

## NRR-DMPSPeM Resource

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**From:** Buckberg, Perry  
**Sent:** Thursday, November 30, 2017 12:23 PM  
**To:** Frehafer, Ken  
**Subject:** RE: Reactor Vessel Internals (RVI) Aging Management Plan (MF6777 & MF6778) - Talking Points for Today's Phone Call  
**Attachments:** NRC Questions PSL Reactor Vessel Internals Aging Management.pptx

Thanks Ken.

As a result of this morning's clarification call, the staff understands that FPL will be providing information to supplement the 2/26/2016 response to RAI-MF6777/MF6778-EVIB-01, and the 3/6/2017 response to RAI-MF6777/MF6778-EVIB-06.

Thanks,

**Perry Buckberg**

Senior Project Manager  
phone: (301)415-1383  
[perry.buckberg@nrc.gov](mailto:perry.buckberg@nrc.gov)  
U.S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Mail Stop O-8B1a  
Washington, DC, 20555-0001

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**From:** Frehafer, Ken [mailto:Ken.Frehafer@fpl.com]  
**Sent:** Thursday, November 30, 2017 10:10 AM  
**To:** Buckberg, Perry <Perry.Buckberg@nrc.gov>  
**Subject:** [External\_Sender] Reactor Vessel Internals (RVI) Aging Management Plan (MF6777 & MF6778) - Talking Points for Today's Phone Call

Perry,

We are providing some handouts for the call.

See you at 11:30.

*Ken Frehafer*

Licensing Engineer  
(772) 467-7748

**Hearing Identifier:** NRR\_DMPS  
**Email Number:** 14

**Mail Envelope Properties** (Perry.Buckberg@nrc.gov20171130122200)

**Subject:** RE: Reactor Vessel Internals (RVI) Aging Management Plan (MF6777 & MF6778) - Talking Points for Today's Phone Call  
**Sent Date:** 11/30/2017 12:22:50 PM  
**Received Date:** 11/30/2017 12:22:00 PM  
**From:** Buckberg, Perry

**Created By:** Perry.Buckberg@nrc.gov

**Recipients:**  
"Frehafer, Ken" <Ken.Frehafer@fpl.com>  
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NRC Questions PSL Reactor Vessel Internals Aging Management.pptx			56142

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# NRC Questions PSL Reactor Vessel Internals Aging Management Plan

11/30/2017

# Question #1

RAI-MF6777/MF6778-EVIB-01 (2/26/16 FPL Response - ML16063A006) - *The information in the response related to the components for which inspections are waived due to having a fatigue time-limited aging analysis (TLAA) is inconsistent with the License Renewal Application (LRA). The only RVI component with a fatigue TLAA is the core barrel cylinder in LRA Section 4.6.3. However, the RAI response includes that a fatigue evaluation was performed for other RVI components which were not in the LRA. Was the analysis performed at a later time and not a part of the LRA Licensing Basis (at the time), or it did not meet the criteria for a TLAA.*

## FPL Response

- Fatigue evaluations of other reactor vessel internal components were performed and were documented in the Extended Power Uprate (EPU) LAR submittal.
- Attachment 5 of EPU LAR submittal lists components.

## Question #2

RAI-MF6777/MF6778-EVIB-06 (3/6/17 FPL Response - ML17075A194) – In the response, FPL proposed plant-specific modifications to MRP-227-A for components at St. Lucie which experience higher fluence than what was analyzed in MRP-227-A. The core barrel cylinder is an expansion component that FPL determined to be susceptible to irradiation assisted stress corrosion cracking (IASCC). Expansion components are linked to other primary components which are examined to ensure that degradation due to certain mechanisms are non-existent. The primary component that the core barrel cylinder is linked to does not have IASCC as a mechanism, which means that it will never be examined for IASCC. Shouldn't the primary link be something for which IASCC is a possible degradation mechanism?

### FPL Response

- Core Support Barrel Upper Cylinder (Expansion Component) screened in for IASCC.
- Core Support Barrel Upper Flange Weld (Primary Link) did not screen in for IASCC.
- Potential to link the Core Support Barrel Upper Cylinder to another Primary Component with IASCC as the Degradation Mechanism.
  - Core Shroud Plate-Former Plate Weld (Primary Link)
  - Core Support Barrel Upper Cylinder (Expansion component)
- Core Support Barrel Upper Cylinder also remains an Expansion component linked to the CSB Upper Flange with SCC as the Degradation Mechanism.