

2.206 PETITION REVIEW BOARD SUMMARY

2.206 Petition on Nine Mile Point Nuclear Station, Unit 1 - 319980733

1. The NRR 2.206 Petition Review Board (PRB) met on 12/18/98 at 2:30 p.m. at O-11-B-2.

GREEN TICKET NO.: G19980733

2. FACILITIES/ORGANIZATIONS: Nuclear Information and Resource Service
3. DATE OF PETITION: December 14, 1998
4. Present at the meeting were:

F. Hebdon, PRB Chairman
R. Subbaratnam, 2.206 Coordinator
S. Singh Bajwa, PDI-1
D. Hoefling., OGC
J. Cushing, PDI-1

5. Facility: Nine Mile Point Nuclear Station, Unit 1 (NMP1)
Niagara Mohawk Power Corporation (NMPC)
6. Petition discussed: Petition request from Paul Gunter, et al., to William Travers, EDO, NRC, dated December 14, 1998.
7. Petitioner's requests:

Petitioner requests that NRC convene a public hearing to consider revocation of the NMP1 operating license based on the following new information for which petitioner claims:

- a. NMPC's conclusion for continued operation before reinspecting the core shroud is based on an analytical model for crack growth rate that is non-conservative because it is based on unirradiated base metals not representative of in situ metal found in the core. The depth of the crack measured during RFO-14 was less than when measured during RFO-13. Some foreign reactors have replaced shrouds or discontinued operation rather than repairing the shrouds.
- b. NMPC's model for crack growth rate is non-conservative because it relies upon a single inspection data point of the vertical cracking. No observed field data on vertical weld cracking is available to support an understanding of the degradation mechanism. NMPC's back-calculation to the onset of

cracking is non-physical and is based on pure speculation about crack initial conditions.

- c. NMPC indicates that cracks have moved outside of the Heat Affected Zone along vertical welds; this constitutes an unreviewed safety issue because it represents a new and unanalyzed challenge to the structural integrity of the shroud not bound by the current safety evaluations.
 - d. By deferring its mid-cycle inspection, NMPC has contradicted BWROG's 1994 advice that "Shroud cracking is a signal to reevaluate, in more detail, the potential for cracking in other vessel internals." Petitioner contends that an accurate, predictive empirical model on IGSCC should be developed.
 - e. Shroud cracking is an unqualified risk to public health and safety because the NRC has not published the risk factors for core shroud cracking (i.e., supplemented GL 94-03 and NUREG-1544), assessed the level of risk as a function of the extent of shroud cracking, nor determined the extent of shroud cracking that represents an unacceptable safety risk.
8. The petition request was determined not to meet the 10 CFR 2.206 criteria.
9. The basis for the above determination is as follows:

The request is not for immediate revocation of the operating license of the licensee, but rather, the request is for convening a public hearing to consider revocation of the operational license of the licensee's Nine Mile Point Unit 1. Hence, the screening criteria as detailed in Management Directive 8.11 Part III for Informal Public Hearing were considered.

The NRC staff had earlier conducted a meeting near the site to hear from the public on April 14, 1997, before acting upon the licensee's request that NRC approve restart and operation for 10,600 hours with the existing shroud (Meeting Summary dated April 25, 1997) and the staff approved the request by letter and SE dated May 8, 1997. Similarly, the NRC staff conducted a meeting near the site on September 24, 1998, to hear from the public before acting upon licensee's request to defer the mid-cycle reinspection of shroud vertical welds until 14,500 hours (Meeting Summary dated November 13, 1998). The staff approved the extension request by letter and SE dated November 2, 1998.

Thus the Issues raised in the petition had been adequately discussed during these meetings and/or in the NRC staff's letter and SE approving NMPC's requests, including related topical reports regarding the inspection and evaluation of BWR core shrouds and other vessel internals. The PRB concluded that the petition does not contain information not previously known or considered during the NRC staff's

review leading to the request for informal hearing. Thus the petition was considered not qualified to be a 2.206 petition.

The PRB recommend a one-step denial letter with reply explaining the prior consideration given to these issues.

10. The board determined that there is no need for OI or OE involvement.
11. The following resolution plan and schedule were approved as low priority and will be handled within the guidelines of Management Directive 8.11:

Activity

Due Date

One Step Denial Letter

February 15, 1999

12. The bases to resolve this petition are as follows:

Not Applicable

13. The licensee has stated that they will place information on the docket to provide insights to NRR regarding the petitioner's concerns.

14. Prepared by:

Ram Sully
Petition Review Board Coordinator

12/31/98
Date

15. Approved by:

Frederick J. Webb
Chairman, PRB

12/31/98
Date