

April 29, 1985

Docket No. 50-219
LS05-85-04-041

Mr. P. B. Fiedler
Vice President & Director
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

Dear Mr. Fiedler:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOLLOWING PRELIMINARY STAFF
STAFF REVIEW OF LICENSEE RESPONSE TO GENERIC LETTER 84-09

Re: Oyster Creek Nuclear Generating Station

The staff has completed a preliminary review to assess the completeness and adequacy of your response for Oyster Creek dated July 13, 1984, to Generic Letter 84-09, Recombiner Capability Requirements of 10 CFR 50.44(c)(3)(ii). Your responses were found to be incomplete. Descriptions of the deficiencies are given in the enclosed request for additional information.

To meet our present review schedule, the staff needs to have the supplementary information within 60 days. We request your cooperation in meeting this schedule. These questions were discussed by phone with your staff on February 22, 1985 and April 26, 1985.

This request for additional information was approved by the Office of Management and Budget under clearance number 3150-0011. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management Room 3208, New Executive Office Building, Washington, D.C. 20503.

Sincerely,

Original signed by

8505020101 850429
PDR ADDCK 05000219
P PDR

John A. Zwolinski, Chief
Operating Reactors Branch No. 5
Division of Licensing

Enclosure:
Request for Additional
Information

DISTRIBUTION

Docket File	PSalminen	CJamerson	Local PDR	BGrimes	HThompson
ORB#5 Reading	JKudrick	JZwolinski	ACRS (10)	EJordan	
JDonohew	WButler	NRC PDR	OELD	JPartlow	

*SEE PREVIOUS PAGE FOR CONCURRENCE

DL:ORB#5*	DL:ORB#5	DSI:CSB*	DSI:CSB*	DL:ORB#5
JDonohew	CJamerson	JKudrick	WButler	JZwolinski
04/24/85	04/30/85	04/24/85	04/24/85	04/30/85

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Oyster Creek Nuclear Generating Station
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To meet our present review schedule, the staff need to have the supplementary information with 30 days. We request your cooperation in meeting this schedule. These questions were discussed by phone with your staff on February 22, 1985.

This request for additional information was approved by the Office of Management and Budget under clearance number 3150-0011 which expires April 30, 1985. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management Room 3208, New Executive Office Building, Washington, D.C. 20503.

Sincerely,

John A. Zwolinski, Chief
Operating Reactors Branch No. 5
Division of Licensing

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JZwolinski
04/ /85

Mr. P. B. Fiedler

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April 29, 1985

cc

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Washington, D.C. 20036

Resident Inspector
c/o U.S. NRC
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Bishop, Liberman, Cook, et al.
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Commissioner
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Newark, New Jersey 07102

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Nuclear Regulatory Commission
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State of New Jersey
Department of Law and Public Safety
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Mayor
Lacey Township
818 West Lacey Road
Forked River, New Jersey 08731

U.S. Environmental Protection Agency
Region II Office
ATTN: Regional Radiation Representative
26 Federal Plaza
New York, New York 10007

D. G. Holland
Licensing Manager
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

REQUEST FOR ADDITIONAL INFORMATIONGENERIC LETTER (GL) 84-09

1. You stated in your response to criterion 2 of the GL that nitrogen is used for the drywell instrument air/nitrogen system; however, atmospheric air exists as the backup to the nitrogen system and is actuated automatically if the nitrogen system fails. Section 6.2.5.3.5, Post-LOCA Oxygen Sources In Containment, in the Oyster Creek Updated Final Safety Analysis Report (FSAR), however, states the instrument air supply inside the drywell, during power operation when the containment is inerted, is from a nitrogen supply and is not a source of oxygen during a LOCA. It is explained in your response that the use of the backup to the nitrogen system could result in air in-leakage and increase the drywell oxygen concentration but, if the concentration exceeds the high limit, an annunciator will then alert the operator to take proper action.

Supplement your response to criterion 2 of GL 84-09 with a discussion of the indication to the operator that the backup air system has been actuated, the proper actions taken by the operator, the high limit for annunciator action, the restrictions on the time the nitrogen system may be out of service, the sources and amounts of this air in-leakage and increased drywell oxygen concentration prior to and during an accident and the operational reliability of the nitrogen system (e.g., can the system suffer a single active failure and still perform its intended function).

For the drywell instrument air/nitrogen system to be acceptable to the staff in meeting criterion 2 in the GL, the backup air system must be automatically isolated when primary containment isolation occurs for the design basis Loss-of-Coolant Accident (LOCA). If the nitrogen system does not meet the single active failure criteria above, the staff also requires that (1) the control room operators must have appropriate instrumentation in the control room to indicate whether or not the air backup system is operating, (2) the total volume of the drywell instrument air/nitrogen system (e.g., accumulators, piping) that can be filled with air after using the air backup system is actuated must be shown to be negligible compared to the drywell volume and (3) the use of the air backup system must be limited to a maximum of 15 days through appropriate limiting conditions for operations and surveillance requirements in the Technical Specifications.

2. In your letter dated July 13, 1984, you did not provide justification that the following specific potential sources of oxygen in containment listed in GL 84-09 may be neglected: instrument air system, service air system, breathing air system, MSIV leakage control system, pressurized penetrations and inflatable door seals. Supplement your response to criterion 3 of the GL with a discussion on your justification to neglect the above potential sources of oxygen.

3. Provide the safety classification of the combustible gas control system for Oyster Creek. Section 6.2.5.3.6.c, pages 6.2-50/51, of the Oyster Creek Updated FSAR states that (1) purging the primary containment to limit the hydrogen concentration following a LOCA may be required within 22 hours (Case 3, maximum hypothetical radiolytic gas generation) to 23 days (Case 1, maximum expected radiolytic gas generation) and (2) conservative calculations of radiolytic gas generation indicate that adequate time is available to take corrective action by either purging the primary containment or dilution by pressurization. It is the position of the staff that the updated FSAR means you are relying on purging/repressurization as the primary means for combustible gas control and these systems must be designed to conform to GDC 41, 42 and 43 of Appendix A to 10 CFR Part 50 and must be "safety-grade." Provide the safety classification of the purging/repressurization system for the primary containment and a discussion of its conformance to GDC 41, 42, and 43.
4. In Section 6.2.5 of the Updated FSAR, it is stated that your containment combustible gas control system (CGCS) is based on controlling the hydrogen content in primary containment following a LOCA instead of controlling the oxygen content. Based on the analyses in Section 6.2.5 of the Updated FSAR, it appears that purging will be required earlier for hydrogen control than for oxygen control. In fact, beginning at 4% oxygen in primary containment, which is a proposed technical specification you have submitted to NRC, purging following a LOCA may not be required within the first 30 days if the CGCS is controlling on oxygen. Therefore, provide your justification for the CGCS controlling on hydrogen rather than on oxygen.