



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

OCT 25 1978

Docket Nos: 50-275 & 50-323

APPLICANT: Pacific Gas & Electric Company (PG&E)  
FACILITY: Diablo Canyon Nuclear Power Station, Units 1 & 2  
(Diablo Canyon)  
SUBJECT: SUMMARY OF MEETING HELD ON OCTOBER 20, 1978 TO DISCUSS  
SEISMIC QUALIFICATION DIABLO CANYON OF ELECTRICAL EQUIPMENT

We met with the applicant on October 20, 1978 in Bethesda Maryland to discuss seismic qualification of electrical equipment. A list of attendees is provided in Enclosure No. 1.

PG&E was performing a seismic reevaluation of the Diablo Canyon plant to determine what modifications were necessary to upgrade the plant's seismic resistance. As part of this program, numerous items of balance-of-plant scope electrical equipment had been retested at Wyle Laboratories to simulate the newer and more severe seismic design basis.

The purpose of this meeting was to discuss our review of the test results for this equipment. The discussions concerned our review of electrical aspects of the testing - how the equipment performance was monitored during the testing to demonstrate that the required safety functions would be accomplished. Our review of the mechanical aspects of the testing, which involves primarily the type and severity of shaking, was not discussed.

The results of the discussions are summarized in Enclosure No. 2. Of the 23 items discussed, 15 were resolved or the specific actions to obtain resolution were identified. The others remained to be resolved.

In addition to the discussion of balance-of-plant scope equipment we provided several questions regarding equipment within the scope of the nuclear steam supply system. These questions are described in Enclosure No. 3.

We also discussed a proposal to remove electrical power from certain valves.

PG&E had proposed, in a letter dated October 10, 1978, to remove electrical power from two residual heat removal system suction line valves. These

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Mr. John C. Morrissey

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were valves 8701 and 8702 in the residual heat removal system suction line from the reactor coolant system. Electrical power would be removed by opening manual circuit breakers.

The proposal had arisen from the fire protection review and its purpose was to preclude the possibility that a fire in the area of the valve's electrical cables could cause both valves to open, overpressurizing the residual heat removal system with full reactor coolant system pressure. We indicated that removing the power in this manner would be acceptable. However, redundant indication of both valves positions would be required to be available in the control room after removing the power. PG&E indicated that it would install such indication or, alternately, provide an acceptable fire protection provisions to preclude the possibility of a fire opening the valves. If acceptable fire protection provisions were made, removal of power would not be necessary.



D. P. Allison, Project Manager  
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Enclosures:  
As stated

cc:  
See next page



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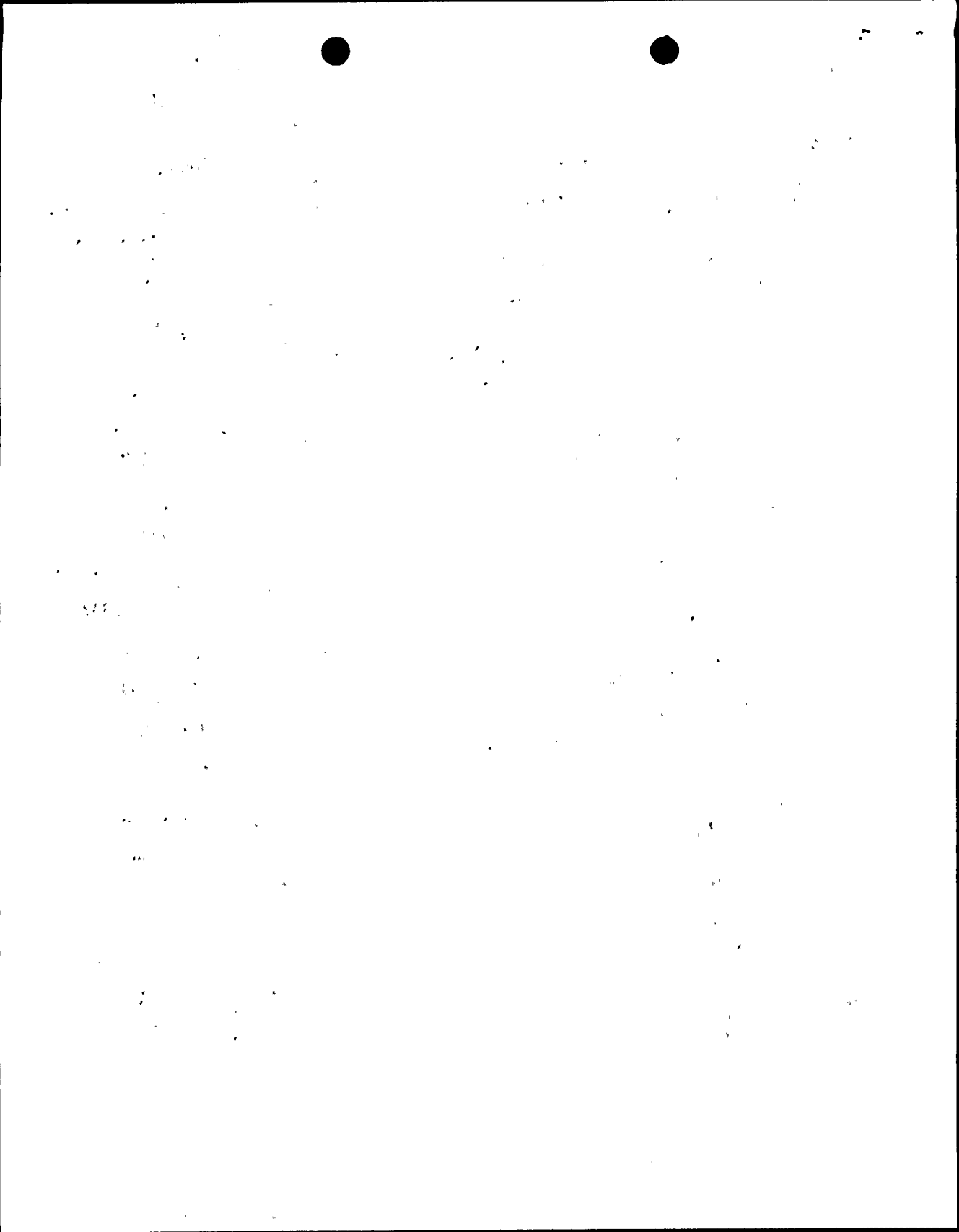
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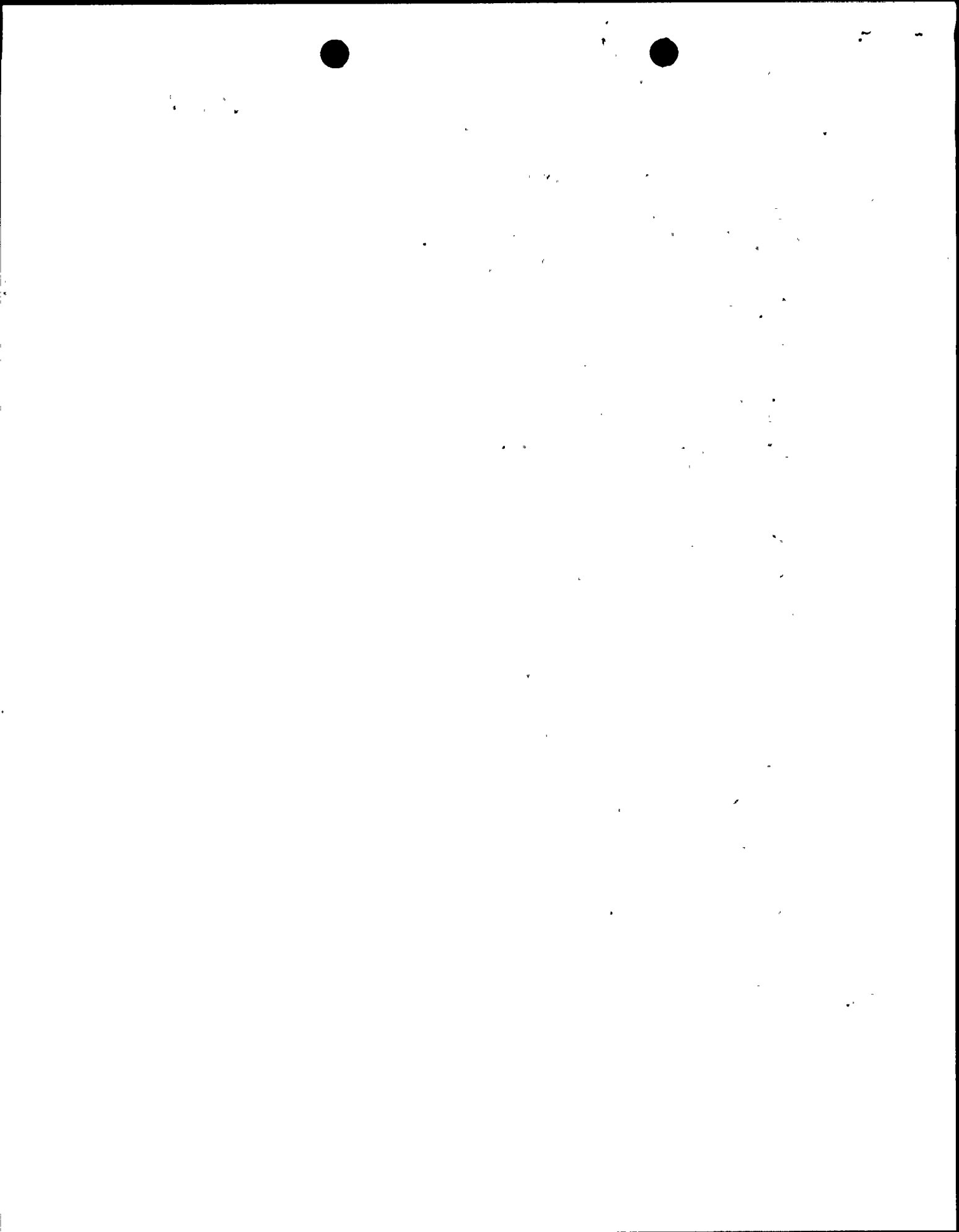
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ENCLOSURE NO. 1

LIST OF ATTENDEES

MEETING WITH PG&E ON OCTOBER 20, 1978

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F. Rosa

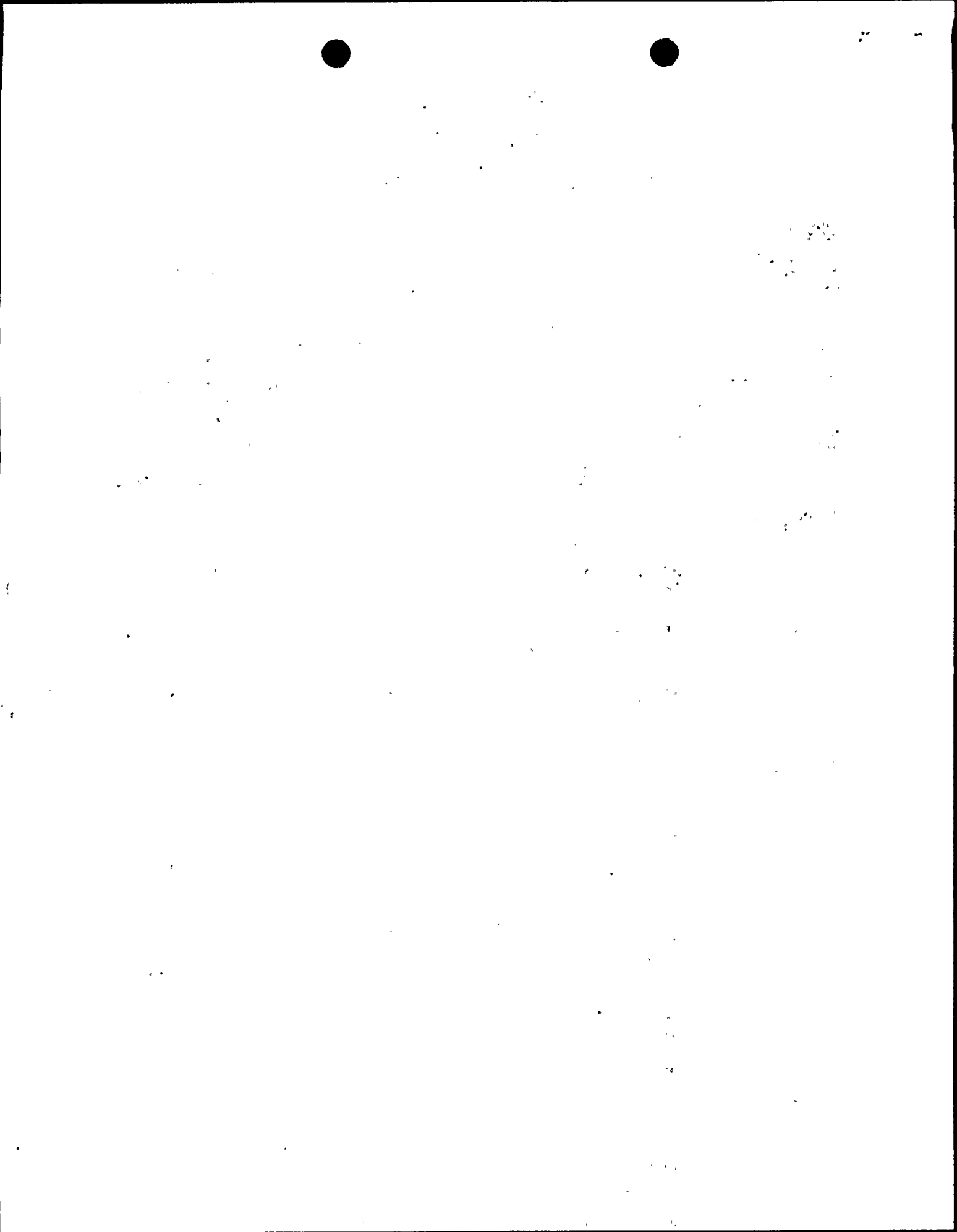
J. Knox

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PG&E

J. Hoch

J. Herbst



ENCLOSURE NO. 2

RESULTS OF DISCUSSION OF BALANCE OF PLANT EQUIPMENT

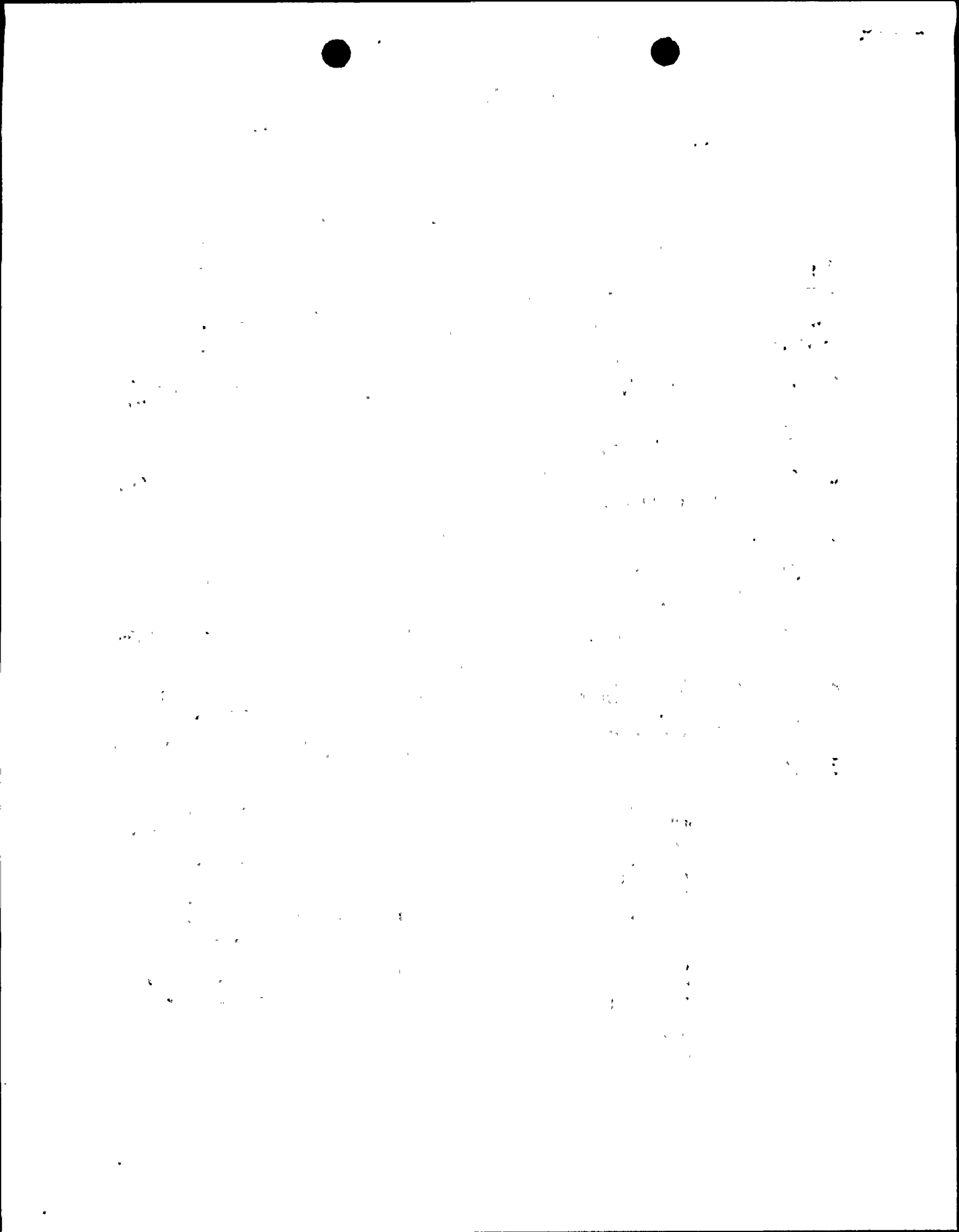
DIABLO CANYON MEETING

OCTOBER 20, 1978

The items below pertain to the Power Systems Branch review of equipment that was retested at Wiley Laboratories.

The first 15 items were resolved or the specific options to obtain resolution were identified. The remaining items were not resolved.

1. Battery - Acceptable subject to satisfactory performance on discharge capacity test. This test to be performed after returning the battery cells to the plant. PG&E to document that voltage was monitored during testing.
2. Battery Charger - Acceptable subject to another retest with monitoring of charger voltage and charging current during shaking.
3. 125 Volt DC Distribution Panel - Acceptable subject to:
  - (1) Retest of molded case circuit breakers to confirm that they do not chatter during shaking
  - (2) confirmation that the white indicating light was monitored during shaking indicating no loss of power
4. 125/250 Volt Motor Control Centers - Acceptable subject to another retest of a starting resistance contactor and a main line contactor to confirm that they do not chatter during shaking
5. Local Starters - Acceptable subject to:
  - (1) For the two speed fan starter on page 283 of the Wiley test report:
    - (a) Confirmation that the auxiliary contacts were monitored and did not chatter during shaking, or
    - (b) Submittal of an acceptable justification that the main contacts could not have chattered during shaking, or
    - (c) Submittal of the results of an analysis demonstrating that contact chatter would have no effect on the performance of the starter or the function of other safety loads, or



- (d) Another retest demonstrating that contact chatter does not occur during shaking.
- (2) Revision of the text of the FSAR description and the Wiley test report to eliminate conflicts.
- 6. Main Control Board Components - Acceptable subject to confirmation that Westinghouse VX252 indicator was within specification on calibration test after shaking.
- 7. Ventilation Control Logic - Acceptable, PG&E to revise description of safety function during shaking.
- 8. Ventilation Relay Panel - Acceptable. PG&E to revise description of safety function during shaking
- 9. Annunciator - Acceptable
- 10. Big Beam Lights - Acceptable
- 11. Namco Limit Switches - Acceptable
- 12. Fischer Controllers - Acceptable
- 13. Steam Dump Valve Controller - PG&E will rely upon qualified switches and qualified solenoid valves rather than controller. Acceptable
- 14. 4KV Switchgear Potential Transformer - Reviewed and acceptable unless rereview during SER preparation discloses an unknown problem.
- 15. Diesel Generator Excitation Cubicle - Acceptable. PG&E to document monitoring of exciter output current. PG&E to document that chattering Westinghouse SG relay has no safety function. PG&E to modify door latch to prevent door from flying open.
- 16. Diesel Generator Control Cabinet Door and Subpanel - PG&E to evaluate and verify that the devices monitored represent all safety functions. Also, PG&E to retest relays to verify they can change state during shaking.
- 17. 4KV Switchgear - Rationale for monitoring auxiliary contacts rather than main contacts of large circuit breakers acceptable. Additional information provided for review in response to previous questions.
- 18. Safeguard Relay Board - PG&E provided list of devices monitored during testing for review.



19. Vital Load Center, Reversing Starters - Some confusion as to what was monitored and what the results were. PG&E to clarify later. Also, PG&E provided further information on relay panel for review
20. Fan Cooler Motor Controllers - PG&E to address chatter in FSAR description.
21. Vital Auxiliary Relay Panel - PG&E to address chatter in FSAR description
22. Fire Pump Controller - Not yet reviewed. PG&E has provided revised description by telecopy within past week.
23. Valve Actuators With Gear Mounted Limit Switches - PG&E to submit FSAR description (as has been done previously for actuators with stem mounted limit switches)

With regard to motor starters PG&E discussed a proposed rationale to eliminate the requirement for monitoring main contacts for some starters. We agreed to consider it when specifics such as contactor types involved are identified by PG&E and the rationale is submitted.





ENCLOSURE NO. 3

QUESTIONS ABOUT NSSS SCOPE EQUIPMENT

DIABLO CANYON MEETING

OCTOBER 20, 1978

The items below pertain to the Instrumentation and Control Systems Branch review of NSSS scope equipment within the Westinghouse generic requalification program.

1. From Amendments 68 and 69
  - (a) Pages 10-27, 10-28, 10-28B, and 10-29 discuss equipment but do not identify model numbers or specific test reports.
  - (b) For Rosemont transmitters the exact type was not established to be identical to the equipment used for North Anna Unit 1. The test results do not appear to have been submitted on the Diablo Canyon docket. Additional testing similar to that done by VEPCO for North Anna Unit 1 (which is beyond the generic testing) would be required. This information could probably be acquired from VEPCO or, perhaps, handled by reference to the North Anna docket.
2. From responses to 10 draft questions
  - (a) Information promised in response to Q5A has not yet been provided.
  - (b) The staff has not received qualification information for Sostman 11901B resistance temperature detectors.



MEETING SUMMARY DISTRIBUTION

LWR 1

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Local PDR

IC

NRR Reading

LWR 1 File

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