

F 3/22/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
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50-275/323

REC: ENGELKEN R H  
NRC

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PACIFIC GAS & ELEC

DOC DATE: 03/07/78  
DATE RCVD: 03/21/78

DOCTYPE: LETTER NOTARIZED: NO  
SUBJECT:

COPIES RECEIVED  
LTR 1 ENCL 0

DURING ROUTINE INSPECTION, A STAINLESS STEEL HANGER MEMBER WAS FOUND IMPROPERLY ATTACHED TO A STAINLESS STEEL PIPE, AND AN EXTENSIVE INVESTIGATION WAS LAUNCHED FINDING MOST HANGER MEMBERS WERE IMPROPERLY WELDED.

PLANT NAME: DIABLO CANYON - UNIT 1  
DIABLO CANYON - UNIT 2

REVIEWER INITIAL: XRS  
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\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

NOTES:  
1. J SODDER W/ICY EVERYTHING (REG V)  
F HEBDON W/ICY ENVIRON MATERIAL

CONSTRUCTION DEFICIENCY REPORT (10CFR50.55(E).  
(DISTRIBUTION CODE B004)

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INTERNAL: REG FILE\*\*LTR ONLY(1) NRC PDR\*\*LTR ONLY(1)  
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STANDARDS DEV.\*\*LTR ONLY(1) K SEYFRIT/IE\*\*LTR ONLY(1)  
~~J SODDER\*\*LTR ONLY(1)~~

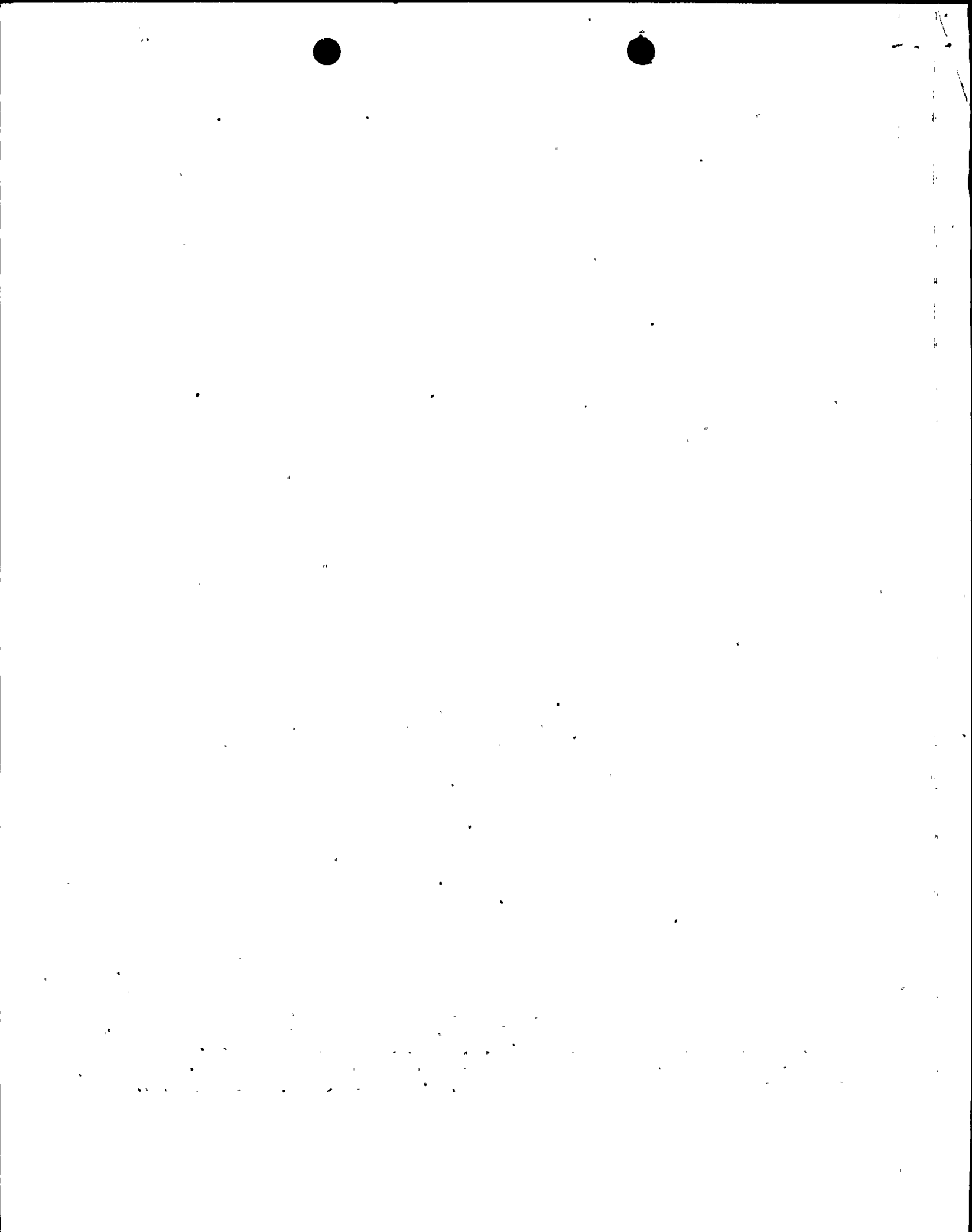
EXTERNAL: LPDR'S  
SAN LUIS OBISPO, CA\*\*LTR ONLY(1)  
TIC\*\*LTR ONLY(1)  
NSIC\*\*LTR ONLY(1)  
ACRS CAT A\*\*LTR ONLY(16)

DISTRIBUTION: LTR <sup>41</sup>~~40~~ ENCL 0  
SIZE: 3P

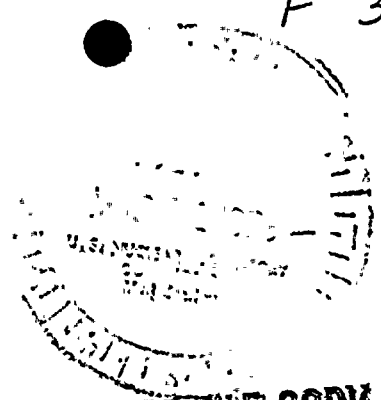
CONTROL NBR: 780810238

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\*\*\*\*\* THE END \*\*\*\*\*



F 3/22/78



March 7, 1978

REGULATORY DOCKET FILE COPY

Mr. R. H. Engelken, Director  
Office of Inspection and Enforcement  
Region V  
U. S. Nuclear Regulatory Commission  
1990 N. California Boulevard  
Walnut Creek Plaza, Suite 202  
Walnut Creek, California 94596

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

Dear Mr. Engelken:

On February 16, 1978, we notified the office of Inspection and Enforcement, Region V, that a condition discovered on pipe hanger assemblies was possibly reportable under the provisions of 10 CFR 50.55e. During routine inspection, a stainless steel hanger member was found improperly attached to a stainless steel pipe. There was inadequate penetration and evidence of sugaring on the weld root. As a result of this finding, we embarked on an extensive investigation into installation and inspection procedures utilized for field installation of piping hanger members.

The investigation revealed that most hanger member connections requiring open butt full penetration welds without weld root access were made improperly. Connections without weld root access are typically pipe or square shapes butted together or to plates. The materials connected have been stainless steel to stainless steel, stainless steel to carbon steel and carbon steel to carbon steel. The welders performing the welds were qualified to full penetration groove weld procedures but not to full penetration open butt weld procedures. This means that the welds in question are discrepant in the root pass only, since the welders were qualified for the remaining welding. The root pass on stainless steel to stainless steel and stainless steel to carbon steel welds was also discrepant since most of these welds were made without an inert gas purge. The welder root pass qualification discrepancy is common to all welds addressed in this report. Further causes of the welding discrepancies are discussed below.

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March 7, 1978

All the stainless steel to stainless steel welds are connections from process piping to hanger members. The members were properly beveled for open butt welding, but a discrepancy occurred due to the contractor's inspection and production personnel misunderstanding the welding procedure assignment on the piping isometric drawing. The isometric drawing specified welding procedure W.P. 129. Most of the work was directed and accepted to W.P. 129F which is a fillet weld procedure for stainless steel.

All the stainless steel to carbon steel welds are connections between hanger members. The process piping was not part of these connections. These welds were performed using a stainless steel to carbon steel full penetration groove weld procedure instead of an open butt full penetration weld procedure. This welding discrepancy occurred due to lack of specific weld procedure direction on the hanger process sheets. The only direction provided to inspection and production personnel was on the hanger process sheet. The process sheet did not identify a welding procedure for each connection, but instead referenced only a procedure to be used for carbon steel fillet welds which is the correct procedure for most of the hanger work.

The carbon steel to carbon steel welds are connections from process piping to hanger members and between members. The discrepant welds between the process piping and the hanger members occurred due to a misunderstanding, as occurred in the case of stainless steel to stainless steel welds. In those cases where the pipe hanger member attached to another member, the discrepancy occurred due to lack of specific weld procedure direction on the hanger process sheet. This is similar to the cause of discrepant welds between stainless steel and carbon steel.

The contractor and PGandE have prepared discrepancy reports addressing these weld deficiencies. The disposition is to reject and repair all the discrepant welds using the correct welding procedures. One hundred and thirty-three hangers require repair in Unit 1 and 159 in Unit 2. We estimate repairs in Unit 1 and Unit 2 will be complete by May 19, 1978 and August 4, 1978, respectively.

The hanger installation program has been modified to identify specifically the proper weld procedures for each pipe support. The contractor's production and inspection personnel have been instructed on welding requirements relating to piping hangers and on the use of



Mr. R. H. Engelken

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the modified hanger process sheet. The contractor is to continue instruction by means of class meetings to assure personnel understand the welding requirements.

Very truly yours,

Philip A. Crane, Jr.

CC: Director of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Service List

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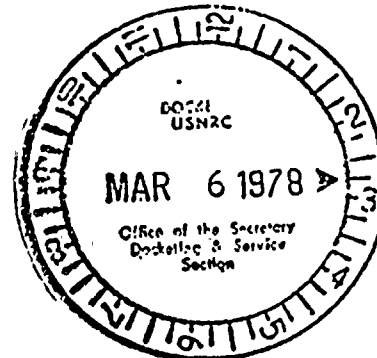
# PACIFIC GAS AND ELECTRIC COMPANY

+ 77 BEALE STREET SAN FRANCISCO, CALIFORNIA 94105

BARTON W. SHACKELFORD  
EXECUTIVE VICE PRESIDENT

February 28, 1978

Mr. Edson G. Case, Acting Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Phillips Building  
7920 Norfolk Avenue  
Bethesda, Maryland



Re: Dockets 50-275-OL - 50-323-OL  
Diablo Canyon Units 1 and 2

Dear Mr. Case:

We have reviewed the letter dated February 13, 1978, circulated by L. Dow Davis setting forth a suggested hearing schedule and a statement of the proposed contentions. Comments on the proposed contentions have been sent directly to Mr. Davis. My concern is with the hearing schedule.

As circulated by Mr. Davis, the schedule shows a 30-day slip in the issuance of SER Supp 7 from the date previously agreed upon. I know of no reason for this slip and suggest that the schedule be revised to show the issuance of SER Supp 7 on April 1, 1978, the date originally agreed upon. As that date approaches we can adjust the schedule, if and to the extent necessary, but I do not believe we should automatically assume that all slips in the issuance of the SER Supp 7 are a minimum of 30 days. One additional comment is that it would be possible to shorten the interval permitted for issuance of the ACRS transcript from 11 to a more realistic 5 days. With these changes the schedule would look like this:

First depositions	(April 1)
SER Supp 7 issues	(April 1)
ACRS Subcommittee Meets	(April 14)
Full ACRS Meets	(May 12)
ACRS Committee Transcripts Issue	(May 17)
ACRS letter	(May 26)
Last interrogatories propounded and witnesses announced (17 days after ACRS transcripts issue)	(June 5)
SER Supp 8 Issues (if necessary)	(June 5 - 19)
Answers to last interrogatories due (21 days from last interrogatories)	(June 26)
Prepared testimony in hand (28 days from when last interrogatory response was due)	(July 24)
Hearing (at least 15 days from testimony in hand date, hearings commencing on a Tuesday morning)	(August 8)

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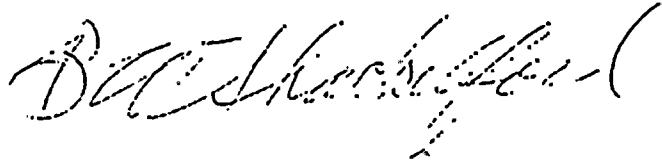
Mr. Edson G. Case

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February 28, 1978

One additional area where the schedule might be improved is in the date for the full ACRS meeting. Some time could be saved if the Committee could schedule a special meeting shortly after the Subcommittee meeting, since the key date for discovery appears to be the issuance of the transcript of the full ACRS meeting.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. E. Shoup". The signature is written in dark ink and is positioned below the word "Sincerely,".

cc: Service List