

JUL 6 1981

MEMORANDUM FOR: Richard H. Vollmer, Director  
Division of Engineering

FROM: Joseph Halapatz  
Materials Engineering Branch, DE

SUBJECT: DIFFERING PROFESSIONAL OPINION RELATED TO SENSITIZATION  
OF BWR STAINLESS STEEL WELDMENTS

This memorandum outlines plans for developing definitive information to characterize metallurgically the propensity for IGSCC of BWR austenitic stainless steel weldments. The plans are submitted in compliance with the Memorandum, Vollmer to Halapatz, dated June 26, 1981.

The definitive information will be developed from the review of General Electric weld procedures used to weld components not addressed by NUREG-0313, such as reactor internals and potential non-conforming material, the replacement of which would likely result in undue hardship.

The purpose of the review is to identify potential problem weldments, i.e., those fabricated using high weld heat inputs, for which inservice surveillance would be in order.

Within this context, the weld procedures which will be reviewed, will include those used in the fabrication of reactor internals:

1. Core Plate
2. Top Guide
3. Steam Separator Assembly
4. Steam Dryer Assembly
5. Core Spray Line
6. Feedwater Sparger
7. Core Shroud
8. Control Rod Guide Tube Assembly
9. Core Spray Sparger
10. Jet Pump Assemblies
11. Orificed Fuel Supports
12. Weld Fabricated Non-Code Reactor Internals

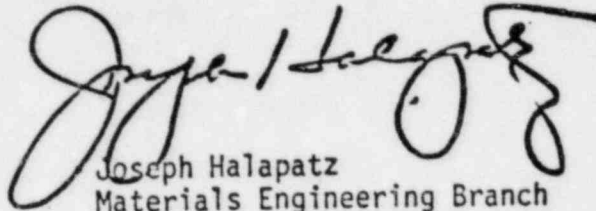
Other weld procedures which will be reviewed will include those used in the fabrication of installed large diameter pipe and concrete embedded flued heads, the replacement of which would likely result in undue hardship.

Findings developed from the review will consider the metallurgical characterization of the weldments of interest with respect to propensity to IGSCC and the consequences of failure in establishing an assessment of overall safety significance.

Richard H. Vollmer

- 2 -

It is recommended that the review be performed jointly with a cognizant GE core design and a materials/welding engineer. It is estimated that the review can be performed most expeditiously in a two-day meeting with these personnel at GE-San Jose, where the required documentation is available.



Joseph Halapatz  
Materials Engineering Branch  
Division of Engineering,

cc: W. Johnston  
S. Pawlicki  
G. Johnson  
W. Hazelton