

September 26, 1983

Docket No. 50-219

MEMORANDUM FOR: James R. Miller, Chief
Operating Reactors Branch #3, DL

FROM: Dennis M. Crutchfield, Chief
Operating Reactors Branch #5, DL

SUBJECT: REQUEST FOR PUBLICATION IN MONTHLY FR NOTICE - NOTICE
OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO PROVISIONAL
OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR A HEARING

GPU Nuclear Corporation, Docket No. 50-219, Oyster Creek Nuclear Generating
Station, Ocean County, New Jersey

Date of amendment request: May 21, 1982

Description of amendment request: Request for amendment to the license to
allow operation of the reactor with the existing core spray sparger subject
to enhanced inspection and reporting requirements.

Basis for proposed no significant hazards consideration determination:

License Amendment No. 47, dated May 15, 1980, to License No. DPR-16 for
the Oyster Creek Nuclear Generating Station added a license condition which
requires the replacement of the existing cracked core spray sparger during
the current cycle 10 refueling outage. Operation with a cracked sparger for
an interim fuel cycle prior to the current refueling outage was permitted
based on repairs to the sparger using repair bracket assemblies. The NRC
Staff concluded in the Safety Evaluation supporting Amendment No. 47 that
this interim repair of the Oyster Creek sparger does not constitute a
significant change in safety margin from that of the original design and
that installation of the repair hardware would not increase the probability
of an accident.

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During the current refueling outage, the licensee has completed full inspection of the accessible surfaces and welds of the sparger and repair assemblies using new inspection techniques and computer photo enhancement and has compared indications of cracks to previous indications. The new inspections and analyses appear to show that: (1) many previous indications of cracks from prior inspections are, in fact, not cracks; (2) no further degradation of the sparger has occurred since the prior inspections; and (3) susceptibility to new cracking (stress corrosion cracking postulated to result from high residual stresses from forcing pipes into position during installation and sensitization from welding, cold work etc.) in new locations is reduced by stress relief from existing cracks.

Moreover, analysis of the seismic, static and thermal loadings for the repair bracket assemblies (which were analyzed, designed and installed in accordance with currently accepted engineering practices) demonstrate the repair bracket assemblies' ability to limit crack openings to an acceptable range should existing cracks propagate around the sparger circumference and inspection data obtained during the current refueling outage indicates that the repair bracket assemblies are capable of maintaining the integrity of the system. The staff has concluded that continued operation of the facility can be permitted if the extent of sparger cracking remains as evaluated in the SER supporting Amendment 47. To ensure that no degradation in performance of the sparger will occur, the licensee will perform full inspections of the accessible surfaces and welds of both core spray spargers and repair assemblies at each refueling outage. Comparisons of the results with previous inspection will be made along with an evaluation of the safety significance of any new or progressing indications. This information will

be provided to the NRC staff for review. Based on staff review of the inspection results and safety evaluations, the staff will determine if the sparger needs to be replaced during the outage or whether the facility can be allowed to restart. This decision will be founded on the determination of whether or not safety margins have been significantly reduced from levels currently in the sparger.

Because, subject to NRC Staff confirmation prior to issuance of the proposed amendment, the magnitude of sparger cracking is not as severe as previously indicated, there has been no additional degradation during the last fuel cycle, and the repair bracket assemblies should maintain the integrity of the existing sparger as it has been maintained during the last fuel cycle, the NRC Staff proposes to determine that issuance of the proposed amendment authorizing operation with the existing repaired sparger without further degradation until the end of life does not involve a significant increase in the probability or consequences of accidents previously considered, does not create the possibility of a new or different accident from any evaluated previously, and does not involve a significant reduction in a margin of safety, all relative to previously approved operation. Accordingly, the NRC Staff proposes to determine that this license amendment would not involve significant hazards consideration.

Local Public Document Room location: 101 Washington Street, Toms River, New Jersey 08753.

Attorney for licensee: G.F. Trowbridge, Esquire, Shaw, Pittman, Potts and Trowbridge, 1800 M Street, N.W., Washington, D.C. 20036.

NRC Branch Chief: Dennis M. Crutchfield

Original signed by

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

cc: Docket
ORB #5 Reading
J. Lombardo
H. Smith

*SEE PREVIOUS TISSUE FOR CONCURRENCE

DL: ORB #5*
HSmith:cc
9/15/83

DL: ORB #5*
JLombardo
9/15/83

DL: ORB #5
DCrutchfield
9-19-83
9/26/83

OELD: GWoodhead
9/20/83

DL: SA
FMiraglia
9/13/83

be provided to the NRC staff for review. Based on staff review of the inspection results and safety evaluations, the staff will determine if the sparger needs to be replaced during the outage or whether the facility can be allowed to restart. This decision will be founded on the determination of whether or not safety margins have been significantly reduced from levels currently in the sparger.

Because, subject to NRC Staff confirmation prior to issuance of the proposed amendment, the magnitude of sparger cracking is not as severe as previously indicated, the repair bracket assemblies should maintain the integrity of the existing sparger as it has been maintained during the last fuel cycle, the NRC Staff proposes to determine that issuance of the proposed amendment authorizing operation with the existing repaired sparger without further degradation until the end of life does not involve a significant increase in the probability or consequences of accidents previously considered, does not create the possibility of a new or different accident from any evaluated previously, and does not involve a significant reduction in a margin of safety, all relative to previously approved operation. Accordingly, the NRC Staff proposes to determine that this license amendment does not involve significant hazards considerations.

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NRC Branch Chief: Dennis M. Crutchfield

DL: DRB #5
HSmith:cc
9/11/83

DL: DRB #5
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9/12/83

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Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
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1/83

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Woodhead
9/20/83

DL: AD/SA
FMiraglia
1/83

during the current outage and review of the inspection data indicates that they are capable of maintaining the integrity of the system, and they will not increase the possibility of a new or different kind of an accident.

Thus, if analysis of the inspection data shows that the magnitude of the problem is not as severe as was previously indicated, and that no degradation has occurred since the licensee's initial inspection, there will be no significant hazard involved with continued operation of the as-repaired facility for the next fuel cycle.

Based on the above discussion, the staff proposes to determine that the action does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident from any previously evaluated and does not involve a significant reduction in a margin of safety. Accordingly, the staff proposes to determine that the requested action involves no significant hazards consideration.

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NRC Branch Chief: Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

cc: Docket
ORB #5 Reading
J. Lombardo

*SEE PREVIOUS ISSUE FOR CONCURRENCE

OFFICE	H. Smith	DL: ORB #5*	DL: ORB #5	DL: ORB #5*	OELD	DL: AD/SA
SURNAME	HSmith:cc	JLombardo	DCrutchfield	Cwoodhead	FMiraglia
DATE	7/8/83	7/19/83	7/12/83	/ /83	/ /83

Thus, if it is shown that the magnitude of the problem is not as severe as was previously indicated, there is reasonable assurance that the health and safety of the general public will not be jeopardized by continued operation of the as-repaired facility for the next fuel cycle.

Based on the above discussion, the staff proposes to determine that the action does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident from any previously evaluated or does not involve a significant reduction in a margin of safety. Accordingly, the staff proposes to determine that the requested action involves no significant hazards consideration.

Local Public Document Room location: 101 Washington Street, Toms River, New Jersey 08753

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NRC Branch Chief: Dennis H. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

cc: Docket
ORB #5 Redding
J. Lombardo
H. Smith

*SEE PREVIOUS TISSUE FOR CONCURRENCE

OFFICE	DL: ORB #5*	DL: ORB #5	DL: ORB #5*	OELD	DL: AD/SA		
JRNAME	HSmith:cc	JLombardo	DCrutchfield	CWoodhead	FMiraalia		
DATE	7/8/83	7/20/83	7/12/83	/ /83	/ /83		

Local Public Document Room location: 101 Washington Street,

Toms River, New Jersey 08753.

Attorney for licensee: G. F. Trowbridge, Esquire, Shaw, Pittman,

Potts and Trowbridge, 1800 M Street, N. W., Washington, D. C. 20036.

NRC Branch Chief: Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

cc:
Docket File (w/INSHC)
ORB Reading
H. Smith
J. Lombardo

AS 7/12/83

OFFICE	DL:ORB#5	DL:ORB#5	DL:ORB#5	OELD	DL:AD-SA	
USERNAME	HSmith:ajs	JLombardo	DCrutchfield	 	FMiraglia	
DATE	07/7/83	07/7/83	07/12/83	07/12/83	07/1/83	



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

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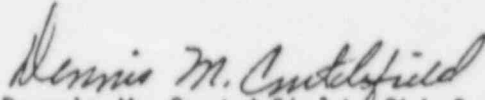
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