

DEC 3 1968

Reel No. 50-133

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Dr. Carroll W. Zebel, Chairman
Advisory Committee on Reactor Safeguards
U. S. Atomic Energy Commission
Washington, D. C.

Dear Dr. Zebel:

A proposed revision of Section VI.B.7 of the Technical Specifications for the Humboldt Bay Power Plant, Unit No. 3, which deals with the operating limits and requirements of the plant's electrical systems is enclosed. The issuance of the full-term operating license for Humboldt, which was reviewed by the Committee in March 1968, has been delayed by discussions between DRL and Pacific Gas and Electric (PG&E) in an effort to reach a mutually satisfactory technical specification on this subject. Full agreement has not been achieved.

PG&E contends that operation of Unit No. 3 (nuclear unit) in the event off-site power is lost should be acceptable without restriction if two sources of on-site power are available. DRL's position is that unrestricted operation of the nuclear unit must conform with the provisions of General Design Criteria No. 39 and that restricted operation may be permissible in emergency situations when the provisions of GDC-39 cannot be met. Specifically, our position requires two sources of off-site power and two sources of on-site power for unrestricted operation. When all of these normal sources of power are not available, operation for a short period of time (12 hours) would be allowed if two power sources are available, and further operation would be allowed with three power sources. Certain reporting requirements (to be to the DRL) concerning the status of the nuclear unit and the restoration of normal sources of power are included in the specification. This position should give PG&E the operational flexibility needed at Humboldt Bay, yet provides AEC with information for the timely review of operation without the normal sources of power.

We have informally discussed these technical specification requirements with PGandB, and it appears that these requirements are not acceptable to PGandB. The basis for the PGandB position is their contention that the off-site power system is not an emergency power system but rather a backup to the on-site emergency power system. Therefore, they do not believe that requirements for the off-site power system should be included in the Technical Specifications. PGandB has also indicated that, if a technical specification requirement regarding off-site power is necessary, the proposed specification is a reasonable and practical means of implementing such a requirement.

We plan to include the enclosed requirements in the Technical Specifications to be issued with the full-term operating license. We will be prepared to review this matter with you during discussion of Category B items at the December meeting.

Sincerely,

Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
Proposed revision of Section VI.B.7
of the Technical Specifications

DRL	DRL	DRL	DRL	DRL	DRL
RMVollmer:jjm	DLZiemann	RCDaYoung	BJSkovholt	FSchroeder	PAMorris
12/2/68	12/ /68	12/ /68	12/ /68	12/ /68	12/ /68

PROPOSED TECHNICAL SPECIFICATION ON OPERATING LIMITS
AND REQUIREMENTS OF ELECTRICAL SYSTEMS FOR
HUMBOLDT BAY POWER PLANT, UNIT NO. 3

VI.B.7. Electrical Systems

a. The sources of emergency electrical power normally required for operation of Unit No. 3 are as follows:

(1) Two sources of off-site power consisting of the two 115 KV transmission lines from the Cottonwood Substation supplying power to the Humboldt Substation and the four 60 KV transmission lines connecting the Humboldt Substation to the Plant 60 KV bus, and

(2) Two of the following three on-site power sources: Unit No. 1 operating, Unit No. 2 operating, propane engine-driven emergency generator operable.

Operation with less than the two off-site and two on-site sources of emergency power available shall be permitted for periods of up to twelve hours provided that two of these sources of power are available, one of which must be on-site. If the emergency generator is the sole source of on-site power, the propane engine shall be operating.

Operation beyond twelve hours with less than the normal power sources available shall be permitted provided that:

(1) At least three of the sources of power are in service, two of which must be on-site.

(2) Systems and components which are required for normal operation, the safe shutdown and maintenance of safe shutdown of Unit No. 3, even under accident conditions, are in their normal operating or normal standby condition, with no trends existing which may indicate imminent departure from normal conditions.

(3) Immediate notification of the status of Unit No. 3 operation and power restoration is supplied to CO Region V, followed by written notification to DNL and CO Region V, within 24 hours, for review of continued operation. The written notification shall include:

- (a) Description of the effort, progress, and schedule relating to restoration of the normal sources of power
- (b) Description of the increased surveillance and administrative controls in effect to assure the safety of continued operation of Unit No. 3
- (c) Description and safety significance of anomalous performance of any systems or components relating to Unit No. 3 or its operating power sources, unexplained changes in operating variables of the reactor and indication of changes in integrities of the containment and the primary coolant boundary.

Any significant changes of the information supplied in (a), (b), or (c) shall be immediately transmitted to CO Region V.

b. The ability of Unit Nos. 1 and 2 to carry house load in the event that these units are separated from the system shall be tested

at intervals not to exceed five years (one of the units shall be tested each 2½ years). Such tests shall normally be performed under initial conditions of rated load on the Unit. An in-service trip of a unit from initial conditions of greater than 50% load shall also be considered as a test.

c. The ability of the 2.4 KV bus of Unit No. 3 to automatically transfer from its house transformer to the Plant 60 KV bus shall be tested for proper transfer operation at intervals not to exceed two years.

d. The transfer of the emergency 480 volt a-c shall be tested for proper operation as specified in VI.4.b not less than once each month. This transfer shall be functionally tested with all loads connected so as to simulate emergency operation at intervals not to exceed two years.

e. The ability of the d-c system to supply the emergency short term load for the safe shutdown of the reactor shall be tested at intervals not to exceed two years.

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DISTRIBUTION:

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R. H. Vollmer-

Dr. Carroll W. Zabel, Chairman
Advisory Committee on Reactor Safeguards
U. S. Atomic Energy Commission
Washington, D. C.

Dear Dr. Zabel:

A proposed revision of Section VI.B.7 of the Technical Specifications for the Humboldt Bay Power Plant, Unit No. 3, which deals with the operating limits and requirements of the plant's electrical systems is enclosed. The issuance of the full-term operating license for Humboldt, which was reviewed by the Committee in March 1968, has been delayed by discussions between DRL and Pacific Gas and Electric (PGandE) in an effort to reach a mutually satisfactory technical specification on this subject. Full agreement has not been achieved.

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We have informally discussed these technical specification requirements with PGandE, and it appears that these requirements are not acceptable to PGandE. The basis for the PGandE position is their contention that the off-site power system is not an emergency power system but rather a backup to the on-site emergency power system. Therefore, they do not believe that requirements for the off-site power system should be included in the Technical Specifications. PGandE has also indicated that, if a technical specification requirement regarding off-site power is necessary, the proposed specification is a reasonable and practical means of implementing such a requirement.

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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

Arthur W. Felt
Director of Regulation

ELECTRICITY POWER REQUIREMENTS FOR OPERATION OF HUMBOLDT BAY POWER PLANT,
UNIT NO. 3

The Division of Reactor Licensing has been unable to reach total agreement with the Pacific Gas and Electric Company (PG&E) on the Technical Specification requirements for electrical power to accompany issuance of the full-term license for Unit No. 3 of the Humboldt Bay Power Plant. All other matters relating to the full-term license have been resolved.

PG&E contends that operation of Unit No. 3 without restriction, in the event off-site power is lost, should be acceptable if two sources of on-site power are in service. BRL's position requires two sources of off-site power and two sources of on-site power for unrestricted operation, but would allow operation for up to 12 hours if two power sources are available. Operation beyond 12 hours would be permitted if three power sources are available and certain reporting requirements (to CG and BRL) concerning the status of the nuclear unit and the restoration of the normal sources of power are met.

normal requirement is for 12 hours
if 3

The ACRS was advised of our position by letter to Dr. Waser dated December 2, 1966, a copy of which is enclosed. The ACRS stated that they had no comments on the proposed requirements for electrical power.

if legal notified of the situation and the program for restoring normal requirements is reported
guaranteed

We feel that our requirements for electrical power provide adequate operational flexibility for Humboldt Bay, and assure a satisfactory level of plant safety, and should, therefore, be issued as a part of the technical specifications. I would appreciate your concurrence with this approach.

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both of

PLM
Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
12/5/66 letter to ACRS

1) HAL 10/11

2) Chris

THE MONTPELIER — Richmond and Lehigh
L. P. ENCE — College House
THE GREAT — Mount College

I feel that our staff is not fully
in accord with present version of
#39 — or with this letter.

I have tried to set up staff
discussions but thus far have failed.

CKB
Oct 10

Ed Core What is status
of this?

CKB
Nov 22

THE MONTPELIER — Richmond and Lehigh
L. P. ENCE — College House
THE GREAT — Mount College