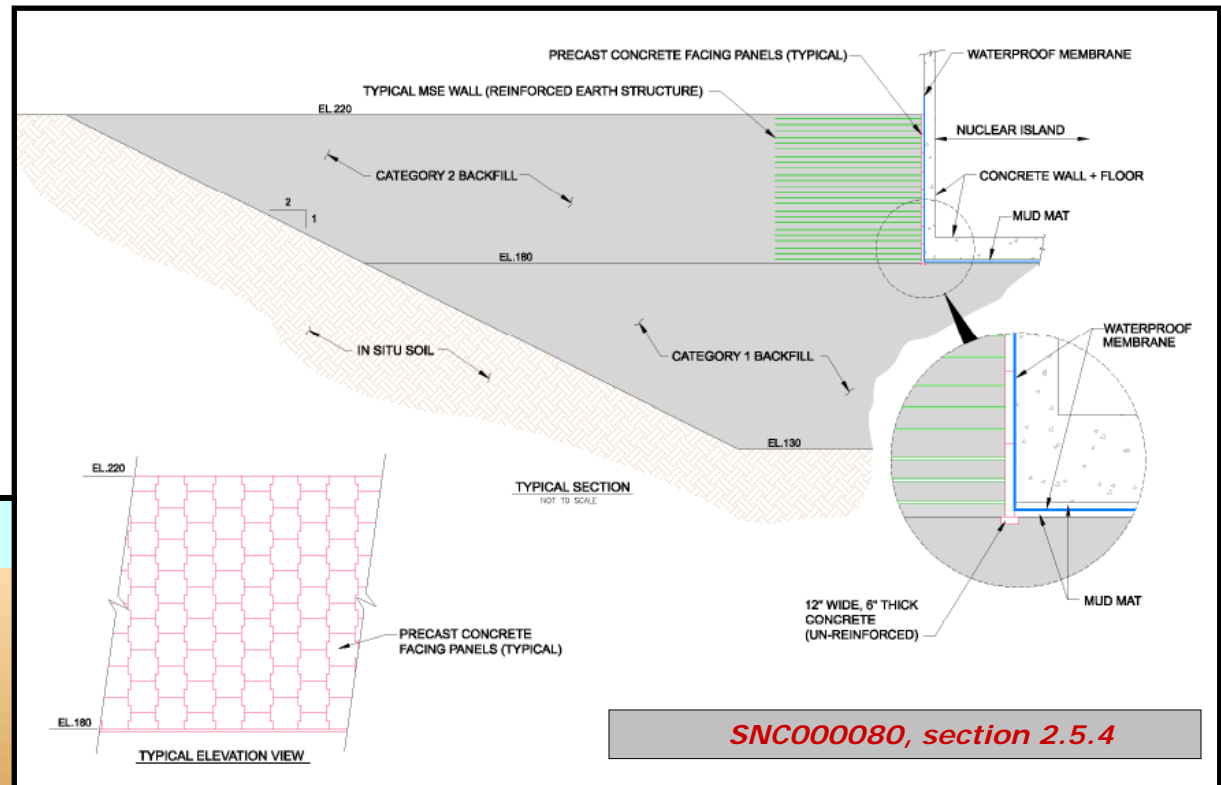
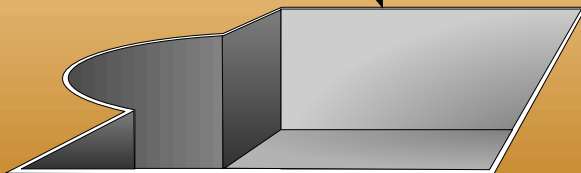
Limited Work Authorization (LWA)



MSE Wall, Mudmat and Waterproof Membrane

Nuclear Island Foundation at Receipt of COL

MSE Wall for Nuclear Island
In Place Prior to COL



Limited Work Authorization (LWA)

Environmental Impacts

Environmental Impacts evaluated in the ESP included the impacts of construction and operation of the Units 3 & 4. The impacts evaluated for the construction activities incorporated the impacts associated with pre-construction and activities covered under the LWA. The following impacts and environmental controls are included in the pre-construction and LWA activities to ensure the activities are conducted in accordance with federal, state & local regulation. These activities will also ensure the Site Redress will be conducted in accordance with the Site Redress Plan. NRC determined the environmental impacts associated with the LWA and pre-construction activities were similar to the impacts of construction, but for a shorter duration. The impacts associated with construction discussed in the ESP FEIS ranged from SMALL to MODERATE.

Impacts Evaluated for LWA

- ◆ Land-Use
- ◆ Air-Quality
- ◆ Water-Related
- ◆ Ecology
- ◆ Socioeconomics
- ◆ Historical & Cultural Resources
- ◆ Environmental Justice
- ◆ Nonradiological Health Impacts
- ◆ Radiological Health Impacts



Environmental Controls

- ◆ Necessary Regulatory Permits
- ◆ Groundwater Monitoring
- ◆ Debris basins
- ◆ Settling basins
- ◆ Dams
- ◆ Site drainage
- ◆ Stormwater management system
- ◆ Dust suppression controls
- ◆ Solid waste storage areas
- ◆ Borrow, spoils, and soil storage areas
- ◆ Spill containment controls
- ◆ Silt screens



Limited Work Authorization (LWA)

Prerequisites For Conducting LWA Activities

- ◆ Documentation of existing site conditions within the VEGP site by way of photographs, surveys, listings of existing facilities and structures, or other documentation.
- ◆ Coordination of agreements between the site's co-owners and Southern. This agreement would allow Southern to carry out LWA activities.
- ◆ Coordination of the movement of the existing VEGP site protected area (PA) boundary, as required.
- ◆ Movement, demolition, or ownership transfer of existing VEGP site buildings and structures within the Vogtle 3 & 4 site.
- ◆ Obtaining the necessary permits to perform preconstruction activities, such as local building permits, General Stormwater Permit, etc.
- ◆ Obtaining the necessary permits to perform LWA activities, such as local building permits, General Stormwater Permit, etc.

FEIS for Vogtle ESP (NUREG-1872, Vol. 1)



Site Redress Plan



The objective of the site redress plan is to ensure that, in the event the VEGP Units 3 and 4 site is not developed to provide new nuclear power generation, it would be returned to an unattended, environmentally stable and aesthetically acceptable condition.

Activities to Accomplish Site Redress

- ◆ SNC LWA activities will take place within the area of preconstruction excavation, approximately 90 feet below grade. SNC's preferred method of redress for these LWA structures would be burial in place.
- ◆ Prior to initiating site redress activities, SNC would discuss with the Georgia Department of Natural Resources, Environmental Protection Division (EPD) the acceptability of burial of the LWA structures in place as a landfill under Georgia solid waste management rules.
- ◆ Site redress would ensure that no significant amounts of degradable materials, such as temporary construction formwork, would remain below grade, but would be removed and disposed of properly at a permitted landfill.
- ◆ If the EPD did not approve in-place disposal, SNC would demolish and remove LWA structures in accordance with Georgia requirements.
- ◆ Final site redress would include regrading the area to conform to the surrounding land surface and to mitigate erosion from stormwater runoff.

Exhibit SNC000082

Thank You!
