

January 14, 2002

MEMORANDUM TO: Don Jones
Reactor Engineer
Mechanical Engineering Branch

FROM: John Jacobson, Chief **/RA/**
Mechanical Engineering Branch
Division of Reactor Safety

SUBJECT: SPECIAL INSPECTION CHARTER FOR QUAD CITIES JET
PUMP HOLD DOWN BEAM FAILURE

On Wednesday, January 9, 2002, the licensee identified an indication of jet pump failure and shut down Unit 1. The licensee verified failure of the #20 jet pump hold down beam following disassembly and inspection of the reactor vessel on Saturday, January 12, 2002. Quad Cities is currently in cold shutdown and the licensee is assessing the condition of the remaining jet pump hold down beams and repair to jet pump #20.

Based upon the criteria specified in Management Directive 8.3 and Inspection Procedure 71153, a special inspection was initiated in accordance with Inspection Procedure 93812. The special inspection will be conducted by Don Jones, Reactor Engineer. The special inspection will be in two parts (Before Startup and After Startup) and will evaluate causal factors of jet pump #20 failure, licensee corrective actions for restart, root cause of jet pump beam #20 failure, and licensee long-term corrective action plans and generic implications. A charter was developed and is attached. The nominal duration of the Before Startup inspection is expected to be approximately three days and the After Startup inspection duration will be determined based on the development of data by the licensee.

Attachment: As Stated

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Attachment: As Stated

DOCUMENT NAME: C:\Program Files\Adobe\Acrobat 4.0\PDF Output\Quad Cities Inspection
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To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

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DATE	01/14/02	01/14/02	01/14/02	

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SPECIAL INSPECTION (SI) CHARTER

QUAD CITIES JET PUMP HOLD DOWN BEAM FAILURE

The special inspection should assess the licensee's performance, and to the extent practicable, independently validate the licensee's efforts in the following areas:

BEFORE STARTUP

1. Causal factors of Jet Pump Beam #20 failure
 - a. Preliminary metallurgical findings
 - b. Adequacy of past jet pump beam NDE (scope and techniques)
 - Site beam cracking/repair history
 - Industry cracking/repair history
2. Licensee corrective actions for restart
 - a. Adequacy of NDE (scope and techniques)
 - Demonstration of procedure and equipment/calibration
 - b. Loose part retrieval/evaluation
 - c. Adequacy of repair/replacement activities for Jet Pump Beam #20
 - Vendor evaluation
 - Material/heat treatment
 - Design

AFTER STARTUP

3. Justification for continued operation of Quad Cities Units 1 and 2 and Dresden Units 2 and 3
4. Root cause of Jet Pump Beam #20 failure
5. Licensee long-term corrective action plans and generic implications
 - Failure location/cause
 - Vendor/industry inspection scope/technique
 - Limitations of NDE
 - Beam replacement design

Charter Approval

_____/RA/_____
Chief, Mechanical Engineering Branch, DRS

_____/RA/_____
Director, Division of Reactor Safety