

February 27, 1997

Mr. E. E. Fitzpatrick, Vice President
Indiana Michigan Power
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: NEW FUEL ENRICHMENT INCREASE (TAC NOS. M94877 AND
M94878)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 213 to Facility Operating License No. DPR-58 and Amendment No. 198 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 26, 1996.

The amendments revise the TS to allow an increased limit for the nominal enrichment of new (unirradiated) Westinghouse fabricated fuel stored in the new fuel storage racks. The proposed changes would allow for the storage of fuel with an enrichment not to exceed a nominal 4.95 weight percent (w/o) U-235, subject to certain integral fuel burnable absorber (IFBA) requirements, in the new fuel storage racks. Plant operation using the higher enriched fuel will be demonstrated to be acceptable by a cycle specific reload safety evaluation performed prior to each fuel loading.

A copy of our related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original Signed by

John B. Hickman, Project Manager
Project Directorate III-3
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316
Enclosures: 1. Amendment No. 213 to DPR-58
2. Amendment No. 198 to DPR-74
3. Safety Evaluation
cc w/encl: See next page

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DATE	1/24/96	12/10/96 <i>EEJ</i>	01/07/97			

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Nuclear Generation Group
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Original Signed by

John B. Hickman, Project Manager
Project Directorate III-3
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

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OFFICE	PM:PD33	E	LA:PD33*	E	ABC:SRXB*	OGC
NAME	JHickman <i>JH</i>		DFoster-Curseen		JLyons	<i>[Signature]</i>
DATE	1/24/96		12/10/96 <i>EEB 12/31/97</i>		01/07/97	1/28/97

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 27, 1997

Mr. E. E. Fitzpatrick, Vice President
Indiana Michigan Power
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: NEW FUEL ENRICHMENT INCREASE (TAC NOS. M94877 AND
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The amendments revise the TS to allow an increased limit for the nominal enrichment of new (unirradiated) Westinghouse fabricated fuel stored in the new fuel storage racks. The proposed changes would allow for the storage of fuel with an enrichment not to exceed a nominal 4.95 weight percent (w/o) U-235, subject to certain integral fuel burnable absorber (IFBA) requirements, in the new fuel storage racks. Plant operation using the higher enriched fuel will be demonstrated to be acceptable by a cycle specific reload safety evaluation performed prior to each fuel loading.

A copy of our related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script, appearing to read "John B. Hickman".

John B. Hickman, Project Manager
Project Directorate III-3
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 213 to DPR-58
2. Amendment No. 198 to DPR-74
3. Safety Evaluation

cc w/encl: See next page

Mr. E. E. Fitzpatrick
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:

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Protection Division
Michigan Department of
Environmental Quality
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P. O. Box 30630 CPH Mailroom
Lansing, Michigan 48909-8130

DATED: February 27, 1997

AMENDMENT NO. 213 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK-UNIT 1
AMENDMENT NO. 198 TO FACILITY OPERATING LICENSE NO. DPR-74-D. C. COOK-UNIT 2

Docket File

PUBLIC

PDIII-3 Reading

J. Roe

E. Barnhill

J. Hickman (2)

OGC

G. Hill, IRM (4)

C. Grimes, O-11F23

L. Kopp

ACRS

J. Caldwell, RIII

G. Marcus



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 213
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated February 26, 1996, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

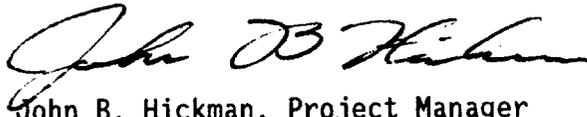
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 213, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance, with full implementation within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John B. Hickman, Project Manager
Project Directorate III-3
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: February 27, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 213

TO FACILITY OPERATING LICENSE NO. DPR-58

DOCKET NO. 50-315

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE

5-4
5-5
5-6
5-8

INSERT

5-4
5-5
5-6
5-8

5.0. DESIGN FEATURES

5.2 CONTAINMENT (Continued)

DESIGN PRESSURE AND TEMPERATURE

- 5.2.2 The reactor containment building is designed and shall be maintained in accordance with the original design provisions contained in Section 5.2.2 of the FSAR.

PENETRATIONS

- 5.2.3 Penetrations through the reactor containment building are designed and shall be maintained in accordance with the original design provisions contained in Section 5.4 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

5.3 REACTOR CORE

FUEL ASSEMBLIES

- 5.3.1 The reactor core shall contain 193 fuel assemblies with each fuel assembly containing 204 fuel rods clad with Zircaloy-4, except that limited substitutions of zirconium alloy or stainless steel filler rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods, and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in non-limiting core regions. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum enrichment of 3.35 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum nominal enrichment of 4.95 weight percent U-235.

CONTROL ROD ASSEMBLIES

- 5.3.2 The reactor core shall contain 53 full length and no part length control rod assemblies. The full length control rod assemblies shall contain a nominal 142 inches of absorber material. The nominal values of absorber material shall be 80 percent silver, 15 percent indium and 5 percent cadmium. All control rods shall be clad with stainless steel tubing.

5.0 DESIGN FEATURES

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The reactor coolant system is designed and shall be maintained:

- a. In accordance with the code requirements specified in Section 4.1.6 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The total contained volume of the reactor coolant system is $12,612 \pm 100$ cubic feet at a nominal T_{avg} of 70°F.

5.5 EMERGENCY CORE COOLING SYSTEMS

5.5.1 The emergency core cooling systems are designed and shall be maintained in accordance with the original design provisions contained in Section 6.2 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements, with one exception. This exception is the CVCS boron makeup system and the BIT.

5.6 FUEL STORAGE

CRITICALITY - SPENT FUEL

5.6.1.1 The spent fuel storage racks are designed and shall be maintained with:

- a. A k_{eff} equivalent to less than 0.95 when flooded with unborated water.
- b. A nominal 8.97 inch center-to-center distance between fuel assemblies placed in the storage racks.
- c. The fuel assemblies will be classified as acceptable for Region 1, Region 2, or Region 3 storage based upon their assembly average burnup versus initial nominal enrichment. Cells acceptable for Region 1, Region 2, and Region 3 assembly storage are indicated in Figures 5.6-1 and 5.6-2. Assemblies that are acceptable for storage in Region 1, Region 2, and Region 3 must meet the design criteria that define the regions as follows:

5.0 DESIGN FEATURES

5.6 FUEL STORAGE (Continued)

1. Region 1 is designed to accommodate new fuel with a maximum nominal enrichment of 4.95 wt% U-235, or spent fuel regardless of the discharge fuel burnup.
2. Region 2 is designed to accommodate fuel of 4.95% initial nominal enrichment burned to at least 50,000 MWD/MtU, or fuel of other enrichments with equivalent reactivity.
3. Region 3 is designed to accommodate fuel of 4.95% initial nominal enrichment burned to at least 38,000 MWD/MtU, or fuel of other enrichments with equivalent reactivity.

The equivalent reactivity criteria for Region 2 and Region 3 is defined via the following equations and graphically depicted in Figure 5.6-3.

For Region 2 Storage

$$\begin{aligned} \text{Minimum Assembly Average Burnup in MWD/MTU} = \\ - 22,670 + 22,220 E - 2,260 E^2 + 149 E^3 \end{aligned}$$

For Region 3 Storage

$$\begin{aligned} \text{Minimum Assembly Average Burnup in MWD/MTU} = \\ - 26,745 + 18,746 E - 1,631 E^2 + 98.4 E^3 \end{aligned}$$

Where E = Initial Peak Enrichment

5.6.1.2: Fuel stored in the spent fuel storage racks shall have a maximum nominal fuel assembly enrichment as follows:

Description	Maximum Nominal Fuel Assembly Enrichment Wt. % U-235
1) Westinghouse 15 x 15 STD 15 x 15 OFA	4.95
2) Exxon/ANF 15 x 15	4.95
3) Westinghouse 17 x 17 STD 17 x 17 OFA 17 x 17 V5	4.95
4) Exxon/ANF 17 x 17	4.95

5.0 DESIGN FEATURES

5.6 FUEL STORAGE (Continued)

CRITICALITY - NEW FUEL

5.6.2 The new fuel storage racks are designed and shall be maintained with:

- a. Fuel assemblies having a maximum enrichment in accordance with Table 5.6-1;
- b. $k_{\text{eff}} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR;
- c. $k_{\text{eff}} \leq 0.98$ if moderated by aqueous foam, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR; and
- d. a nominal 21 inch center to center distance between fuel assemblies placed in the storage racks.

Table 5.6-1
MAXIMUM NOMINAL FUEL ASSEMBLY ENRICHMENT
FOR NEW FUEL STORAGE RACKS

Description	Maximum Nominal Fuel Assembly Enrichment Wt. % U-235
1) Westinghouse 15 x 15 STD 15 x 15 OFA	4.55*
2) Exxon/ANF 15 x 15	3.50
3) Westinghouse 17 x 17 STD 17 x 17 OFA 17 x 17 V5	4.55*
4) Exxon/ANF 17 x 17	4.23

DRAINAGE

5.6.3 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 629'4".

* A maximum nominal enrichment of 4.95 weight percent U-235 for Westinghouse fuel types is acceptable provided that sufficient integral fuel burnable absorber is present in each fuel assembly stored in the new fuel storage racks such that the maximum reference fuel assembly k_{∞} is less than or equal to 1.4857 at 68°F.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 198
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated February 26, 1996, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

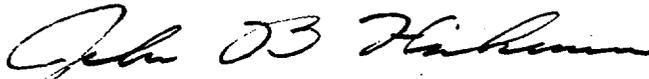
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 198, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance, with full implementation within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John B. Hickman, Project Manager
Project Directorate III-3
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: February 27, 1997

ATTACHMENT TO LICENSE AMENDMENT NO.198

FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 50-316

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE

5-6
5-9

INSERT

5-6
5-9

5.0 DESIGN FEATURES

5.6 FUEL STORAGE (Continued)

CRITICALITY - SPENT FUEL (Continued)

The equivalent reactivity criteria for Region 2 and Region 3 is defined via the following equations and graphically depicted in Figure 5.6-3.

For Region 2 Storage

Minimum Assembly Average Burnup in MWD/MTU =

$$- 22,670 + 22,220 E - 2,260 E^2 + 149 E^3$$

For Region 3 Storage

Minimum Assembly Average Burnup in MWD/MTU =

$$- 26,745 + 18,746 E - 1,631 E^2 + 98.4 E^3$$

Where E = Initial Peak Enrichment

5.6.1.2

Fuel stored in the spent fuel storage racks shall have a nominal fuel assembly enrichment as follows:

Description			Maximum Nominal Fuel Assembly Enrichment Wt. % U-235
1)	Westinghouse	15 x 15 STD 15 x 15 OFA	4.95
2)	Exxon/ANF	15 x 15	4.95
3)	Westinghouse	17 x 17 STD 17 x 17 OFA 17 x 17 V5	4.95
4)	Exxon/ANF	17 x 17	4.95

5.6 DESIGN FEATURES

5.6 FUEL STORAGE (Continued)

CRITICALITY - NEW FUEL

5.6.2 The new fuel storage racks are designed and shall be maintained with:

- a. Fuel assemblies having a maximum enrichment in accordance with Table 5.6-1;
- b. $k_{\text{eff}} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR;
- c. $k_{\text{eff}} \leq 0.98$ if moderated by aqueous foam, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR; and
- d. a nominal 21 inch center to center distance between fuel assemblies placed in the storage racks.

Table 5.6-1
MAXIMUM NOMINAL FUEL ASSEMBLY ENRICHMENT
FOR NEW FUEL STORAGE RACKS

Description	Maximum Nominal Fuel Assembly Enrichment Wt. % U-235
1) Westinghouse 15 x 15 STD 15 x 15 OFA	4.55*
2) Exxon/ANF 15 x 15	3.50
3) Westinghouse 17 x 17 STD 17 x 17 OFA 17 x 17 V5	4.55*
4) Exxon/ANF 17 x 17	4.23

DRAINAGE

5.6.3 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 629'4".

CAPACITY

5.6.4 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 3613 fuel assemblies.

* A maximum nominal enrichment of 4.95 weight percent U-235 for Westinghouse fuel types is acceptable provided that sufficient integral fuel burnable absorber is present in each fuel assembly stored in the new fuel storage racks such that the maximum reference fuel assembly k_{∞} is less than or equal to 1.4857 at 68°F.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 213 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO.198 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated February 26, 1996, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The proposed amendments would change the TS to allow an increased limit for the nominal enrichment of new (unirradiated) Westinghouse fabricated fuel stored in the new fuel storage racks. The proposed changes would allow for the storage of fuel with an enrichment not to exceed a nominal 4.95 weight percent (w/o) U-235, subject to certain integral fuel burnable absorber (IFBA) requirements, in the new fuel storage racks. Plant operation using the higher enriched fuel will be demonstrated to be acceptable by a cycle specific reload safety evaluation performed prior to each fuel loading.

2.0 EVALUATION

The analysis of the reactivity effects of fuel storage in the new fuel storage racks was performed with the two-dimensional multi-group transport theory computer code, PHOENIX-P, using a 42 energy group neutron cross section library. PHOENIX-P is widely used for the analysis of fuel rack reactivity and has been benchmarked against results from numerous critical experiments. These experiments simulate the Cook new fuel storage rack as realistically as possible with respect to parameters important to reactivity such as enrichment and assembly spacing. Based on this, the staff concludes that the analysis methods used are acceptable and capable of predicting the reactivity of the Cook new fuel storage rack with a high degree of confidence.

Fresh fuel is normally stored dry in the new fuel racks. However, to meet the criterion stated in Section 9.1.1 of the NRC Standard Review Plan (SRP), k_{eff} must not exceed 0.95 with the racks fully loaded with fuel of the highest anticipated reactivity and flooded with unborated water. Furthermore, k_{eff} must be no greater than 0.98 under low density (optimum moderation) conditions. The maximum calculated reactivity must include a margin for uncertainties in reactivity calculations and in manufacturing tolerances such

that the true k_{eff} will not exceed these limits at a 95% probability, 95% confidence (95/95) level. These uncertainties are described in Section 9.7 of the D.C. Cook UFSAR.

Previous calculations approved by the NRC have shown that fuel assemblies with enrichments up to 4.55 w/o U-235 can be safely stored in the Cook new fuel racks. In order to store fresh fuel with initial enrichment greater than 4.55 w/o U-235, the concept of reactivity equivalencing was used. In this technique, which has been previously approved by the NRC, credit is taken for the reactivity decrease due to the IFBA material coated on the outside of the UO_2 pellet. Based on these calculations, 32 IFBA rods are required to maintain the k_{eff} criteria for fuel initially enriched to a nominal 4.95 w/o U-235. Due to the normal manufacturing enrichment variability of ± 0.05 w/o U-235, a nominal enrichment of 4.95 w/o U-235 can result in a maximum enrichment of 5.0 w/o U-235. These IFBA requirements were based on the standard IFBA patterns used by Westinghouse. However, since the reactivity worth of individual IFBA rods can change depending on position within the assembly due to local variations in thermal flux, additional calculations were performed to evaluate this effect and a conservative reactivity margin was included to account for this effect. This assures that the IFBA requirement remains valid at intermediate enrichments where standard IFBA patterns may not be available. In addition, the IFBA requirements also include a conservatism of approximately 10% on the total number of IFBA rods at 4.95 w/o U-235 to account for calculational uncertainties. The staff finds that sufficient conservatism has been incorporated into the IFBA determination to adequately account for manufacturing and calculational uncertainties.

As an alternative method for determining the acceptability of fuel storage in the new fuel racks, a reference k_{inf} calculation was performed using PHOENIX-P. The calculation used a 4.55 w/o U-235 enriched fuel assembly with no burnable absorbers in the Cook reactor geometry at a temperature of 68°F. The resulting k_{inf} was 1.4857 and included a 1% reactivity bias to account for calculational uncertainties. Thus, fuel assemblies which are to be stored in the Cook new fuel racks must either meet the initial enrichment versus IFBA requirements previously described, or have a reference k_{inf} less than or equal to 1.4857, to ensure that the final k_{eff} of the Cook new fuel racks will be no greater than 0.95 (if fully flooded) and 0.98 (under optimum moderation).

The following Technical Specification changes have been proposed as a result of the requested enrichment increase. The staff finds these changes as well as the proposed additional administrative changes acceptable.

(1) TS 5.6.2 has been revised to incorporate the information presently in TS 5.6.2.1 and 5.6.2.2 into a format similar to the format used in the improved standard TS (NUREG-1431, Rev 1). All current TS requirements are still retained. Table 5.6-1 is added to clarify the individual enrichment limits for the various fuel types used at Cook. The revised TS also includes the requirement for k_{eff} to be no greater than 0.95 if fully flooded with unborated water, which is consistent with NRC requirements.

(2) TS Table 5.6-1 has been revised to include a footnote for the Westinghouse fuel types to allow a maximum nominal enrichment of 4.95 w/o

U-235 provided sufficient IFBAs are present such that k_{∞} is no greater than 1.4857.

3.0 SUMMARY

Based on the review described above, the staff finds the proposed increase in the allowable U-235 enrichment of fuel to be stored in the new fuel storage facilities of the D.C. Cook plants to be acceptable. The proposed change meets the requirements of General Design Criterion 62 for the prevention of criticality in fuel storage and handling.

Although the Cook TS have been modified to specify the increased enrichment fuel as acceptable for storage in the new fuel racks, evaluations of reload core designs will continue to be performed on a cycle by cycle basis as part of the reload safety evaluation process. Each reload design is evaluated to confirm that the cycle core design adheres to the limits that exist in the accident analyses and TS to ensure that reactor operation is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32 and 51.35, an environmental assessment and finding of no significant impact was published in the Federal Register on February 12, 1997 (62 FR 6565).

Accordingly, based upon the environmental assessment, the Commission has determined that issuance of the amendments will not have a significant effect on the quality of the human environment.

6.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Larry Kopp, NRR

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