

Poehler, Jeffrey

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**From:** Poehler, Jeffrey *NR*  
**Sent:** Monday, June 25, 2012 9:09 AM  
**To:** Medoff, James; Hiser, Allen  
**Subject:** FW: Background--Kewuanee RAI-MRP-227-A  
**Attachments:** DOC\_20120625085018.PDF

FYI

Jeffrey C. Poehler  
Sr. Materials Engineer  
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(301) 415-8353

**From:** Butcavage, Alexander *RI*  
**Sent:** Monday, June 25, 2012 8:53 AM  
**To:** Poehler, Jeffrey  
**Cc:** Vias, Steven  
**Subject:** RE: Background--Kewuanee RAI-MRP-227-A

Best I can give on short notice Jeff...

**From:** Poehler, Jeffrey  
**Sent:** Monday, June 25, 2012 8:32 AM  
**To:** Butcavage, Alexander  
**Subject:** RE: Background--Kewuanee RAI-MRP-227-A

Thanks Al, this is helpful. Do you have any pictures or figures of split pins?

Jeffrey C. Poehler  
Sr. Materials Engineer  
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**From:** Butcavage, Alexander  
**Sent:** Monday, June 25, 2012 8:18 AM  
**To:** Poehler, Jeffrey; Cheruvenki, Ganesh; Hiser, Allen; Purtscher, Patrick; Medoff, James; Rogers, Billy; Widrevitz, Di  
**Cc:** Vias, Steven  
**Subject:** RE: Background--Kewuanee RAI-MRP-227-A

Recall that in some cases the vendor recommended changing them back when Ginna did the first change out.....(m late 1980's?) During that round of change outs, some of them at other units were found broken when replaced or... broke when they were removed.....

There were also 1 or 2 cases where they activated the loose parts monitor in the SG's..and the pieces were traced b to the Split pins.....Ginna has some cases documented in the arguments to change the bolts. (Internal cost benefit/consequence type analysis)

Also...the organization overseas that I mentioned previously has a sample plant inspection program.....when I left G we were using some of their results in our examples of why Ginna should change.....they had less hours then Ginna....but ...could fit the probe up inside the bottom of the opening in the upper core plate, and do UT.

Recall that the UT probe has to fit into the compressed slot of the split pin after it is in the hole....not all pins can accommodate the probe insertion.....depends on spread after pin installed. (Re-inspection interval had not basis eit

The sample plant in Europe, had "something" (what they called Shadows) show up in there inspection results....that that time, still were still trying to decipher...as the shadow was in an area where the probe was not qualified to look.....but they knew "something" was there....

Last I heard after interaction with us at Ginna, they had requested a bid to estimate replacement?????

NOT sure where it ended up???

Thus my comment if someone has a contact over there, I would get an update form them on the latest experience. had many plants with that type pin.

Hope this helps Jeff.....Al

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**From:** Poehler, Jeffrey

**Sent:** Friday, June 22, 2012 4:52 PM

**To:** Butcavage, Alexander; Cheruvenki, Ganesh; Hiser, Allen; Purtscher, Patrick; Medoff, James; Rogers, Billy; Widrev Dan

**Cc:** Vias, Steven

**Subject:** RE: Background--Kewanee RAI-MRP-227-A

So if they are so difficult to inspect, how was the cracking initially found?

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Jeff

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**From:** Butcavage, Alexander

**Sent:** Tuesday, June 19, 2012 8:28 PM

**To:** Cheruvenki, Ganesh; Hiser, Allen; Poehler, Jeffrey; Purtscher, Patrick; Medoff, James; Rogers, Billy; Widrevitz, Di

**Cc:** Vias, Steven

**Subject:** RE: Background--Kewanee RAI-MRP-227-A

Ginna did replace split pins in 2011...as I heard....it went pretty well...They were suppose to give a few to DOE and E to play with for 60-80 year life...not sure if that happened....

Do we know basis for the pins being considered core support structure?????

Are they specifically listed in the ASME tables??? (NO Access this week in training offsite)

As I recall, the functions of the pin is to provide lateral support to the lower end of the CRGT. For RGE design, (oth may be different) ....as I recall there is an indentation in the top surface of the upper core plate that would keep the lower end of the CRGT in place if the split pin sheared off.

My reason for wanting to change pins at Ginna was the fact that a loose part (nut or piece there-of)...had the POTEI to go to SG and not sure where from there...depends on size.....of piece that breaks off....plus they were 20 years old....which at that time plants at Edf were seeing "something" on pins with less time.

NOT SURE IF THE W calcs takes any credit for the CRGT's column taking Upload from core on the CRGT column....o does all upload go through the other rigid supports columns (no CR's) that support the top hat???

Now to the inspection part....you can only see the lower edge of the pin with VT and make sure pin is there....throug bottom of the hole in the upper core plate when the upper internals are lifted form the vessel to the stand or stand i vessel....with sub-marine camera.

Areva claims they can inspect with UT using a blade probe from below....by inserting the probe up into the slot of the split pin.....but depends on size of the slot....I never bought that argument as there was conflicting views on if you could inspect the entire area of interest.....Also...when do you have to re-inspect....????

Ask Edf if you have any connections there....they were going to look into this more when I left Ginna last year.... so they probably know the latest. I have a contact name at home someplace....

I know Ginna did check to see if they could see pins as the upper internals were moved.....ask them to see pics....as recall we had a few that were made from the sub video...just to show you could see them. Don't see why they would continue to perform that check.....I think they changed to risk informed ISI...but don't think that impacts what they are going forward on internals.....

Note you can also see split pins towards outer row from above upper core plate ....nuts and top end of pin....but limited to outer rows area...

Hope this helps...AL

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**From:** Cheruvenki, Ganesh

**Sent:** Saturday, June 16, 2012 7:16 AM

**To:** Hiser, Allen; Poehler, Jeffrey; Purtscher, Patrick; Medoff, James; Rogers, Billy; Widrevitz, Dan

**Cc:** Butcavage, Alexander

**Subject:** Background--Kewuanee RAI-MRP-227-A

All—

Please discard the previous e-mail on this item, instead read the attached file particularly, the item in bold fonts. I think Jim may be right on this issue. I will set up a meeting to discuss this item next week. We need to make a decision whether split pins come under the ASME Code, Section XI program. The following plants are affected.

Indian Point, North Anna, Robinson, Ginna, Palisades, Point Beach, Turkey Point, and Surry