

PMLevyCOLPEm Resource

From: Anderson, Brian
Sent: Tuesday, July 26, 2011 1:29 PM
To: Patel, Pravin; Thomas, Vaughn; Carl Costantino; Tom Houston
Cc: Shams, Mohamed; Spicher, Terri; Minarik, Anthony; LevyCOL Resource
Subject: Applicant's proposed revisions for drilled shaft ITAAC.docx
Attachments: Drilled Shaft ITAAC Proposed Revisions.docx

Importance: High

Pravin, Carl, Tom, Vaughn –

The attached shows (1) the current LNP ITAAC, (2) the NRC revised ITAAC, and (3) the applicant's proposed revisions to the ITAAC. Please take a look at this in preparation for tomorrow's call.

Thanks,
Brian

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Drilled Shaft ITAAC Proposed Revisions.docx		15737

Options

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Existing ITAAC in LNP FSAR Rev. 2

**Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)**

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the design drawings.

Revised ITAAC Proposed by NRC Staff on 7/21/2011

**Table 3.8-4
Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)**

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement be used to minimize movements in the soft foundation soils in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex <u>these</u> buildings and the nuclear island structures	Inspection of the as-built drilled shaft foundation physical arrangement will be performed <u>to ensure that the foundation can provide adequate bearing capacity to safely sustain the vertical design load of the drilled shaft. The socket of the drilled shaft is to be at least 10' deep and have a minimum RQD of 25 over the full depth of the rock socket plus at least two socket diameters. A pilot hole will be drilled at the location of each shaft, with core obtained over the depth of the expected socket plus at least two</u>	A report exists that reconciles the as-built physical arrangement of the drilled shaft foundations for the Turbine, Radwaste, and Annex Buildings with the properties of the rock socket for each drilled shaft with the foundation design drawings.

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socket diameters. The RQD will be determined from the rock core recovered from the pilot hole. If the pilot hole indicates that the RQD does not meet design requirements, the rock socket can be extended to a new design depth based on the core obtained from the pilot holes.

The bottom of the socket must be inspected by an experienced engineer/geologist and shown to be free of all deleterious material, loose cuttings and muck. The socket shall be reasonably dry and ready to receive concrete. Pumping can be used to achieve a reasonably dry socket bottom. If the rate of water inflow is excessive in the judgment of the inspecting engineer/geologist, grouting of the socket may be used to ensure concrete is tremied effectively in the dry. Alternatively, wet construction methods for concrete placement will be followed as specified in ACI 336.1-01 and ACI 336.

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Revised ITAAC Proposed by PGN/JVT on 7/25/11

Table 3.8-4
 Drilled Shaft Foundation Inspections, Tests, Analyses, and Acceptance Criteria (Sheet 1 of 1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
<p>Drilled Shaft Foundations for the Turbine, Radwaste, and Annex Buildings will preclude movement in excess of the separation provided between the structural elements of the Turbine, Radwaste, and Annex buildings and the nuclear island structures.</p>	<p><u>During construction, an inspection of the condition physical properties of the rock socket for each drilled shaft will be performed. Upon completion of construction, an inspection of the as-built drilled shaft foundation physical arrangement will be performed.</u></p>	<p>A report exists that reconciles the <u>during construction condition physical properties of the rock socket for each drilled shaft and the</u> as-built physical arrangement of the <u>drilled shaft foundations for the</u> Turbine, Radwaste, and Annex Buildings' <u>drilled shaft foundations</u> with <u>the</u> design <u>specifications and</u> drawings.</p>