

John Segala

From: John Segala *MSO*
Sent: Tuesday, July 11, 2006 1:56 PM
To: Christian Araguas; Stephanie Coffin; Clifford Munson
Cc: Nitin Patel; George Wunder
Subject: Re: Fwd: ESP spectra

My understanding is that at ESP, even if they reference a actual design, we would only be determining the SSE for the ESP site. It would be at COL where Southern would have to address the high frequency issue.

>>> Christian Araguas 7/11/2006 1:49 PM >>>

How would this change for an ESP that is referencing a certified design ie. Vogtle ESP which will reference the AP1000?

>>> Clifford Munson 07/11/2006 1:43 PM >>>

The high frequency "issue" is that rock sites will have amplified SSE ground motion in the high frequency ranges (above 10 Hz). This high frequency ground motion is not damaging to nuclear structures or components with the exception of electrical relays. Nevertheless, it is a characteristic of the site. NRC and industry have agreed that this is an issue for COL applicants to deal with rather than at ESP. ESP applicants do not have a design response spectrum selected because they have not specified a nuclear design. The new RG will not deal with the high frequency issue but instead it will be covered in an update of Chap 3.7 in the SRP. This chapter is not covered in ESP applications.

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>>> John Segala 07/10/06 4:37 PM >>>

Stephanie,

Attached is an e-mail from Cliff Munson depicting the High Frequency issue. NEI has submitted reports to the SITAG in an attempt to resolve the high frequency issue, which would result in a revision to RG 1.165. NEI was also planning to submit the following reports to support a revision to RG 1.165 (see attached letter from RES to NEI):

NEI Reports:

G1.1, "Assessment of a Performance Based Approach for Determining Seismic Ground Motions for New Plant Sites"

G1.2, "Use of Minimum Cumulative Absolute Velocity (CAV) in Seismic Hazard Analysis"

S2.1, "Effect of Seismic Wave Incoherence on Foundation and Building"

S2.2, "Effect of Negligible Inelastic Behavior on High-Frequency"

I1.1, "Integration of NEI Recommendations for Update of Regulatory Guide 1.165"

There were also additional items that the SITAG asked NEI to address.

John