

CuadradoDeJesus, Samuel

From: Sheikh, Abdul
Sent: Monday, January 23, 2012 1:25 PM
To: CuadradoDeJesus, Samuel; Murphy, Martin; Auluck, Rajender
Cc: Mahoney, Michael; Hernandez, Pete; Holmberg, Mel
Subject: RE: Status Call Results- DB SB Cracking

Please see the following excerpt from SRP, Section 3-8-1 regarding use of computer codes. In addition, please note there is a precedent on this issue. Crystal River root cause team also used Abacus code. The root cause evaluation is also not a design basis calculation.

Computer Programs. The computer programs used in the design and analysis should be described and validated by any of the following procedures or criteria:

- i. The computer program is recognized in the public domain and has had sufficient history of use to justify its applicability and validity without further demonstration.
 - ii. The computer program's solutions to a series of test problems have been demonstrated to be substantially identical to those obtained by a similar and independently written and recognized program in the public domain. The test problems should be demonstrated to be similar to or within the range of applicability of the problems analyzed by the public domain computer program.
 - iii. The computer program's solutions to a series of test problems have been demonstrated to be substantially identical to those obtained from classical solutions or from accepted experimental tests or to analytical results published in technical literature. The test problems should be demonstrated to be similar to or within the range of applicability of the classical problems analyzed to justify acceptance of the program.
- A summary comparison should be provided for the results obtained in the validation of each computer program.

From: CuadradoDeJesus, Samuel
Sent: Monday, January 23, 2012 11:54 AM
To: Murphy, Martin; Auluck, Rajender; Sheikh, Abdul
Cc: Mahoney, Michael; Hernandez, Pete; Holmberg, Mel
Subject: FW: Status Call Results- DB SB Cracking
Importance: High

Marty, Raj, and Abdul

What are your thoughts related to the applicant's approach to investigate the root cause of the SB cracks as described by Mel in the e-mail below? I'll try to stop by and/or give you a call to talk about it. RIII will have a teleconference with the applicant next Thursday (I'll schedule it), we can discuss this matter then.

From: Holmberg, Mel
Sent: Monday, January 23, 2012 11:40 AM
To: CuadradoDeJesus, Samuel
Cc: Hills, David; Neurauter, James; Shaikh, Atif; Sanchez Santiago, Elba
Subject: FW: Status Call Results- DB SB Cracking

Samuel,

The licensee root cause investigation will rely on tests and computer models (ABACUS) that were not developed or performed under Appendix B controls. Thus, if they intend to use the conclusions from this root cause work to validate the effectiveness of their Structures (e.g. shield building) age management program are we ok with this? If not, this could be put on our Agenda to discuss this Thursday with the licensee.

M

From: Holmberg, Mel
Sent: Monday, January 23, 2012 9:59 AM
To: Prescott, Paul
Subject: FW: Status Call Results- DB SB Cracking

Paul,

Appreciate any thoughts you have on this issue associated with QA applicable to root cause related testing to determine cause of cracking in the shield building at the Davis-Besse. Or if there is someone else at NRR I should contact?

Thanks,

Mel

From: Holmberg, Mel
Sent: Monday, January 23, 2012 8:30 AM
To: Hills, David
Cc: Shaikh, Atif; Neurauter, James; Sanchez Santiago, Elba
Subject: RE: Status Call Results- DB SB Cracking

Yes, I specifically inquired into this issue. The licensee procured commercial services for root cause testing using non-safety related procurement documents and thus are not required to meet Appendix B and the staff doing the specialized testing in support of the root cause tests are not required to have any qualifications or certifications (see attached responses). I am not sure that any plant will apply appendix B for root cause work.

If this testing was done to certify plant materials going into safety related components than it would have to be appendix B. But this vendor testing is being used to assist in determination of a cause for degradation of a safety related structure so I am not sure if the NRC has set a policy in this area. I have reviewed the licensee root cause procedures and cannot find any specific guidance in this area so I will contact Paul Prescott or others in vendor branch to see if they have more information on NRC policy for this type of work.

Thanks,

M

From: Hills, David
Sent: Monday, January 23, 2012 8:12 AM
To: Holmberg, Mel; Shaikh, Atif; Neurauter, James; Sanchez Santiago, Elba
Subject: RE: Status Call Results- DB SB Cracking

Thanks Mel. Did anyone ever check into the questions we had regarding applicability of Appendix B to the testing they did in California and Colorado? What were our conclusions?

- Dave

From: Holmberg, Mel
Sent: Thursday, January 19, 2012 3:58 PM

To: Shaikh, Atif; Neurauter, James; Sanchez Santiago, Elba

Cc: Hills, David

Subject: Status Call Results- DB SB Cracking

Team,

Attached is a summary of the conference call with Davis-Besse Root Cause Team to gather information on the status of their work. Let me know if you have any questions or suggestions for next weeks call.

M