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Docket Nos.: 50-528, 50-529  
and 50-530

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Dear Mr. Brunt:

Subject: Request for Additional Information Palo Verde, Units 1, 2 and 3

In order to complete our review of the adequacy of station electric distribution system voltages for the Palo Verde Plant, we request that you provide the additional information discussed in Enclosure 1.

The above review area has been discussed between your staff and the NRC staff at several times, during which the need for additional information was identified. The purpose of this letter is to identify the specific information needed.

Please advise us as to when you plan to respond to this request. If you have any questions regarding the request, you should contact Manny Licitra, the Licensing Project Manager.

Sincerely,

Original signed by:  
George W. Knighton

George W. Knighton, Chief  
Licensing Branch No. 3  
Division of Licensing

Enclosure:  
As stated

cc: See next page

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Palo Verde

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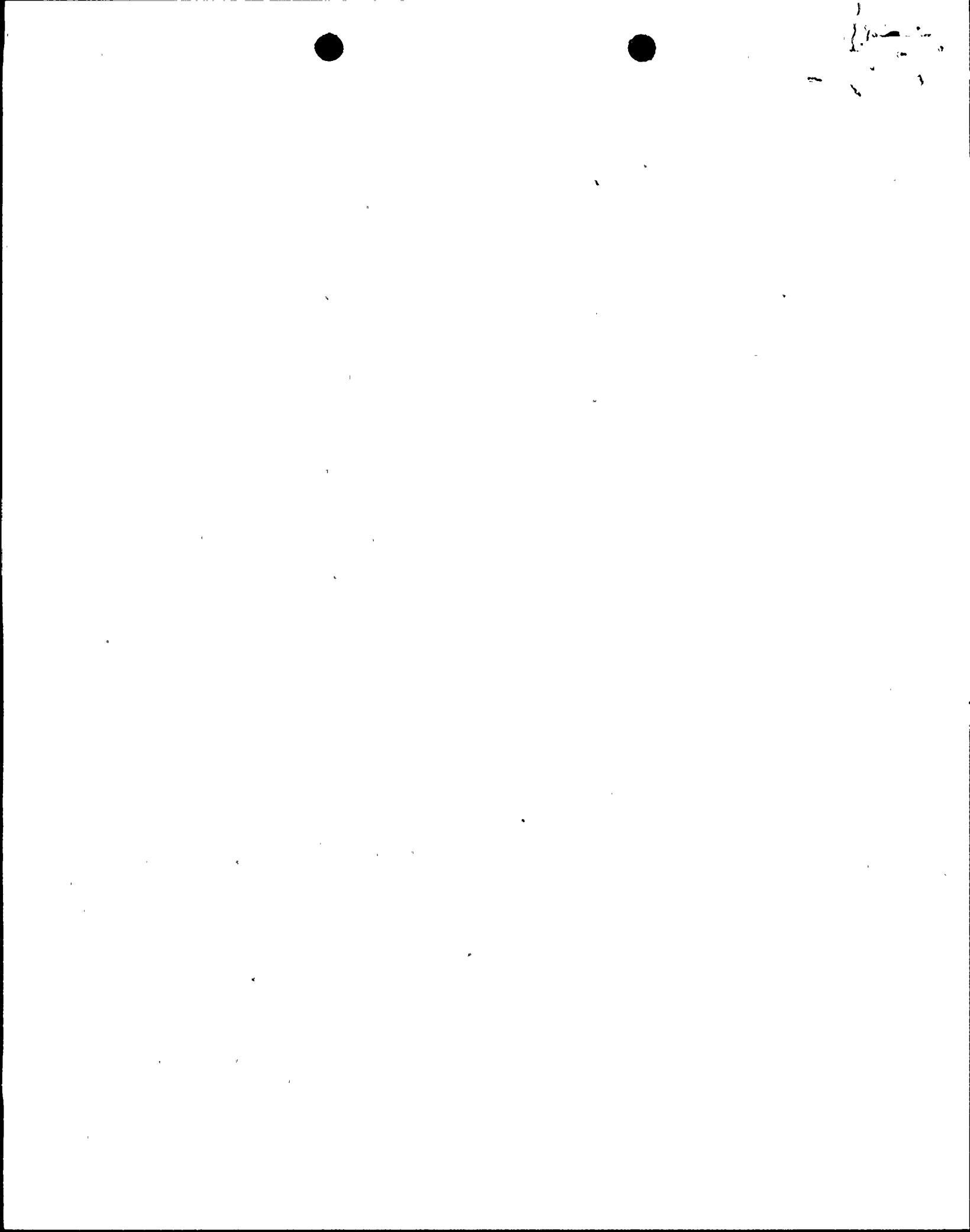
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Your response to the Palo Verde SER open item regarding the adequacy of station electric distribution system voltages is not complete. Please provide the following additional information:

1. In the Palo Verde design, the first and second levels of undervoltage protection relays are set at 68% and 90% of the design voltage, respectively. In view of these relay setpoints, address a scenario where the system voltage degrades below your ESF equipment rating i.e. 75%, but above 68% setpoint. We are concerned that ESF equipment may not start and run under these conditions during the time delay interval before the second level of undervoltage relays are activated. Provide the results of the above postulated scenario analysis.
2. The staff requires that the second level of undervoltage protection relays shall include coincident logic on a per bus basis to preclude spurious trips of the offsite power source. Describe the coincident logic for the second level of undervoltage protection relays for your design or justify the present design.
3. Your voltage regulation study submitted on October 25, 1981 for cases #12 and #13 does not include minimum loading with offsite power supply at maximum expected grid voltage as required by staff position. Modify your analysis to include this requirement. In addition, provide your commitment and schedule to perform a test to verify your analysis.