AP1000DCDFileNPEm Resource

From: Loza, Paul G. [lozapg@westinghouse.com]
Sent: Tuesday, March 02, 2010 4:53 PM
To: Clark, Phyllis
Cc: Buckberg, Perry; Sanders, Serita; Jaffe, David; Butler, Rhonda; McKenna, Eileen; Lindgren, Donald A.
Subject: Acknowledgement of RAI-SRP 3.9.4-EMB1-01

Phyllis,

I acknowledge receipt for Westinghouse of RAI-SRP 3.9.4-EMB1-01.

Thanks,

Paul

From: Clark, Phyllis [mailto:Phyllis.Clark@nrc.gov]
Sent: Tuesday, March 02, 2010 3:06 PM
To: Loza, Paul G.
Cc: Buckberg, Perry; Sanders, Serita; Jaffe, David; Butler, Rhonda; McKenna, Eileen
Subject: New RAI (RAI-SRP 3.9.4-EMB1-01)
Importance: High

Hi Paul,

The staff has an identified an additional Chapter 3 RAI, RAI-SRP 3.9.4-EMB1-01. This question is related to Section 3.10, Seismic and Dynamic Qualification of Mechanical and Electrical Equipment, as well as 3.9.4, Control Rod Drive System. Please acknowledge receipt of this RAI and let me know if a conference call to discuss this RAI will be needed.

Thanks,

Phyllis

Seismic Qualification of AP1000 CRDM

RAI-SRP 3.9.4-EMB1-01

It has come to the staff's attention that the adequacy of seismic qualification of the Control Rod Drive Mechanism (CRDM) for AP1000 standard design may not be adequate. GDC 2 of Appendix A to 10 CFR Part 50 states that structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, combined with appropriate effects of normal and accident conditions, without loss of capability to perform their safety functions. AP1000 CRDM pressure boundary components, such as CRDM pressure housing and CRDM rod travel housing are designed and qualified to meet the ASME Code requirements. However, the CRDM non-pressure boundary components, including the latch assembly and coil stack assembly are not explicitly qualified for seismic events. The potential for not working properly such as jamming of the latch mechanism or malfunction of the coils due to seismic events may prevent the control rods from dropping as designed. The applicant is requested to provide a justification to explain why the latch mechanism and coil stack assembly do not need to be seismically qualified to comply with GDC 2, or to revise the seismic classifications of the CRDM components to ensure adequate seismic qualification for the safety functions of the Control Rod Drive System.

Hearing Identifier: AP1000_DCD_Review
Email Number: 345

Mail Envelope Properties (6F27D3A0E6C93E4A9212AD1F4FA57B60146EAE3074)

Subject: Acknowledgement of RAI-SRP 3.9.4-EMB1-01
Sent Date: 3/2/2010 4:53:24 PM
Received Date: 3/2/2010 4:53:27 PM
From: Loza, Paul G.

Created By: lozapg@westinghouse.com

Recipients:
"Buckberg, Perry" <Perry.Buckberg@nrc.gov>
Tracking Status: None
"Sanders, Serita" <Serita.Sanders@nrc.gov>
Tracking Status: None
"Jaffe, David" <David.Jaffe@nrc.gov>
Tracking Status: None
"Butler, Rhonda" <Rhonda.Butler@nrc.gov>
Tracking Status: None
"McKenna, Eileen" <Eileen.McKenna@nrc.gov>
Tracking Status: None
"Lindgren, Donald A." <lindg1da@westinghouse.com>
Tracking Status: None
"Clark, Phyllis" <Phyllis.Clark@nrc.gov>
Tracking Status: None

Post Office: SWEC9966.w-intra.net

Files	**Size**	**Date & Time**
MESSAGE	2216	3/2/2010 4:53:27 PM

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