

## PMTurkeyCOLPEm Resource

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**From:** Comar, Manny  
**Sent:** Monday, July 06, 2015 1:23 PM  
**To:** TurkeyCOL Resource  
**Subject:** FW: Draft ITAACs for RAIs 2.5.4 - 31, 32, & 33  
**Attachments:** ITAAC Table for NRC 02.05.04-31.pdf; ITAAC Table for NRC 02.05.04-33.pdf; ITAAC Table for NRC 02.05.04-32.pdf

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**From:** Comar, Manny  
**Sent:** Tuesday, June 16, 2015 9:53 AM  
**To:** Candelario, Luisette; Heeszal, David; Karas, Rebecca; Patel, Pravin; Plaza-Toledo, Meralis; Seber, Dogan; Stieve, Alice; Thomas, Vaughn; Walsh, Lisa; Xi, Zuhan; Xu, Jim  
**Cc:** Comar, Manny  
**Subject:** FW: Draft ITAACs for RAIs 2.5.4 - 31, 32, & 33

FYI

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**From:** Franzone, Steve [<mailto:Steve.Franzone@fpl.com>]  
**Sent:** Thursday, June 11, 2015 10:20 AM  
**To:** Comar, Manny  
**Cc:** Burski, Raymond; Maher, William  
**Subject:** Draft ITAACs for RAIs 2.5.4 - 31, 32, & 33

Manny

As discussed during the NRC/FPL public meeting on Tuesday, I have attached 3 draft revised ITAACs. We believe the revised ITAACs addressed the issues raised during the public meeting.

In addition, we plan on revising the ITAAC associated with RAI 2.5.4-27 to narrow the shear wave velocity range and we believe we can provide a value with a +/- range for shear wave velocity. Once I am able to confirm a date when the draft will be ready I will let you know.

Thanks

Steve Franzone

NNP Licensing Manager - COLA

"What is the use of living, if it be not to strive for noble causes and make this muddled world a better place for those who will live in it after we have gone." Winston Churchill

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**Subject:** FW: Draft ITAACs for RAIs 2.5.4 - 31, 32, & 33  
**Sent Date:** 7/6/2015 1:23:11 PM  
**Received Date:** 7/6/2015 1:23:13 PM  
**From:** Comar, Manny

**Created By:** Manny.Comar@nrc.gov

**Recipients:**  
"TurkeyCOL Resource" <TurkeyCOL.Resource@nrc.gov>  
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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1913	7/6/2015 1:23:13 PM
ITAAC Table for NRC 02.05.04-31.pdf	14881	
ITAAC Table for NRC 02.05.04-33.pdf	14999	
ITAAC Table for NRC 02.05.04-32.pdf	15584	

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**Recipients Received:**

**Turkey Point Units 6 & 7**

**COL Application**

**FSAR Subsection 2.5.4 Stability of Subsurface Materials and Foundations**

**FPL Response to NRC RAI Question No. 02.05.04-31 (e-RAI 7811)**

The following ITAAC will be added to the COLA, Part 10, Appendix B:

**Table 3.8-5  
Fill Concrete**

<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>First lift of fill concrete placed under the nuclear island basemat, containment building, shield building, and auxiliary building, meets durability requirements of ACI 201.2R-08 for Class 2 sulfate exposure.</b>	<b>Test, inspections, or combination of tests and inspection will be performed to determine the cement type and water-cementitious material ratio of the concrete mix for the first lift of fill concrete.</b>	<b>For the first lift of concrete fill (minimum thickness of 2.5 feet), the cement is a sulfate resisting Type V cement (or equivalent as defined in ACI 201.2R-08) and that the maximum water-cementitious material ratio is 0.45.</b>

Note: The ITAAC presented in the Response to RAI 02.05.04-33 will be in addition to this Fill Concrete ITAAC.

**Turkey Point Units 6 & 7**

**COL Application**

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The following ITAAC will be added to the COLA, Part 10, Appendix B:

**Table 3.8-5  
Fill Concrete**

<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>Fill concrete placed under the nuclear island basemat, containment building, shield building, and auxiliary building, to a thickness greater than 5 feet is designed, constructed, and tested as specified in ACI 207 as described in FSAR Subsection 2.5.4.5.1.2.</b>	<b>(a) Testing will be performed to determine the mean compressive strength of the fill concrete. (b) Inspection will be performed to ensure that methods used to control thermal cracking are in accordance with ACI 207, as described in FSAR Subsection 2.5.4.5.1.2.</b>	<b>(a) The mean 28-day compressive strength of the fill concrete is equal to, or greater than 1500 psi. (b) Methods used to control thermal cracking are in accordance with ACI 207, as described in FSAR Subsection 2.5.4.5.1.2.</b>

Note: This ITAAC will be added to the Fill Concrete ITAAC presented in the Response to RAI 02.05.04-31.

**Turkey Point Units 6 & 7**

**COL Application**

**FSAR Subsection 2.5.4 Stability of Subsurface Materials and Foundations**

**FPL Response to NRC RAI Question No. 02.05.04-32 (e-RAI 7811)**

The following ITAAC will be added to the COLA, Part 10, Appendix B:

**Table 3.8-6  
ITAAC for Category I Engineered Fill**

<b>Design Commitment</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>Backfill material adjacent to the nuclear island basemat, containment building, shield building, and auxiliary building is installed to meet a minimum of 95 percent Modified Proctor compaction density.</b>	<b>Testing will be performed during as-built placement of the backfill materials.</b>	<b>The backfill material placed adjacent to the nuclear island basemat, containment building, shield building, and auxiliary building meets the minimum 95 percent Modified Proctor Compaction.</b>
<b>Backfill material adjacent to the nuclear island basemat, containment building, shield building, and auxiliary building meets the soil chemistry evaluation guidelines for mild to moderate concrete exposure to sulfate as provided in FSAR Table 2.5.4-211.</b>	<b>Testing will be performed during as-built placement of the backfill materials.</b>	<b>The backfill material placed adjacent to the nuclear island basemat, containment building, shield building, and auxiliary building does not exceed a water soluble sulfate (SO<sub>4</sub>) concentration of 0.20 percent by weight.</b>