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 50-323 Diablo Canyon Nuclear Power Plant, Unit 2, Pacific Gas 05000323
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 RECIP. NAME RECIPIENT AFFILIATION
 DENTON, H.R. Office of Nuclear Reactor Regulation

SUBJECT: Forwards Revision 5. to response to NUREG-0578. Changes result from questions by NRC reviewers preparing SER.

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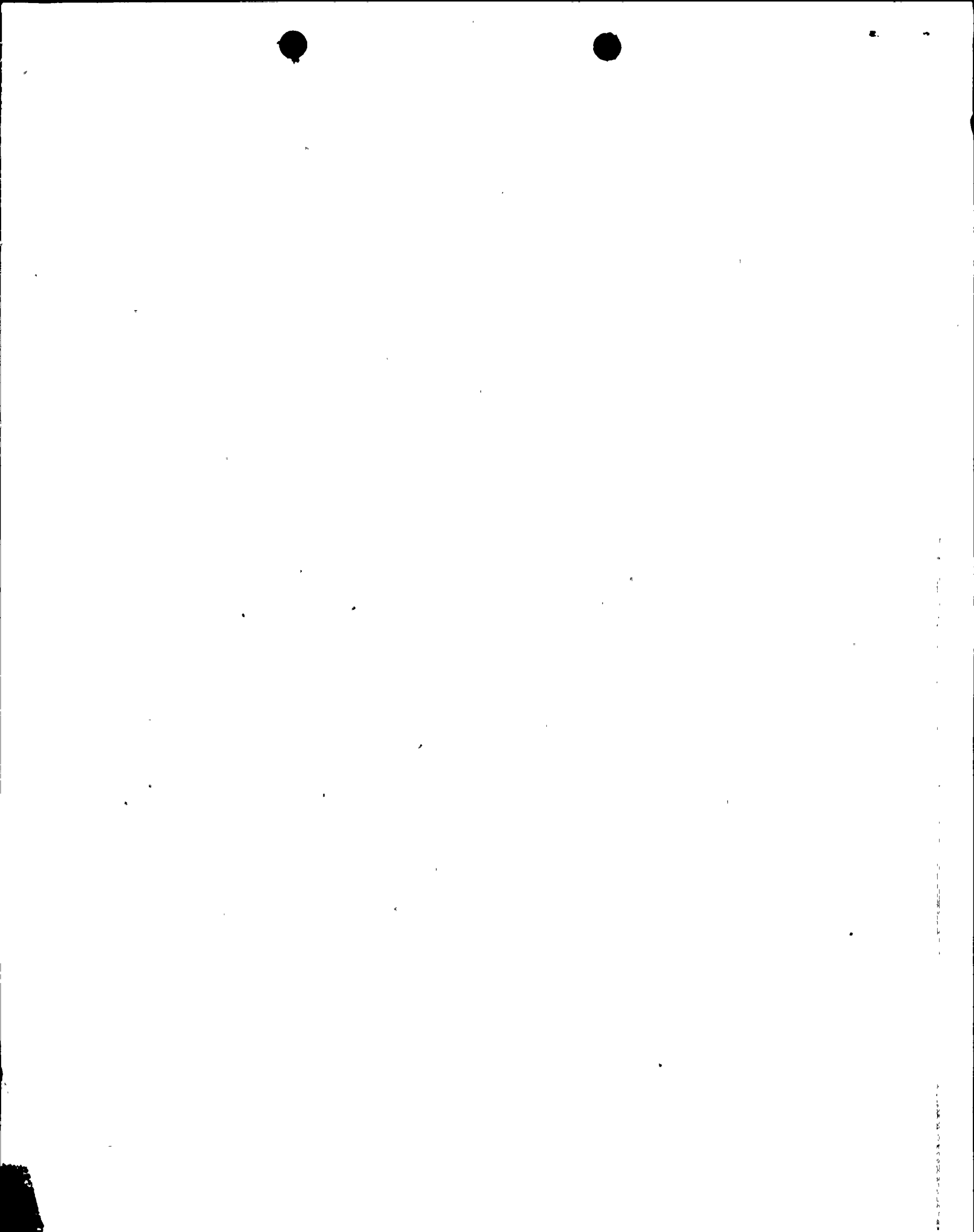
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Re: Docket No. 50-275
Docket No. 50-323
Diablo Canyon Units 1 and 2

Dear Mr. Denton:

Enclosed are 40 copies of Revision 5 to "Pacific Gas and Electric Company Response to NUREG-0578: Short Term Lessons Learned Requirements." These changes are the result of questions asked by NRC reviewers presently preparing the Diablo Canyon SER. Copies for the service list will be mailed today.

Kindly acknowledge receipt of the above material on the enclosed copy of this letter and return it to me in the enclosed addressed envelope.

Very truly yours,

Philip A. Crane, Jr.

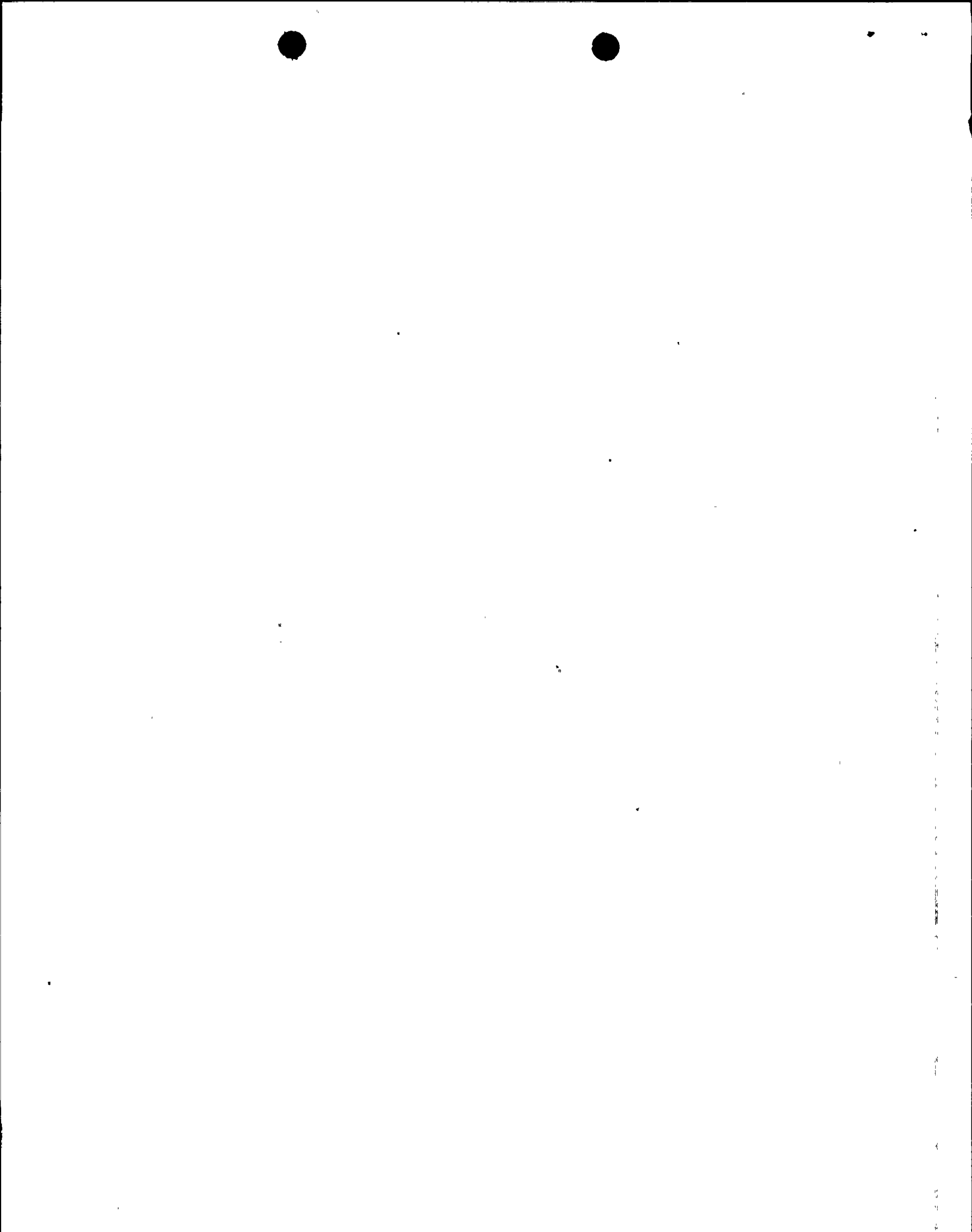
Enclosures

cc w/enc.: Service List

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INSTRUCTIONS FOR INSERTION OF
NUREG-0578 RESPONSE REVISION 5 PAGES

1. Replace the Rev. 0 pages indicated below with Rev. 5 pages:

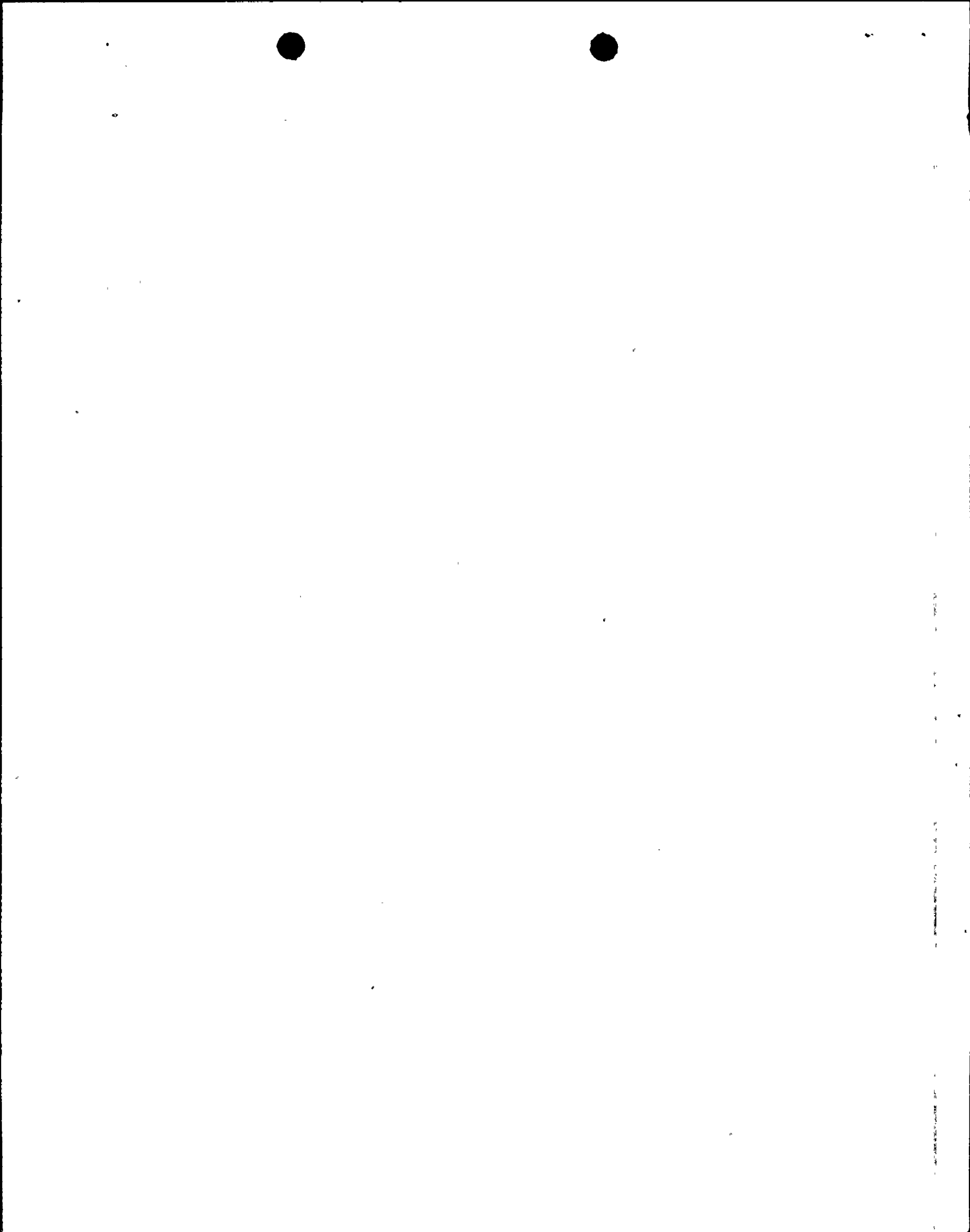
III-D-2, III-M-3

2. Replace the Rev. 4 pages indicated below with Rev. 5 pages:

I-A-1, I-A-2, III-D-4

3. Add the Rev. 5 page indicated below:

III-D-5



PACIFIC GAS AND ELECTRIC COMPANY
RESPONSE TO
NUREG-0578: SHORT TERM LESSONS LEARNED REQUIREMENTS

April 21, 1980

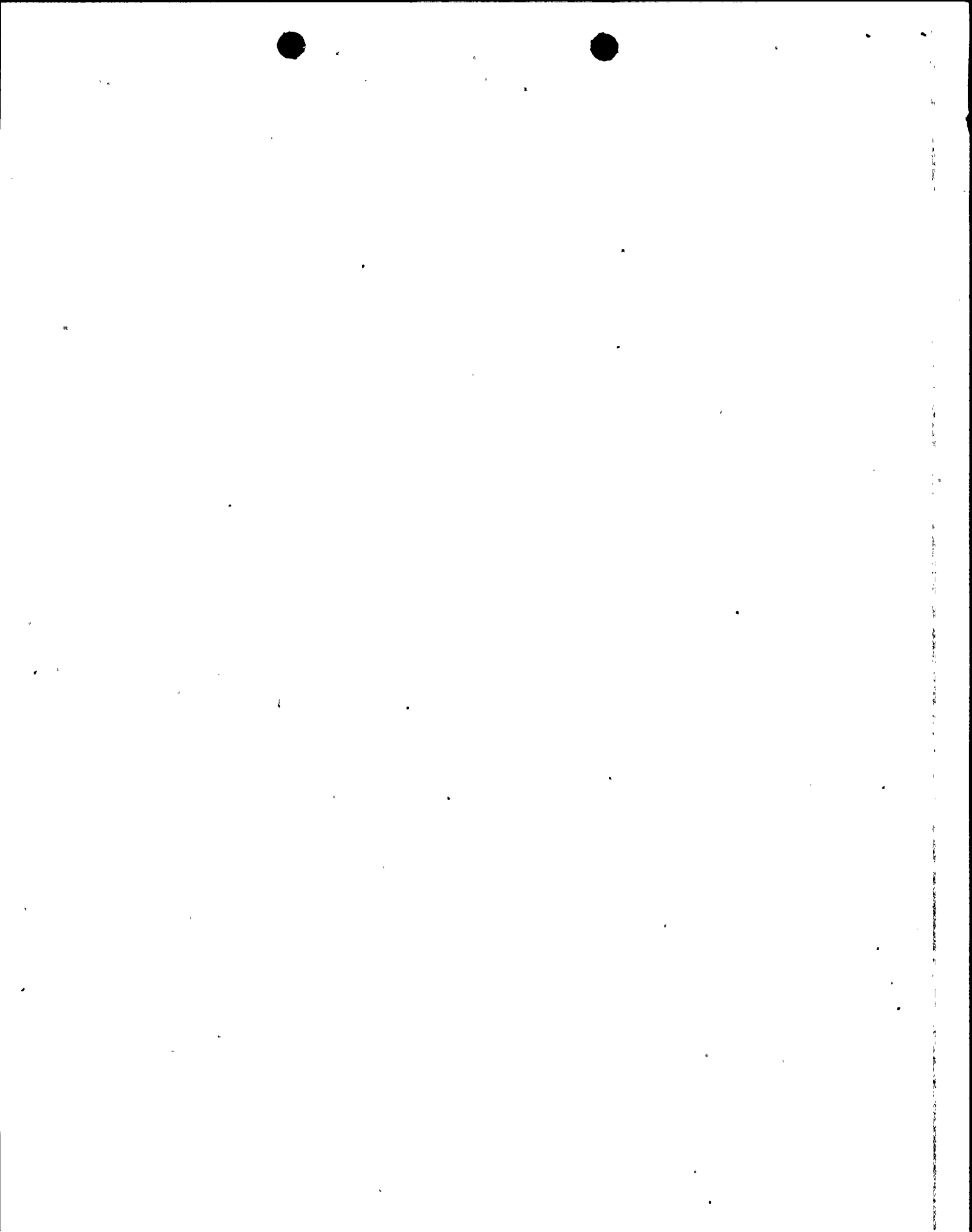
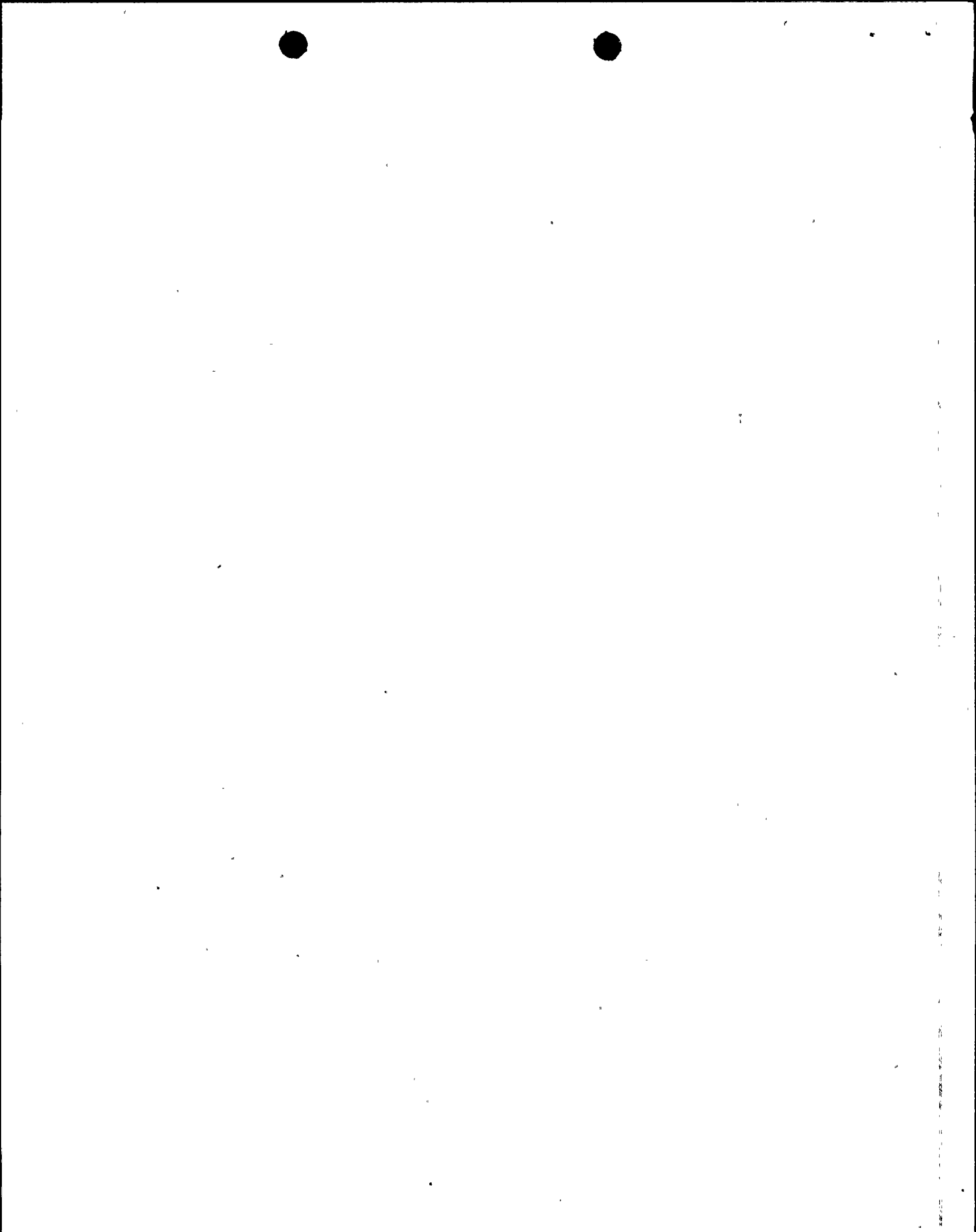


TABLE OF CONTENTS

	<u>Page No.</u>
I. Title Page and Table of Contents	I-A-1-4
II. Introduction and Summary	II-A-1-4
III. Response to NUREG-0578 and Clarifications	III-A-1
2.1.1 Emergency Power Supply Requirements for the Pressurizer Heaters, Power-Operated Relief Valves and Block Valves, and Pressurizer Level Indicators in PWR's	
A. Pressurizer Heater Power Supply	III-B-1-7
B. Power Supply for Pressurizer Relief and Block Valves and Pressurizer Level Indicators	III-B-8-27
2.1.2 Performance Testing for BWR and PWR Relief and Safety Valves	III-C-1-4
2.1.3.a Direct Indication of Power-Operated Relief Valve and Safety Valve Position for PWR's and BWR's	III-D-1-5
2.1.3.b Instrumentation for Detection of Inadequate Core Cooling in PWR's	
A. Subcooling Meter	III-E-1-10
B. Additional Instrumentation	III-E-11-18
2.1.4 Containment Isolation Provisions for PWR's and BWR's	III-F-1-15
2.1.5.a Dedicated Penetrations for External Recombiner or Post-Accident External Purge System	III-G-1-4
2.1.5.b Inerting BWR Containments	III-H-1
2.1.5.c Capability to Install Hydrogen Recombiners at Each Light Water Nuclear Power Plant	III-I-1&2
2.1.6.a Integrity of Systems Outside Containment Likely to Contain Radioactive Materials (Engineered Safety Systems and Auxiliary Systems)	III-J-1-15
2.1.6.b Design Review of Plant Shielding and Environmental Qualification of Equipment for Spaces/Systems Which May Be Used in Post-Accident Operations	III-K-1-6



Section 2.1.3.a (Continued)

4. The valve position indication should be seismically qualified consistent with the component or system to which it is attached. If the seismic qualification requirements cannot be met feasibly by January 1, 1980, a justification should be provided for less than seismic qualification and a schedule should be submitted for upgrade to the required seismic qualification.

5. The position indication should be qualified for its appropriate environment (any transient or accident which would cause the relief or safety valve to lift). If the environmental qualification program for this position indication will not be completed by January 1, 1980, a proposed schedule for completion of the environmental qualification program should be provided.

PG&E Response and Status

There are 3 PORVs and 3 safety valves on the pressurizer. The pressurizer PORV's presently have both open and close limit switches which control indicating lights mounted at their respective control switches on the main control board. The limit switches are snap acting, positive throw switches mounted on the valve yokes. They are operated by the actual valve stem motion. The indication circuits are powered from the station batteries. All devices have been seismically qualified to meet the postulated Hosgri Earthquake, and environmentally qualified for the design basis event.



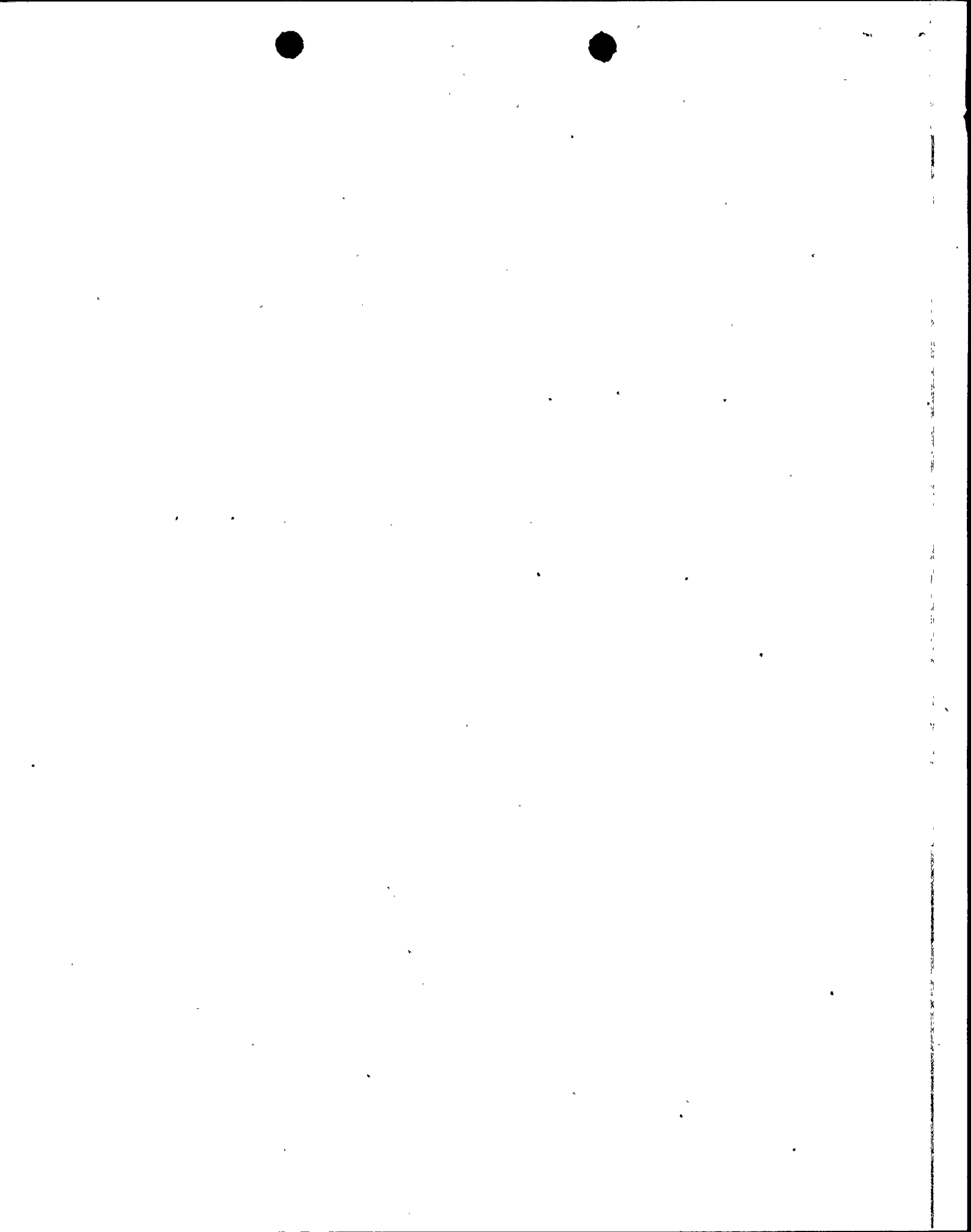
Section 2.1.3.a (Continued)

Accelerometers, acting as acoustical sensors, are to be located on the discharge piping within six inches of the valve for sensing valve flow signals. High frequency (30 KHz) signals to which the accelerometers are sensitive are rapidly attenuated in the roughly 30 feet minimum of heavy piping and supports between each valve and the common header which is twice the diameter of the discharge piping. Due to the isolation which is provided by this arrangement, crosstalk has been shown in other plants, to generally be reduced by a factor of at least 100 so that the indication of an open valve would be readily distinguished from any noise introduced by an adjacent valve. Monitor gains are adjusted so that normal background noise levels do not influence position indications. Thus the effects of any feedback are minimized.

The monitors will be safety grade. Backup indication is provided by valve discharge temperature indicators on the main control board. Devices will be environmentally and seismically qualified to IEEE Standards No. 323-1974 and No. 344-1975. The manufacturers qualification program is scheduled to be completed in late 1980.

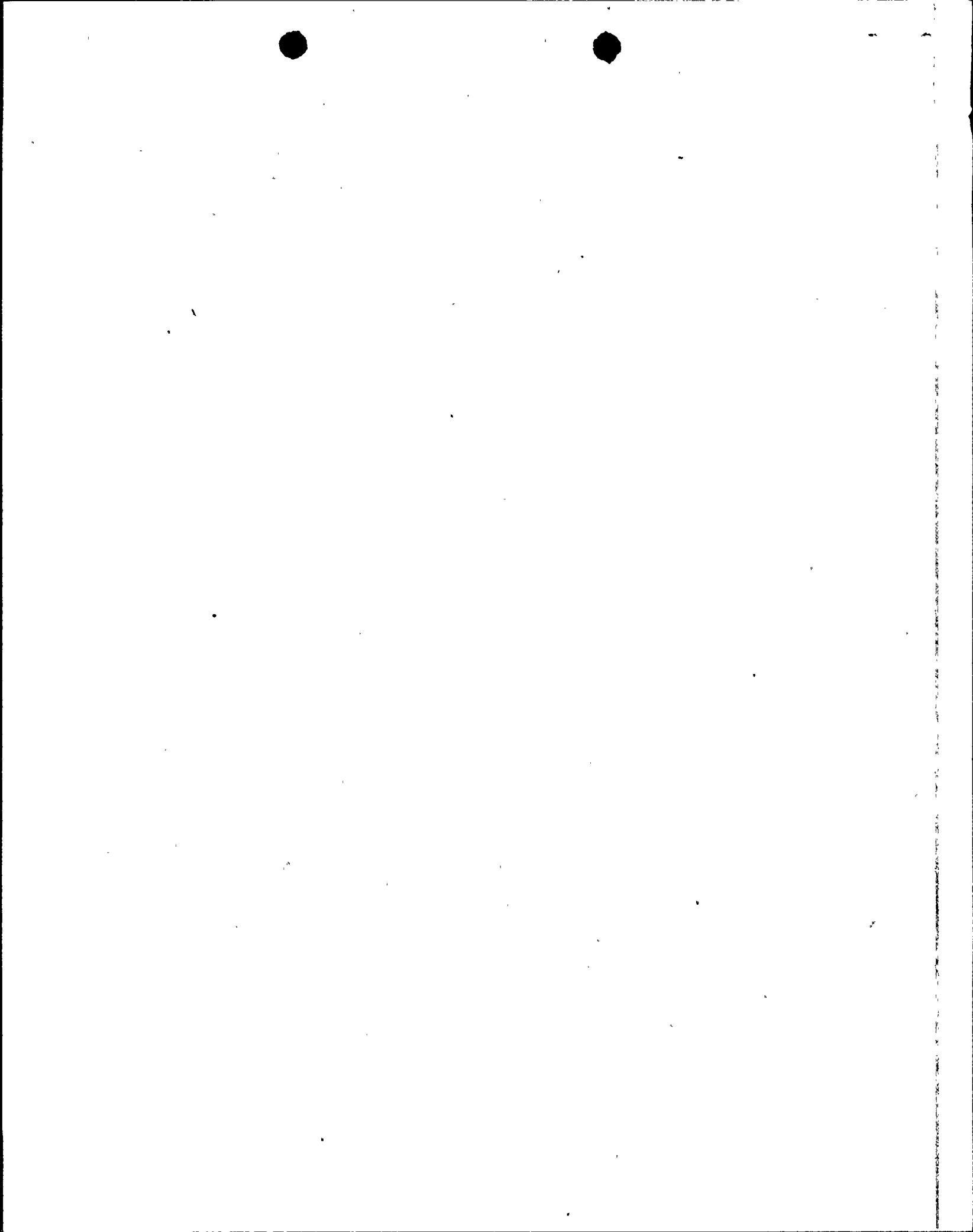
Installation is expected to be completed by June 1, 1980.

Backup indication is provided by discharge pipe temperature monitors for each safety valve and for the PORV header. Indicators are mounted on the main control board and high alarms are provided on the main annunciators.



Additionally the pressurizer relief tank is provided with pressure, level and temperature indication on the main control board, with high alarms on the main annunciator for each parameter.

The emergency operating procedures OP-0, OP-1, and OP-3, which are appended to Section 2.1.9 of this response, require that the operator verify valve position by using discharge pipe temperatures.



Section 2.1.7.b (Continued)

PG&E Response and Status for TFP 1

The Diablo Canyon design has one auxiliary feedwater flow indicator for each of four steam generators. The indicators are safety grade. Indication is provided at the main control board and the hot shutdown panel. Accuracy is +7.5% or better.

PG&E Response and Status for TFP 2

Two separate critical instrument power buses are used for the four flow indicators, with two flow indicators on each bus.

The flow from the turbine-driven auxiliary feedwater pump is monitored by the same indicators which monitor the motor-driven auxiliary feedwater pump flow.

An additional indication of auxiliary feedwater flow is provided by the safety grade steam generator wide range level indication. This provides recording on the main control board and indication on the hot shutdown panel. It is powered from the same bus as powers two of the flow indicators. See attached Figure 2.1.7.b.1.

