



**Pacific Gas and
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PG&E Letter DCL-05-152

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-275, OL-DPR-80
Diablo Canyon Unit 1
ASME Section XI Inservice Inspection Program Relief Request NDE-SLH

Dear Commissioners and Staff:

Pursuant to 10 CFR 50.55a(g)(5)(iii), Pacific Gas and Electric Company hereby requests NRC approval for Inservice Inspection Relief Request NDE-SLH.

This request for relief is associated with reactor vessel lower shell-to-bottom head circumferential weld examinations performed during Diablo Canyon Power Plant (DCPP) Unit 1 Refueling Outage 13. A similar relief request is expected to be required for DCPP Unit 2 Refueling Outage 13, scheduled for spring 2006.

The bases for the requested relief for the reactor pressure vessel weld examinations are provided in Enclosure 1.

Sincerely,


James R. Becker

mjrm/4557/A0632940

Enclosure

cc: Diablo Distribution
cc/enc: Edgar Bailey, DHS
Bruce S. Mallett, Region IV
Terry W. Jackson, Senior Resident Inspector
Alan B. Wang, NRR
State of California, Pressure Vessel Unit

A047

**INSERVICE INSPECTION (ISI) RELIEF REQUEST NDE-SLH
In Accordance with 10 CFR 50.55a(g)(5)(iii)**

--Inservice Inspection Impracticality--

1. ASME Code Component Affected

Diablo Canyon Power Plant (DCPP) Unit 1 reactor vessel lower shell-to-bottom head circumferential weld.

2. Applicable Code Edition and Addenda

ASME Section XI, 1989 Code Edition without Addenda.

3. Applicable Code Requirement

Table IWB-2500-1, Category B-A, Item B1.11, requires that the reactor vessel shell-to-bottom head weld (Unit 1 weld number 10-442) be volumetrically examined once at or near the end of the interval. Essentially 100 percent of the weld volume is required to be examined as shown in Figure IWB-2500-1, using the acceptance standard of IWB-3510.

Relief is requested from performing a portion of the volumetric examination where access is restricted by core support lugs and the bottom head taper.

4. Impracticality of Compliance

The design of the vessel shell-to-bottom head weld precludes a portion of the required examination due to the presence of the six core barrel support lug locations. The support lugs and bottom head taper limit access of the vendor's reactor vessel examination tool to a portion of the examination volume. All areas of the weld (75.36 percent) accessible for Code volumetric examination were examined as required.

5. Burden Caused By Compliance

Providing access at this location would require redesign of the building concrete structure and the vessel insulation, and is impractical.

6. Proposed Alternative and Basis for Use

All accessible areas (75.36 percent of the required volume) have been examined as required.

A portion of the weld is physically inaccessible due to the core support lug design and the bottom head taper. All areas accessible to the vendor's examination tool have been examined as required. In addition to the volumetric examination, visual examination of the vessel interior is performed per Code Category B-N-1, and visual examination is conducted during pressure test per Code Category B-P. The partial volumetric examinations combined with the visual examinations provide continued assurance of weld integrity.

Consideration was also given to examining the weld from the vessel outside diameter. The bottom head and shell insulation in this area is not designed to be removable and the close proximity of the insulated vessel to the concrete shield wall prohibits access. As stated above, providing access at this location would require redesign of the building concrete structure and the vessel insulation, and is impractical.

7. Duration of Proposed Alternative

This relief request will be implemented during the DCCP Unit 1 second ISI interval. The examinations took place during the Unit 1 Refueling Outage 13 in November of 2005. The second ISI interval ends December 31, 2005.

This request is essentially the same as NDE-001 from the first ISI interval, which was approved in NRC letter dated December 14, 1988.