

Kusnick, Joshua

From: Stevens, Gary
Sent: Tuesday, February 19, 2013 8:21 AM
To: ASME Code Participants; RES_DE_CIB; Tregoning, Robert; RES_DE_CMB
Subject: ASME Code Meeting Report -- Subgroup on Evaluation Standards

For those that may be interested, here is a summary report from the May ASME Code meeting in Los Angeles, CA for the Subgroup on Evaluation Standards.

Group Name: Subgroup on Evaluation Standards

When: Wednesday, 02/13/2013, 8:30 a.m. – 11:00 a.m.

Where: Westin Bonaventure Hotel, Los Angeles, CA

Group Charter: This group is responsible for all Section XI Flaw Evaluation Rules and Acceptance Criteria

My Capacity: Member, Secretary

SUMMARY

ADMINISTRATIVE ITEMS

- Membership
 - Warren and Gary reported that there were three relevant membership items:
 - Nitin Shan will be dropped from the WGFE roster.
 - Scott Pellet will be added to the WGPFE roster
 - Dr. Yoon-Suk Chang, Safety & Structural Integrity Research Center, Korea has been listed as a Corresponding Member of SGES for several years. ASME has no record of this membership and requested that we drop Dr. Chang from the SGES roster.
- Executive Committee Report (Warren Bamford and Gary Stevens reported)
 - Met Tuesday afternoon from 3:00 to 6:20 pm.
 - Membership: See above for membership issues related to SGES and the supporting WGs.
 - All WGs and SGs should be using C&S Connect to post their meeting agendas and minutes.
 - There were no new actions for addition to Thursday's agenda, nor were there any new charters.
 - The Nickel-Based Alloy TG discussed the Gravelines BMI issue. The NRC requested that the TG develop inspection criteria for BMIs, and will be sending in a letter to ASME with this request. There was no other news on this topic from France, other than EdF continues to inspect. This topic will be retained on the EC XI agenda for tracking purposes because of the pending NRC letter.
 - Rules for decommissioning were discussed in terms of what Section XI requirements, if any, apply after a plant has been permanently shut down and fuel

remains in the spent fuel pool. The initial response from the NRC is that these requirements are covered by the Plant Technical Specifications. The EC XI will continue to monitor this topic.

- Belgian authorities have provided information summaries and reports on the Doel 3 RPV issue on their public website at <http://www.fanc.fgov.be/page/homepage-federaal-agentschap-voor-nucleaire-controle-fanc/1.aspx>. The FANC released a summary report of their conclusions related to the licensee analyses and stated, "*In the current state of knowledge and given the available data, these open issues do not represent conditions that require a definitive shutdown of the Doel 3 and Tihange 2 reactor units.*" The NRC is hosting a public meeting with U.S. industry at NRC headquarters on March 5, 2013 to discuss the potential for similar quasi-laminar indications to exist in U.S. reactor pressure vessel forgings. The meeting should be noticed very soon.
- The WGOPC and the WGPT met jointly on Tuesday afternoon to discuss the Phase 2 approach to adding operational leakage requirements into Section XI. Actions were assigned and this topic is on-going.
- The nonmandatory appendices action that added words into the beginning of all appendices on the use of the appendix passed SC XI ballot, but there were comments. SGES is addressing those comments (see report below for Action No. 12-1602).
- There was significant discussion on errata to the Code and how users are supposed to find these when all they have is a hardcopy of the Code. Errata are not well advertised, nor are they always available to hardcopy users. Mark Ferlisi and Ryan Crane are checking into getting these on the website.
- The action associated with updated Table IWA-1600-1 on the referencing of other codes and standards in Section XI is complete and will be published in the 2013 Edition.
- All SGs should continue to provide status updates to Dennis Davis' compilation of activities being done to respond to NRC conditions and negatives on Code items. We should be also copying Mark Ferlisi on such changes.
- Honors
 - None.

"TOP TEN" ACTION ITEMS

10-783: Revise K Calculation Methods for Circumferential ID Flaws in Cylinders (Lee)

- Darrell Lee reported.
- This item was merged with Action 08-1595 to simplify these two items into one action.
- The action needs to be checked for accuracy.
- This item will be finalized for voting at the May meeting.

11-4: Code Case N-809, "Reference Fatigue Crack Growth Rate Curves for Austenitic Stainless Steels in Pressurized Reactor Water Environments" (Cipolla)

- Russ Cipolla reported.
- This item is being worked in the TG on Crack Growth and will be discussed further at this afternoon's meeting.
- This item remains a work in progress.

OTHER ACTION ITEMS

02-3759: Cast Stainless Steel Inspection Issues (Griesbach)

- Tim Griesbach reported.
- The TG on CASS met on Monday.
- A presentation was made to the TG (see **Attachments 3 and 4**) and also to WGPFE.
- The latest version of the draft Code Case on methodology to evaluate flaws was discussed at the TG.
- This item is still not quite ready for voting as items are still being finalized. NRC has some issues on the draft CC that are being discussed and evaluated.
- There is hope that this action will be voted at WGPFE in May.

05-248: Implementation of Code Case N-597 (Scarth)

- Doug Scarth reported.
- WGPFE went over the latest markup of this item prepared by Phil Rush and Mike Davis.
- There aren't any technical issues remaining on this item, including from the NRC.
- There was a telecon with the NRC since the November meeting that resolved those issues.
- Mike Davis did not attend this week's meetings, so some changes made to this item will need to be discussed with him before this item can proceed.
- It is expected that this item can be voted at both WGPFE and SGES in May.

08-1642: Revision to Appendix G to Include Nozzle Discontinuity Solutions (Stevens)

- Gary Stevens reported.
- This item passed both SC XI and BNCS after the November meeting, and will be published in the 2013 Edition.
- Drop this item from the agenda and place under "Approved Action Items Retained Until Printed" for verification after publication.

09-170: Integral Attachments (Dyle)

- Robin Dyle was absent.
- No report.

09-182: Code Case to Incorporate Full Master Curve Approach (Cipolla)

- Russ Cipolla reported.
- The proposed Code Case for this item was included as Attachment 3 in the November meeting minutes.
- The item passed unanimously at the November SGES meeting in Phoenix, but it did not make the last SC XI agenda.
- **ACTION: Russ Cipolla get the Master Curve Code Case action on the SC XI agenda for the May meeting.**

10-129: Update IWA and IWB to Address Specific S/G Requirements (Armentrout)

- Viki Armentrout reported.
- See **Attachment 5**.
- This action applies to the evaluations aspects of S/G requirements in Section XI, which are driven by Plant Technical Specifications.
- Another separate action is being worked regarding personnel qualifications associated with S/G inspection requirements.
- This item was presented for information due to the changes in the -3000 portions of the Code.

- One change was made to the item (noted in Attachment 5): instead of deleting IWB-3630, reference was made to the Plant Technical Specifications similar to the other changes being made for this item.
- The item was motioned and seconded, and passed unanimously 16-0-0-0.

11-1991: IOU from Wirtz's Withdrawn Inquiry 10-96 (Dyle/Wirtz)

- Robin Dyle was absent.
- No report.

12-552: IWA-9000 Glossary definitions for "evaluation," "engineering evaluation," and "analytical evaluation" (Bamford/Stevens)

- Warren Bamford and Gary Stevens reported.
- The TG for this item met after EC XI on Tuesday for about 45 minutes.
- Four definitions of types of "evaluation" have been finalized by the TG: Evaluation, NDE Evaluation, Analytical Evaluation, and Engineering Evaluation.
- The new definitions will be passed to all SGs for consideration ahead of the action.
- This item will be held until August so that a mark-up of the 2013 Edition can be made.
- The action will be distributed to all SGs in August for action to go through all of their respective portions of Section XI and modify all uses of "evaluation" to be consistent with the new definitions.

12-841: Operational Leakage – Code Case N-513-4 (McGill/Griesbach)

- Bob McGill reported.
- This item was intended to go to vote at WGPFE on Monday.
- NRC was uncomfortable with the increase in pressure for this action from 275 psig to 430 psig. As a result, there was discussion of this at the WG, and the WG is reconsidering the pressure limit change and may revert back to a pressure limit of 275 psig.
- There will be discussions with the NRC to investigate this issue further, and a final decision will be made so that this item can be voted at both the WG and SGERs in May.

12-842: Code Case N-694 on Evaluation of Flaws in PWR Reactor Head Nozzles (G. DeBoo)

- Guy DeBoo reported.
- This item passed both SC XI and BNCS after the November meeting, and will be published in the 2013 Edition.
- Drop this item from the agenda and place under "Approved Action Items Retained Until Printed" for verification after publication.

12-795: Acceptance Standards for Austenitic Steel Heat Exchangers, IWC-3510 (Vo)

- Truong Vo reported.
- This item passed both SC XI and BNCS after the November meeting, and will be published in the 2013 Edition.
- Drop this item from the agenda and place under "Approved Action Items Retained Until Printed" for verification after publication.

12-1411: Clarification of IWB-3514 Acceptance Standards for Flaws in SCC Susceptible Materials (Xu)

- Doug Scarth reported.
- See **Attachments 6 and 7**.
- This item was voted at SC XI after the November meeting and received two comments. The comments and responses are shown in Attachment 7.
- The responses will be discussed at SC XI tomorrow.

12-1602: Use of Nonmandatory Appendices A, C, E, G, H, K, L, and O (Bamford)

- Warren Bamford reported.
- This item passed SC XI after the November meeting, but received comments.
- Warren is addressing the comments and this item is expected to proceed for publication in the 2013 Edition.
- Drop this item from the agenda and place under "Approved Action Items Retained Until Printed" for verification after publication.

12-zzzz: Effects of Residual Stress on Flaw Evaluation (Bamford)

- Warren Bamford reported.
- Guy DeBoo's Task Group on Reference Crack Growth Curves is addressing this item by developing a Nonmandatory Appendix for WRS analysis guidance.
- The TG is starting with a reference curve for a single groove dissimilar metal weld based on the efforts of John Broussard (who was not present this week).
- Continuing effort -- it's too early to obtain an action number until things get more defined.

INQUIRIES

- There were no inquiries.

RECURRING ITEMS

R1. Errata

- There were new errata identified by Kunio Hasegawa.
- Warren discussed these with Rick Swayne and the recommendation was made to hold these and consider them when reviewing the proofs for the 2013 Edition.
- We will obtain an action no. to track these.

R2. Fatigue Issues (Stevens)

- The NRC has completed a draft of NUREG/CR-6909 Rev. 1 that is currently undergoing internal NRC review.
- Gary Stevens presented the contents of the revised NUREG to the Working Group on Environmental Fatigue Evaluation Methods on Monday afternoon and the SG on Fatigue Strength on Tuesday morning. In addition, NRC suggestions for further work on EAF were presented.
- The draft NUREG and a draft of RG 1.207 Rev. 1 are expected to go out for public comment by the end of 2013.

R3. Working Group Reports

- WGPFE (Scarth)
 - The WG is looking into extending the stress intensity factor G coefficients for flaws with an a/c ratio greater than 1.0 to address axial flaws in circumferential welds. A Code Change will be pursued.
- WGPC (Griesbach)
 - The WG is looking at changes to Appendix G to consider EPFM in nozzles.
- WGFE (Cipolla)
 - Nothing further to report.

R4. Task Group Reports

- **Task Group on HDPE Pipe (Scarth)**
 - The TG met on Monday evening.
 - There were significant technical discussions.
 - Phil Rush and Doug Scarth have an action to draft a Code Case on flaw evaluation of HDPE pipe. They will try to have something specific to discuss at the next meeting.
 - There was significant discussion on the impact of scratches on HDPE pipe. Several individuals are supposed to bring specific data to support their arguments on this discussion to the next meeting.
- **Task Group on Evaluation of Beyond Design Basis Events (Pace)**
 - Hal Gustin reported.
 - The TG met on Tuesday evening. The TG was a bit short-handed due to the recent weather in the northeast.
 - Three items were discussed: (1) a summary of the 2007 earthquake in Japan and the associated recovery efforts, (2) the initiating question for the Code Case is being reviewed by the TG, and (3) Paul Donavin's presentation on in-plant actions needed after a severe event.
 - All discussion led to further progress on the Code Case. There will need to be some catch-up in May when everyone is present.
- **Task Group on Buried Piping (McGill)**
 - The TG discussed additional changes to Code Case N-806-1.
 - There is a desire to add Duke's area reinforcement approach to the Code Case.
 - Hopefully, the draft Code Case will be presented to the TG for review in May.

R5. Approved Action Items Retained Until Printed

- (Errata) Keep Appendices proof mark-up issues on agenda until published.
- (Errata) N-641 identified by Nathan Palm (Westinghouse) -- Warren provided this item to Ryan Crane for processing at the February 2012 meeting.
- 03-1377: Code Case for RT_{TO} (**Cipolla**).
- 05-1328: Alternative Acceptance Criteria and Evaluation Procedure for Flaws in Ferritic Steel Components Operating in the Upper Shelf Range (**Cipolla**) – this Code Case was published in Supplement 9 to the 2010 Code.
- 07-1307: Class 1, 2, and 3 Flaw Evaluation for Pipes Less Than NPS 4" (**Cipolla**)
- 09-159: EPRI-MRP-BWRVIP Risk Informed Appendix G Work (**Server/Griesbach**)
 - Need to verify that editorials submitted in November 2011 SC XI meeting get implemented.
- 09-794: Operational Leakage (**Griesbach**)
- 10-915: Evaluation of Metal Loss in Class 2 and 3 Metallic Piping Buried in a Back-filled Trench (**McGill/Scarth**) – this Code Case was published in Supplement 10 to the 2010 Code.

- 11-61: Change to IWB-3112/IWC-3112 to Allow Evaluation of Subsurface Flaws Found During Pre-Service Inspections (**Stevens**).
- 11-207: Improvements in Evaluation of Flaws in PWR Reactor Head Nozzles (Guy DeBoo)
- 11-1791: Change to IWB-3112/IWC-3112 to Allow Evaluation of Subsurface Flaws Found During Pre-Service Inspections (**Stevens**).
- 11-1996: (Errata) An editorial change to Appendix G and a Table note correction for Appendix A.

NEW BUSINESS

- 10-123: Code Case N-XXX, Alternative Requirements for RPV Examination
 - Russ Day (PPL Susquehanna) reported.
 - See **Attachment 8**.
 - This Code Case consolidates and simplifies the examination requirements for RPVs.
 - It is an older action that has been completely revised based on previous comments received.
 - This item passed WGISC 11-0-1-0 and SGWCS 18-0-0-0.
 - Since this item was significantly revised, it will proceed at SC XI as a first consideration action.
 - The item was presented to SGES for information only.
- Rick Swayne's Code Case Applicability Index (Stevens)
 - Refer to the last page of **Attachment 9**.
 - SGES has an action for Code Case N-513.
 - The applicability index should not be updated for N-513-3. This change was deleted because the Code Case itself has an applicability statement included – so, to change the applicability index would cause a conflict. This issue is being fixed in N-513-4.

The meeting was adjourned at ~11:00 a.m.

Let me know if you have any questions, or would like to see any of the attachments.

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