

GPU NUCLEAR CORPORATION  
OYSTER CREEK NUCLEAR GENERATING STATION

PROVISIONAL OPERATING  
LICENSE NO. DPR-16

Technical Specification  
Change Request No. 96  
Docket No. 50-219

Applicant submits, by this Technical Specification Change Request No. 96 to the Oyster Creek Nuclear Generating Station Technical Specifications, a change to Specifications listed on Attachment No. 1, the Summary of Technical Specification change request.

By: MSnyder  
Vice President and  
Director, Oyster Creek

Sworn and subscribed to before me this 31 day of August 1982.

Michael Lagdary  
Notary Public

MICHAEL LAGDARY  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires January 11, 1983

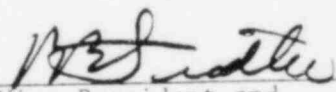
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF )  
GPU NUCLEAR CORPORATION ) DOCKET NUMBER 50-219

CERTIFICATION OF SERVICE

This is to certify that a copy of Technical Specification Change Request No. 96 for the Oyster Creek Nuclear Generating Station Technical Specification, filed with the U. S. Nuclear Regulatory Commission on August 31, 1982 has this 31 day of August been served on the Mayor of Lacey Township, Ocean County, New Jersey by deposit in the United States mail addressed as follows:

The Honorable Theodore Hutler  
Mayor of Lacey Township  
818 W. Lacey Road  
Forked River, NJ 08731

By:   
Vice President and  
Director - Oyster Creek

DATED: August 31, 1982



**GPU Nuclear**  
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Writer's Direct Dial Number

August 31, 1982

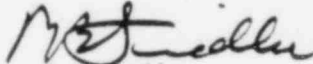
The Honorable Theodore Hutler  
Mayor of Lacey Township  
818 W. Lacey Road  
Forked River, NJ 08731

Dear Mayor Hutler:

Enclosed herewith is one copy of Technical Specification  
Change Request No. 96 for the Oyster Creek Nuclear Generating  
Station Technical Specifications.

These documents were filed with the U. S. Nuclear Regulatory  
Commission on August 31, 1982.

Very truly yours,

  
P. B. Fiedler  
Vice President and  
Director - Oyster Creek

blf

Enclosure

GENERAL PUBLIC UTILITIES NUCLEAR CORPORATION  
OYSTER CREEK NUCLEAR GENERATING STATION  
PROVISIONAL OPERATING LICENSE DPR-16  
(DOCKET NO. 50-219)

TECHNICAL SPECIFICATION  
CHANGE REQUEST NO. 96

Applicant hereby requests the Commission to change the Technical Specifications (Appendix A of the above captioned license) as follows:

1. Sections to be Changed

<u>Section</u>	<u>Description of Changes</u>
1	Add page 1.0-6
2.1	Replace entire section
2.2	Replace entire section
2.3	Replace entire section
3.1	Replace pages 3.1-11, 12 and 12a only
3.2	Replace entire section
3.4	Replace entire section
3.5	Replace pages 3.5-4a through 3.5-7 only
3.10	Replace entire section
4.2	Replace entire section
4.10	Replace entire section

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Extent of Change

To incorporate limits determined by methods described in NEDO-24195 and current FDSAR including all applicable amendments into Appendix A, Technical Specifications and Bases to Provisional Operating License DPR-16, Oyster Creek Nuclear Generating Station. (See enclosed Attachment No. 1).

Changes Requested

See enclosed Attachment No. 2.

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Discussion

The enclosed Attachment No. 1 presents a summary of proposed changes by indicating affected sections and pages of the current specifications, extent of changes and justifications for changes. There are three categories of changes: editorial and repaging, deletion of obsolete and non-applicable bases statements, and those due to changes in methods, fuel design and fuel vendor.

Editorial changes and repaging have been proposed in such a manner that no technical meaning has been changed. Vertical bars have been placed at affected sections where extensive changes are made in Attachment No. 2. Several obsolete and non-applicable bases statements, discussing initial core and methods have been deleted. These sections have been identified in Attachment No. 2. Those limits changed due to changes in methods, fuel design and fuel vendor have been identified in Attachments No. 1 and 2. For convenience, entire sections have been replaced even though only minor changes may be involved.

The reference cycle reload is used to present new nuclear evaluation methods for Oyster Creek reload analysis. It is not intended to be a submittal for an actual Oyster Creek reload. The new evaluation methods will be used to analyze both GE and Exxon Nuclear Company, Inc. (ENC) fuel designs. The previous submittal for nuclear evaluation methods, Amendment 76 to the FDSAR, will be superceded. However, those sections of Amendment 76 which pertain to ENC reload fuel design and ECCS analysis, and the fuel operating and design limits associated with those sections will remain applicable. Technical specification limits for local linear heat generation rate and average planar linear heat generation rate for ENC fuel designs will be based on ENC analyses previously submitted.

At the time of this submittal, reload core transient analyses by GE's ODYN computer code and MAPLHGR limits by GE's ECCS Evaluation Model are not available. The proposed technical specification changes and appropriate sections of NEDO-24195 will be updated when these results become available. We anticipate these updates will be submitted by December 31, 1982.

## Attachment No. 1

Summary of Tech Spec Change Request

<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Change</u>	<u>Justification</u>
<u>Section 1 Definitions</u>				
1	-----	Definition page 1.0-6	Add new definition for FLPD, MFLPD, FRP, and TAF	
<u>Section 2.1 Safety Limit - Fuel Cladding Integrity</u>				
2	Specification 2.1.A,A.1 and A.2 page 2.1-1 and specification 2.1.E page 2.1-2	Specification 2.1.A page 2.1-1	Use of Safety Limit Curve (Figure 2.1.1) is replaced by MCPR $\leq 1.07$ for reactor pressure $\geq 800$ psia and core flow $\geq 10\%$ rated. MCPR limits for type VB fuel is replaced by one limit for all fuel types in core.	See Bases Statement, first two paragraphs in page 2.1-2
3	Specification 2.1.B page 2.1-1	Specification 2.1.B page 2.1-1	Reactor power is limited to 25% rated for reactor pressure $< 800$ psia and core flow $< 10\%$ rated.	See Bases Statement, third and fourth paragraphs in page 2.1-2 and extended to page 2.1-3
4	Specification 2.1.C page 2.1-1	Specification 2.1.C page 2.1-1	Neutron flux scram setting at 1.75 seconds is replaced by proposed specification 2.3.A.1 and A.2 in page 2.3-1.	See Bases Statement, first paragraph in page 2.1-3 of proposed Tech spec.
5	Specification 2.1.D page 2.1-2	Specification 2.1.D page 2.1-1	Water level is changed from 4'8" to 10" above the TAF	See Bases Statement, second paragraph in page 2.1-3 and first paragraph in page 2.1-4
6	Bases Statements pages 2.1-2	Bases Statements pages 2.1-2	Entire Bases Statements have been revised in accordance with changes 2 through 5 above, except first paragraph of page 2.1.4a of Current Tech Spec.	See 2 through 5 above

<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Changes</u>	<u>Justification</u>
7	References page 2.1-5	References page 2.1-4	Replace all references with NEDO-24195	NEDO-24195, General Electric Reload Fuel Application for Oyster Creek describes de- tails of GE supplied reload fuel design and reload methodology to be used for future cycles.
<u>Section 2.2 Safety Limit - Reactor Coolant System Pressure</u>				
8	Base Statement paragraph 5 page 2.2-1 and paragraph 1 page 2.2-2	Base Statement paragraph 1 page 2.2-2	Delete duplicate bases statements and combined them into one.	Technical Specification change request No. 98; NRC approved as Amendment No. 62.
9	References page 2.2-2	References page 2.2-2	References 2 and 3 are replaced by NEDO-24195	In accordance with changes in Bases Statement as descr- ibed in 8 above.
<u>Section 2.3 Limiting Safety Systems Settings</u>				
10	Specification 2.3.1.a page 2.3-1	Specification 2.3.A.1 pages 2.3-1 and-2	APRM flux scram setting function is modified by replacing $\frac{PFo}{PF}$ by $\frac{FRP}{MFLPD}$	See Bases Statements, para- graphs 3 and 4 of page 2.3-4 entire page 2.3-5, and paragraph 1 of page 2.3-6 of proposed Tech Spec.
11	Specification 2.3.2a page 2.3-2	Specification 2.3.B page 2.3-2	Control rod block function is modified by replacing $\frac{PFo}{PF}$ by $\frac{FRP}{MFLPD}$	See justification 10 above.

<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Changes</u>	<u>Justification</u>
12	Specification 2.3.4 page 2.3-2	Specification 2.3.D page 2.3-3	Two groups of ERV setpoints are introduced: 2 values at 1070 psig and 3 values at 1090 psig.	Technical Specification change request No. 98; NRC approved as Amendment No. 62.
13	Specification 2.3.5 page 2.3-2	Specification 2.3.E page 2.3-3	Time delay for Isolation Condenser Initiation change from 15 to 3 seconds.	See License Amendment No.39
14	Bases Statements paragraph 3 of page 2.3-3, entire page 2.3-4, and paragraph 1 of page 2.3-5	Bases Statements paragraphs 3 and 4 of page 2.3-4 entire page 2.3-5 and paragraph 1 of page 2.3-6	<u>PFo</u> is replaced by <u>FRP</u> <u>PF</u> <u>MFLPD</u>	To support changes 10 and 11
15	Bases Statement in paragraph 2, page 2.3-5	-----	Delete obsolete reference to peak pressure of turbine trip without bypass.	See justification of change 12 above.
16	Bases Statement in paragraph 1 page 2.3-6	-----	Delete obsolete statement reference to void reactivity coefficient.	See Extent of Change.
17	Bases Statements, paragraph 3 page 2.3-6 and in paragraph 3 page 2.3-7	-----	Delete non-applicable statement reference to scram settings.	See Extent of Change.
18	Bases Statement in paragraph 4 page 2.3-7	-----	Delete non-applicable statement reference to MCHFR.	See Extent of Change.
19	References pages 2.3-7 and 8	References page 2.3-8	Delete non-applicable references.	See Extent of Change.



Section 3.1 Protective Instrumentation

<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Changes</u>	<u>Justification</u>
20	Table 3.1.1 Specification K.1 and 2 page 3.1-11 and note y, page 3.1-12a.	Table 3.1.1 Specification K.1 and 2 page 3.1-11	Minimum operable number of SRM is changed 3 to 2 and delete note y in page 3.1-12a.	In accordance with Specification 3.9.E and F.
21	Table 3.1.1 Note b page 3.1.12	Table 3.1.1 Note b page 3.1-12	Permissible pressure level change from 600 psig to 800 psia.	Range of GETAB as described in NEDO-24195.

Section 3.2 Reactivity Control

22	Specification 3.2.B.2.b page 3.2-1a	Specification 3.2.B.2.b page 3.2-2	Design Criteria for rod drop accident of 1.25% is replaced by 280 cal/gm.	See last paragraph of page 3.2-5 of proposed Tech Spec.
23	Specification 3.2.B.6 page 3.2-2	-----	Delete Requirement of Control rod density of 3.5% during power operation.	All rod out at end of cycle condition is analyzed and presented in NEDO-24195.
24	Bases Statement paragraph 4 page 3.2-3	Bases Statement paragraph 4 page 3.2-4	Revise statements referencing the first cycle core to be consistent with reload fuel and core.	See Extent of Change.
25	Bases Statement paragraphs 2 and 3 page 3.2-4	Bases Statements paragraph 3 page 3.2-5	See change 22 above.	See Justification for Change 22.
26	Bases Statement in paragraph 3 page 3.2-4	Bases Statement in paragraph 1 page 3.2-6	Non-applicable scram reactivity curve is deleted.	New scram reactivity curve for each reload core will be evaluated.

No.	Current Tech Spec	Proposed Tech Spec	Extent of Change	Justification
27	Bases Statements paragraphs 3 and 4 page 3.2-5	Bases Statement in paragraph 2 page 3.2-6	Delete obsolete reference to in-operable control rod patterns.	See Extent of Change.
28	Bases Statement in paragraph 2 page 3.2-6	-----	Delete reference statement for 3 SRM.	See Justification for change 20 above.
29	Base Statements paragraphs 2, 3, and 4 page 3.2-7 and paragraphs 1, 2, and 3 page 3.2-8	Base Statement paragraph 3 page 3.2-8	Statements pertaining to surveillance requirements for standby liquid control system pumping circuit have been revised.	Justification of 7-day requirement is deleted from Tech Spec and attached to a plant operations procedure.
30	Bases Statement paragraph 1 page 3.2-9	-----	Description for 3.5% control rod density is deleted.	Analysis in NEDO-24195 includes all rod out at end of cycle cases.
31	References page 3.2-9	References page 3.2-9	Delete non-applicable references.	See Extent of Change.
32	Specification 3.4.A.6 and 7 page 3.4-1	Specification 3.4.A.6 and 7 page 3.4-1	<u>Section 3.4 Emergency Cooling</u> Change from 4'8" to 10"	See Justification for Change 5.
	Bases statement paragraph 1 paragraph 4 page 3.4-4	Bases statement paragraph 1 page 3.4-4 paragraph 1 page 3.4-4a		

No.	Current Tech Spec	Proposed Tech Spec	Extent of Change	Justification
<u>Section 3.5 Containment</u>				
33	Bases statement paragraph 2 page 3.5-4a	Bases statement paragraph 2 page 3.5-4a	Criteria for the worst case rod drop accident limit is changed from 1.5%k to fuel damage criteria.	See Justification for change 22.
<u>Section 3.10 Core Limits</u>				
34	Specification 3.10.A page 3.10-1	Specification 3.10.A, A.1, A.2, and A.3 page 3.10-1	Add APLHGR for GE supplied reload fuels.	Introduction of GE designed fuel into Oyster Creek core. See NEDO-24195 for detail design information.
35	Specification 3.10.B page 3.10-1	Specification 3.10.B, B.1, B.2, and B.3 page 3.10-2	Delete LHGR <sub>d</sub> and $\Delta P/p$ values for fuel type IIIIF and add LHGR value for GE supplied reload fuels.	See Justification for change 34.
36	Specification 3.10.C page 3.10-2 Bases statements paragraphs 4 & 5 pages 3.10-5 & 6	—————	Delete assembly averaged power void relationship for fuel type IIIIF. Delete statements per- taining to power void relationship.	No type IIIIF fuel in Oyster Creek core.
37	Specification 3.10.D pages 3.10-2 & 3	Specification 3.10.C page 3.10-3	Change of Operational MCPR limits and add use of $K_f$ curve.	See Base Statements in pages 3.10-7 and 8 of Proposed Tech Spec.
38	Bases statements paragraphs 2 & 3 page 3.10-4	Bases Statements paragraphs 3 & 4 pages 3.10-4 & 5	Delete statements referencing Type IIIIF fuel and add those of GE supplied reload fuel.	See Extent of Change statement.
39	—————	Bases Statements paragraph 3 page 3.10-6	Add statement referencing power spike penalty for GE supplied reload fuel.	See Extent of Change statement.
40	Bases Statements paragraph 2 page 3.10-6 & 7	Bases Statements paragraphs 3 & 4 page 3.10-7	Change bases of MCPR limits.	See Bases Statements of Proposed Tech Spec.

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<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Change</u>	<u>Justification</u>
41	Bases Statements paragraphs 5 & 6 page 3.10-7	Bases Statements paragraph 1 page 3.10-7	Change of range of operating MCPR statements.	Results of new analysis.
42	References page 3.10-8	References page 3.10-8	References 1 and 4 replaced by NEDO-24195.	See NEDO-24195 Section 5.
43	Figure 3.10-1 page 3.10-9	Figure 3.10-1 page 3.10-9	Delete MAPLHGR limit for fuel type IIIF.	Fuel type IIIF no longer in Oyster Creek core.
44	Figure 3.10-2 page 3.10-10	Figure 3.10-2 page 3.10-10	Delete MAPLHGR limit for fuel type IIIF.	Same as above.
45	—————	Figure 3.10-4 page 3.10-12	Add MAPLHGR limits for fuel types P8DRB-239, P8DRB-265L, and P8DRB-265H for five loop operation.	Introduction of GE supplied reload fuel into Oyster Creek core.
46	—————	Figure 3.10-5 page 3.10-13	Add MAPLHGR limits for fuel types P8DRB-239, P8DRB-265L, and P8DRB-265H for four loop operation.	Same as above.
47	—————	Figure 3.10-6 page 3.10-14	Add $K_f$ curve.	Introduction of $K_f$ curve to define operating limits at other than rated flow conditions.  See Bases Statements paragraphs 3 and 4 page 3.10-7 of proposed Tech Spec.
<u>Section 4.2 Reactivity Control</u>				
48	Specification 4.2.G page 4.2-2	—————	Delete 3.9% control rod density requirement.	See Justification for Change 30.

<u>No.</u>	<u>Current Tech Spec</u>	<u>Proposed Tech Spec</u>	<u>Extent of Change</u>	<u>Justification</u>
49	Bases Statement paragraph 2 page 4.2-3a	—————	Delete statements reference to control rod density requirement.	Same as above.
			<u>Section 4.10 ECCS Related Core Limits</u>	
50	Specification 4.10.C page 4.10-1	—————	Delete Spec. 4.10.C	No Type IIIIF in Oyster Creek core.
51	Bases Statements paragraph 2 page 4.10-1 and 4.10-2	—————	Delete statements reference to power void relationship.	Same as above.