

From: Chawla, Mahesh
Sent: Wednesday, April 10, 2013 5:08 PM
To: Alan I Hassoun
Cc: Hardgrove, Matthew; Parks, Benjamin; Grover, Ravinder; Widrevitz, Dan
Subject: Request for Additional Information - Fermi 2 - LAR - MF0446 - To Relocate Pressure and Temperature Curves to a PTLR

Sam,

I am retransmitting the following message since the numbering of notes in the previous message was not correct:

By letter dated December 21, 2012 (ADAMS Accession No. ML13004A134), Detroit Edison Co. submitted a license amendment request for Fermi 2 for proposed LAR to relocate Pressure and Temperature Curves to a PTLR. The NRC staff has identified the following additional information which you need to provide in order for them to complete the review. Please arrange a teleconference with the NRC staff to discuss the subject information:

1. Use of Integrated Surveillance Program Data

Page 2 of Enclosure 1 to the December 21, 2012, license amendment request states, "The latest information from the Boiling Water Reactor Vessel and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) that is applicable to Fermi 2 has been utilized."

Please provide additional information:

- Provide specific reference details for the latest information, to which the above statement refers. If it is not available to the NRC, please submit it.
- Explain how this information is applicable to Fermi 2.
- Explain how the information has been utilized.

2. Assumptions Used in Fluence Calculations

The information in the following table summarizes significant assumptions regarding the flux over discrete exposure periods, and is developed using data on Page 2 of Enclosure 1 to the December 21, 2012, license amendment request:

Object	Exposure Period	Power Level	Operating Assumption
P/T Curve	12.04 EFPY [1]	3430	CLTP [2]
P/T Curve	19.96 EFPY	3952	EPU [3]
WLI [4] Nozzle	3.228 EFPY	3293	OLTP [5]
WLI Nozzle	16.35 EFPY	3430	CLTP
WLI Nozzle	10.59	3486	MUR [6]

1. Explain whether, for any of the above exposure periods, reactor vessel neutron fluence was calculated using any methods other than the referenced General Electric-Hitachi analytic methods described in NEDC-32983P-A.
2. For the above exposure periods, explain whether a generalized core flux source was assumed, or whether cycle-specific flux distributions were assumed.
3. A measurement uncertainty recapture (MUR) uprate relies largely on analyses that are unaffected by the increase in power level, because the assumed power level includes an uncertainty that bounds both pre- and post-MUR core powers. Explain how the MUR assumptions in the fluence analysis differ from the CLTP assumptions, and whether the uncertainty analysis for the reactor vessel neutron fluence is affected by these assumptions.

[1]

- Effective full-power years
 - ² Current licensed thermal power
 - ³ Extended power uprate
 - ⁴ Water level instrument
 - ⁵ Original licensed thermal power
 - ⁶ Measurement uncertainty recapture
-
-

- [\[1\]](#) Effective full-power years
- [\[2\]](#) Current licensed thermal power
- [\[3\]](#) Extended power uprate
- [\[4\]](#) Water level instrument
- [\[5\]](#) Original licensed thermal power
- [\[6\]](#) Measurement uncertainty recapture