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APR 1 1 2011

LES-11-00051-NRC

Attn: Document Control Desk
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Louisiana Energy Services, LLC
NRC Docket No. 70-3103

Subject: Revision to License Amendment Request (LAR) 11-04-Supplement

Reference: Revision to Request for Approval to use AWS D1.1 alternate weld inspection method for Cascades 1, 2 and 3 (LAR 11-04), dated March 29, 2011

In the reference letter URENCO USA (UUSA) provided a revision to the "Request for Approval to use AWS D1.1 alternate weld inspection method for Cascades I, 2, and 3 (LAR 11-04)." This revision, specific to Cascades 1 and 2, included a markup of the Quality Assurance Program Description (QAPD) Section 10 Inspections, which provided an historical note for an alternate weld inspection methodology. After further review the historical note in QAPD Section 10 is being deleted and replaced with an historical note for inclusion into Section 3.4.22 of the Safety Analysis Report (as enclosed).

Should there be any questions concerning this LAR revision, please contact Wyatt Padgett, LES Licensing Manager, at 575.394.5257.

Respectfully,

David E. Sexton
Chief Nuclear Officer and Vice President of Operations

Enclosure: Safety Analysis Report Section 3.4.22 Markup for LAR 11-04

NMSS01

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ENCLOSURE
Safety Analysis Report Section 3.4.22 Markup for LAR 11-04

- AISC Manual of Steel Construction
- ANSI/AISC N690, American National Standard Specification for the Design, Fabrication, and Erection of Steel Safety-Related Structures for Nuclear Facilities

Historical Note: Fillet weld inspections performed on Cascades 1 and 2 upper steel in SBM 1001 Assay Unit 1, under ANSI/AISC N690-1994 and AWS D1.1, involved use of an alternate weld inspection methodology as approved by the NRC in LAR 11-04. This method, delineated in TQ-2010-102 which has been superseded by TQ-2011-11 to eliminate groove weld applications, involved a through paint weld assessment and engineering evaluation for disposition of identified weld defects.

- PCI Design Handbook
- American Society of Testing and Materials

3.4.23 Structural Design Loads

a. Wind loadings for structures are in accordance with provisions of the International Building Code and Section 6.5 of ASCE 7.

b. For reinforced concrete targets, the formulas used to establish the missile depth of penetration (x) and scabbing thickness (ts) are based on the Modified National Defense Research Committee Formula (NDRC) (ASCE, 58) and the Army Corps of Engineers Formula (ACE) (ASCE, 58) respectively.

c. Per Section C.7.2.1 of ACI 349, the concrete thickness required to resist hard missiles shall be at least 1.2 times the scabbing thickness, ts. Punching shear is calculated and checked against the requirements of ACI 349, Section C.7.2.3.

d. For steel targets, the formula used to establish the perforation thickness is the Ballistic Research Laboratory (BRL) Formula (ASCE, 58).

e. All buildings and structures, including such items as equipment supports, are designed to withstand the earthquake loads defined in Sections 1615 through 1617 of the International Building Code.

f. Extreme snow loadings on roofs of safety significant structures are based on a ground snow load of 32 lb/ft^2. The snow load for safety significant structures is enveloped by the general 40 lb/ft^2 roof live load with the exception of drift areas. Drift areas (where load can exceed 40 lb/ft^2) are evaluated when required for each structure.

   Quality Level 3 structures will as a minimum, meet the IBC requirements for snow loading.

g. Load combinations for concrete structures and components for the safety significant structures are based on ACI 349 except for SBMs which may be based on ACI 318. Load combinations for other concrete structures are based on (ACI 318). All concrete structures are designed using the ACI Strength Design Method (ACI 318).

h. Load combinations for steel structures and components for all buildings are provided in ISAS Section 3.3.2.2.8. All structural steel is designed using the AISC Allowable Stress Method (AISC, Manual of Steel Construction).

i. Design live loads, including impact loads, used are in accordance with Section 4.0 and Table 4-1 of ASCE 7.