

King, Mark

From: King, Mark
Sent: Tuesday, August 30, 2011 7:45 AM
To: Sigmon, Rebecca; Garmon, David
Cc: Thorp, John
Subject: RE: INES rating of North Anna Questions --- from IOEB Clearinghouse Screening Summary for Monday, August 29, 2011

Rebecca/ Dave

So how do we get around the statement on bottom of page 76 --- in User's Manual 2008 Edition which states:

Beyond design initiators are not included specifically in Table 9. If such an initiator occurs, then an accident may occur, requiring rating based on actual consequences. If not, Level 2 or 3 is appropriate under defence in depth, depending on the redundancy of the systems providing protection.

--- Does this imply/ mean if you have a **beyond design** basis "earthquake"/initiator and you have all your safety equipment available it would still be rated at least a level 2 event (or level 3 depending on redundancy of systems) since we had no actual consequences for the North Anna event and we had an EDG failure but had back-up redundancy of the other train EDG and the SBO DG.

It has been awhile since I looked at/ done these ratings.

The next paragraph seems to muddy the waters even more:

The occurrence of internal and external hazards such as fires, floods, tsunamis, explosions, hurricanes, tornados or **earthquakes**, may be rated using Table 9. The hazard itself should not be considered as the initiator (as the hazard may cause either initiators or degradation of safety systems or both), but the safety systems that remain operable should be assessed against an initiator that occurred and/or against potential initiators.

Let's talk about this when you get a chance.

Thanks,
Mark

From: Sigmon, Rebecca
Sent: Monday, August 29, 2011 3:28 PM
To: King, Mark; Garmon, David
Cc: Thorp, John
Subject: RE: North Anna IOEB Clearinghouse Screening Summary for Monday, August 29, 2011

No. We considered the possibility that the quake was beyond design basis when we issued the rating. INES is a deterministic rating and is not risk-informed.

From: King, Mark
Sent: Monday, August 29, 2011 3:27 PM
To: Garmon, David
Cc: Sigmon, Rebecca; Thorp, John
Subject: FW: North Anna IOEB Clearinghouse Screening Summary for Monday, August 29, 2011

FYI - Ross is questioning we direct an AIT (high risk issue)... and meanwhile an INES rating of Level 0.

Do we need to re-look at this AIT issue, Design Basis Earthquake [DBE] limits) may have been exceeded event and our INES rating?

Does seem a little out of wack. --- I haven't looked at the INES review / ratings flowchart pathway yet.

We can talk tomorrow.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions Outside of Scope
FOIA- 2011-0357

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FYI.
Mark

From: Telson, Ross *MTK*
Sent: Monday, August 29, 2011 2:34 PM
To: King, Mark
Subject: RE: IOEB Clearinghouse Screening Summary for Monday, August 29, 2011

Wow, fun stuff right after the NRC made some pretty bold statements about US readiness regarding seismic events, no?

Wonder how something with a risk level warranting an AIT doesn't get past a NEWS "0."

6) EN 47181 - NORTH ANNA 1 & 2 - ALERT DECLARED DUE TO AN EARTHQUAKE IN THE AREA AND A LOSS OF OFFSITE POWER (FOLLOW UP INFORMATION)

Both Units are in cold shutdown. Seismic walkdowns are in progress, systems 23% complete, structures 35% complete. Initial review of seismic response data from the earthquake on 8/23/11 (1348 hours) indicates that design spectrum input assumptions (i.e. Design Basis Earthquake [DBE] limits) may have been exceeded above 5 HZ. This would have resulted in classification of an Alert under EAL HA1.1. (See the update to EN 47181 and new EN 47201). Licensee is expecting results from the vendor today.

The NRC will begin an Augmented Inspection Team (AIT) inspection on Tuesday, August 30, 2011. Regional inspectors will be supplemented by a seismologist and a structural expert from headquarters.

The NRC formally reported the earthquake event at North Anna to the International Atomic Energy Agency (IAEA) via the Nuclear Events Web-based System (NEWS). The provisional rating for this event has been determined to be a Level 0 in accordance with the International Nuclear and Radiological Event Scale (INES) User's Manual 2008 Edition, a copy of which is available at <http://nrr10.nrc.gov/ope-info-gateway/ines-2008-e.pdf>. The USNRC's participation in the INES is described in Information Notice 2009-27, dated November 13, 2009, ADAMS Accession No. ML092510055. A brochure describing the INES is available at <http://www.iaea.org/Publications/Factsheets/English/ines.pdf>

Pass to the TRG Leads for AFW (Stanley Gardocki), ECCS (Samuel Miranda), Electrical Power (Roy Mathew), EDGs (Bob Wolfgang), Emergency Preparedness (Eric Schrader), Flooding/Missiles (Edward Smith), Spent Fuel Handling (Steve Jones), Structural (Goutam Bagchi) and to NRO (Doug Copeland). Assigned to Bob Bernardo.

From: Robles, Jesse *MTK*
Sent: Monday, August 29, 2011 2:15 PM
Subject: IOEB Clearinghouse Screening Summary for Monday, August 29, 2011

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7) EN 47196 - NORTH ANNA 1 & 2 - UNUSUAL EVENT DECLARED DUE TO AN AFTERSHOCK EARTHQUAKE (8/25) - UPDATED

See EN Text. The licensee has exited from its unusual event at 1536 EDT on 8/28/11 based on the cessation of any further seismic activity. Pass to the TRG Leads for AFW (Stanley Gardocki), ECCS (Samuel Miranda), Electrical Power (Roy Mathew), EDGs (Bob Wolfgang), Emergency Preparedness (Eric Schrader), Flooding/Missiles (Edward Smith), Spent Fuel Handling (Steve Jones), Structural (Goutam Bagchi) and to NRO (Doug Copeland). Assigned to Bob Bernardo.

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8) EN 47196 - NORTH ANNA 1 & 2 – UNUSUAL EVENT DECLARED DUE TO AN AFTERSHOCK EARTHQUAKE (8/25) - UPDATED

9) EN 47201 - NORTH ANNA 1 & 2 - UNANALYZED CONDITION BASED ON SEISMIC ACTIVITY THAT POTENTIALLY EXCEEDED DESIGN BASIS EARTHQUAKE MAGNITUDE

Outside of Scope

outside of scope

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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Attendees at Screening Meeting:

- Jesse Robles
- Dave Garmon
- Chris Lamb – NSIR
- Ryan Craffey (NRO)
- Bob Bernardo
- Russ Haskell – by phone
- Steve Pannier
- Mary Wegner (RES) – by phone