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June 18, 1980

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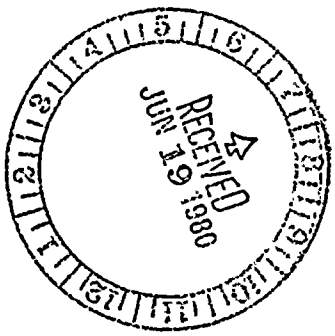

Re: Docket No. 50-275
Docket No. 50-323
Diablo Canyon Units 1 & 2

Dear Mr. Engelken:

This letter is in response to IE Bulletin 80-08, "Examination of Containment Liner Penetration Welds."

We have reviewed this bulletin as it applies to Diablo Canyon Units 1 and 2. The following are our replies to the items of information requested in the bulletin:

(1) Diablo Canyon Units 1 and 2 do utilize flued head containment penetration closures of the type illustrated in figure NE-1120-1c of the ASME B&PV Code, Section III.

(2a) The applicable code for the welds in question is ASME B&PV Code, Section VIII, Division 1, 1968 edition with addenda through Summer 1968. Regulatory Guide 1.19 (Safety Guide 19) was issued after construction was started. Although PGandE has not committed to complying with this regulatory guide, in fact PGandE has met the intent of a majority of the requirements of the guide.

(2b) Full radiographic inspection was performed on flued-head-to-penetration-sleeve butt welds. Acceptance criteria used were those stipulated in ASME Section VIII, paragraph UW-51. Radiographs were interpreted and checked by the erection contractor's Level II radiographer, a PGandE representative with a Level II certification, as well as by the third-party inspector. Periodic audits were made by NRC Region V inspectors.

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(2c) The weld joints in question were full penetration butt-welds with U-groove profiles. Backing bars were not used; consumable inserts were used. Root passes were made with the tungsten inert gas process; subsequent passes were applied with the shielded metal arc process. Materials of the flued heads were carbon steel (SA-105, Gr 2) and stainless steel (SA-182, Gr F-304). The penetration sleeve material was carbon steel (SA-333, Gr 1 or SA-516, Gr 60 with supplemental impact requirements). Sleeve diameters ranged from 8 inches to 40 inches.

(2d) The Unit 2 penetration-to-flued-head welds were all found acceptable based on radiographic examination. On Unit 1, ten welds were rejected out of a total of 53 welds. Those ten welds were subsequently repaired and accepted. The types of defects found in the welds were: consumable inserts not fully consumed; rejectable slag; rejectable porosity; lack of fusion; surface discontinuities; and suckback.

(3) No response required. Radiography was performed as described in item (2b) above.

This completes our response to Bulletin 80-08 for Diablo Canyon Units 1 and 2.

Very truly yours,

Philip A. Crane, Jr.

CC: Director
Division of Reactor Construction Inspection
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555