

Poehler, Jeffrey

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**From:** Poehler, Jeffrey *MPK*  
**Sent:** Wednesday, February 15, 2012 9:57 AM  
**To:** Purtscher, Patrick  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Thanks,

Jeffrey C. Poehler  
Sr. Materials Engineer  
NRR/DE/EVIB  
(301) 415-8353

**From:** Purtscher, Patrick *MPK*  
**Sent:** Wednesday, February 15, 2012 9:57 AM  
**To:** Poehler, Jeffrey  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

I think the rewording is appropriate. I don't have any other issues.

Pat

**From:** Poehler, Jeffrey  
**Sent:** Wednesday, February 15, 2012 9:54 AM  
**To:** Purtscher, Patrick  
**Cc:** Cheruvenki, Ganesh  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Any comments on my changes?

Jeffrey C. Poehler  
Sr. Materials Engineer  
NRR/DE/EVIB  
(301) 415-8353

**From:** Poehler, Jeffrey  
**Sent:** Tuesday, February 14, 2012 3:34 PM  
**To:** Purtscher, Patrick  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Pat, the whole 1<sup>st</sup> paragraph of Section 3.2.1 could be clearer. I reworded this paragraph to eliminate some unnecessary details.

I fixed footnote 2.

For Figure H-7, I agree that the lower bound could be higher at 0.1 dpa especially if you only considered the data points that are Type 304. However, I'm not sure if the 75% would work with the stress analysis for VYNPS since they determined 14% relaxation. The stress analysis only showed 13% margin over the ASME Code allowable for some scenarios. I'm not sure an additional 11% of preload reduction would result in a one-to-one reduction in the percent margin, but would definitely reduce it. At any rate, Figure H-7 is just one data point supporting VYNPS's estimate. If you look at the GEH curve, it is also a best-estimate curve.

B/27

Please review the changes which are marked up in the attached revision.

Thanks,

Jeff

**From:** Purtscher, Patrick  
**Sent:** Tuesday, February 14, 2012 1:53 PM  
**To:** Poehler, Jeffrey  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Jeff,

The 3<sup>rd</sup> sentence in Section 3.2.1 doesn't seem clear enough for the reader, I think it needs rewording.

Footnote 2, don't you mean displacement per atom?

Regarding Figure H-7 from MRP-175, I looked at it and I think 75% is a realistic lower bound, still better than the 50% line that is drawn, but more relaxation than the mean value. Would that 25% relaxation be a problem based on what we know?

Pat

**From:** Poehler, Jeffrey  
**Sent:** Tuesday, February 14, 2012 9:25 AM  
**To:** Cheruvenki, Ganesh  
**Cc:** Purtscher, Patrick  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Did you guys have time to comment?

**From:** Cheruvenki, Ganesh  
**Sent:** Tuesday, February 07, 2012 12:07 PM  
**To:** Poehler, Jeffrey  
**Subject:** RE: Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Will do.

**From:** Poehler, Jeffrey  
**Sent:** Tuesday, February 07, 2012 10:45 AM  
**To:** Cheruvenki, Ganesh  
**Cc:** Purtscher, Patrick  
**Subject:** Peer Review of SE Input for Vermont Yankee Core Plate Bolt Analysis (ME6248)

Ganesh,

As discussed yesterday, please peer review (technical only) my SE input for Vermont Yankee. Use TAC ME6248. Note that it is not a complete SE because Pani has the lead on the SE. He can integrate my inputs into the structure of his SE.

If you can give me comments by the end of the week that would be fine.

Pat, I copied you so if you have time to review your comments would also be appreciated.