

## PMLevyCOLPEm Resource

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**From:** Habib, Donald  
**Sent:** Friday, May 20, 2016 4:07 PM  
**To:** PMLevyCOLPEm Resource  
**Subject:** FW: FSER Chap 2.5 Review Comments (JMMc).docx  
**Attachments:** FSER Chap 2.5 Review Comments (JMMc).docx

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**From:** Waters, David B [mailto:David.Waters2@duke-energy.com]  
**Sent:** Thursday, May 19, 2016 7:42 AM  
**To:** Habib, Donald <Donald.Habib@nrc.gov>  
**Cc:** Kitchen, Robert H <Robert.Kitchen@duke-energy.com>; McConaghy, John <John.McConaghy@duke-energy.com>; Waters, David B <David.Waters2@duke-energy.com>  
**Subject:** [External\_Sender] FSER Chap 2.5 Review Comments (JMMc).docx

Don

As we discussed, attached are three comments related to the information contained in Section 2.5 of the Levy FSER that are being sent to you in advance of our formal comments in order for you to resolve them as necessary prior to finalization of the FSER.

Dave Waters

**Hearing Identifier:** Levy\_County\_COL\_Public  
**Email Number:** 1329

**Mail Envelope Properties** (3c56feb817ee4685bf1f4b44cfa09cde)

**Subject:** FW: FSER Chap 2.5 Review Comments (JMMc).docx  
**Sent Date:** 5/20/2016 4:06:31 PM  
**Received Date:** 5/20/2016 4:06:32 PM  
**From:** Habib, Donald

**Created By:** Donald.Habib@nrc.gov

**Recipients:**  
"PMLevyCOLPEm Resource" <PMLevyCOLPEm.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQPWMSMRS04.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	674	5/20/2016 4:06:32 PM
FSER Chap 2.5 Review Comments (JMMc).docx		25238

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

**Checklist for FSER Chapter 2, Subsection 2.5**

**FSER REVIEW FORM**

FSER Chapter 2, Subsection 2.5

The following review comments are included below:

**Technical Review**

**Licensing Review**

**Other Review** \_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_  
**Lead Reviewer Approval (print name & signature)**

**Date**

Item No.	Comment	Resolution
1	I verified closure of Confirmatory Items from ASER	None Required.
2	(Most Important Technical Comment). The introductory information to Subsection 2.5 (Second paragraph top of page 2-229) misrepresents the effect of CEUS SSC on the Levy Site Characteristics, stating that CEUS resulted in higher earthquake amplitudes than EPRI-SOG, and that this resulted in a need to scale up the original GMRS by 21%. In fact (as indicated in the following paragraph and elsewhere in FSER 2.5), the CEUS inputs are bounded by those of EPRI-SOG, and the up-scaling would be required for either model to produce in the minimum acceptable earthquake (0.1g) design input required by 10CFR50 Appendix S.	
3	As noted by Mr. Haemer in his ASER comments, FSER Subsection 2.5.4.4.3.2 (top paragraph page 2-374) implies that the grouting program is intended to minimize or eliminate safety concerns. In fact, the grouting program is not credited for any safety function, and the RCC bridging mat is designed to accommodate a conservatively large void.	
4	As previously pointed out in several ASER Comments, Subsection 2.5.4.4.10.3.1 (p. 2-396) and 2.5.4.4.10.4.3 (p. 2-404) refer to evaluations of a 20' karst void. The LNS design basis void described in the FSAR is a 10' void. This is correctly described in FSER 2.5.4.4.3.5 (p. 2-376).	
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