

**From:** Schiller, Alina  
**Sent:** Tuesday, July 13, 2021 4:39 PM  
**To:** GEH-BWRX-300DocsPEm Resource  
**Subject:** List of Talking Points for the July 21 2021 Public Meeting with GEH  
**Attachments:** List of Talking Points for the July 21 2021 Public Meeting with GEH.pdf

*Alina Schiller*

Project Manager  
Office of Nuclear Reactor Regulation  
Division of New and Renewed Licenses  
New Reactor Licensing Branch  
O-13 C10  
301-415-8177

**Hearing Identifier:** GEH\_BWRX300\_Docs\_Public  
**Email Number:** 7

**Mail Envelope Properties** (BLAPR09MB71531511A4E6D81E7EA4569396149)

**Subject:** List of Talking Points for the July 21 2021 Public Meeting with GEH  
**Sent Date:** 7/13/2021 4:39:11 PM  
**Received Date:** 7/13/2021 4:39:12 PM  
**From:** Schiller, Alina

**Created By:** Alina.Schiller@nrc.gov

**Recipients:**  
"GEH-BWRX-300DocsPEm Resource" <GEH-BWRX-300DocsPEm.Resource@usnrc.onmicrosoft.com>  
Tracking Status: None

**Post Office:** BLAPR09MB7153.namprd09.prod.outlook.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>	
MESSAGE	196	7/13/2021 4:39:12 PM	
List of Talking Points for the July 21 2021 Public Meeting with GEH.pdf			93058

**Options**  
**Priority:** Normal  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**

## Topics for Discussion with GEH on NEDO-33914, Revision 0, BWRX-300 Advanced Civil Construction and Design Approach

1. FIA Interface Model (Figure 4-1) and determination of the values of the associated parameters using information in Site Investigation Program (Section 3.1.1) and Laboratory Testing Program (Section 3.1.2).
2. Characterization of Rock Mass and Rock Mass Properties (Section 3.1.3). Rock joints are 3D in nature and occur in sets. Multiple sets of rock joints can be present in a rock mass developing individual rock blocks. Additionally, the rock mass may comprise of multiple rock beds (bedded deposits).

Will there be a program to assess the uncertainties in the estimated rock mass modulus using various empirical equations using different measured and inferred parameters (indirect estimation)?

3. In Section 3.1.1, Site Investigation Program, the maximum required drilling depth is set at 120 m because the expected change in stresses due to excavation of the shaft would be less than 10% from the original in-situ stress field. Will the assessment models include horizontal stresses, which can be larger than the vertical stress at some sites?
4. Fracture flow in addition to pore pressure for fluid-soil interaction in Section 4.3.3, Fluid-Soil Interaction Modeling.
5. What will be the preferred method(s) to sink the shaft in hard rock?
6. Will the computer code used in FIA be able to simulate large displacement along an interface (whether RB structure/rock/soil, rock/rock, soil/rock), for example, more than one element length in the tangential direction? Will the computer code be able to handle intersecting interfaces?
7. What is meant by disadvantageous fracture zones, joints, bedding planes, discontinuities, and other zones of weakness in Section 5.1.2, Soil-Structure Interaction Modeling Assumptions? How to determine whether the site is disadvantageous or not?
8. What are meant by LR and UR properties in Section 5.2.4, Strain Compatible Subgrade Dynamic Properties?
9. Will the reactor be placed in a groundwater aquifer (Section 4.3.4.1, Site Characterization)?
10. Section 7.0, BWRX-300 Generic Design Approach, does not discuss about rock properties including rock mass properties with fracture network. Does this mean the rock fracture characteristics do not affect the design significantly?