January 6, 2000

Template No. 058

Mr. Robert P. Powers, Senior Vice President
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: ISSUANCE OF AMENDMENTS - DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2, RE: FUEL ROD ZIRLO CLADDING AND INTEGRAL FUEL BURNABLE ABSORBER REQUIREMENTS (TAC NOS. MA7041 AND MA7042)

Dear Mr. Powers:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 239 to Facility Operating License No. DPR-58 and Amendment No. 220 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated November 3, 1999.

The amendments allow use of fuel rods with ZIRLO cladding, specify an alternate methodology to determine the integral fuel burnable absorber (IFBA) requirements for Westinghouse fuel assemblies stored in the new fuel storage racks, and delete the designation of the fuel assembly types allowed in the spent fuel storage racks and the new fuel storage racks.

A copy of our related safety evaluation is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,
Original Signed By
Carl F. Lyon
for John F. Stang, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 239 to DPR-58
2. Amendment No. 220 to DPR-74
3. Safety Evaluation

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

January 6, 2000

Mr. Robert P. Powers, Senior Vice President
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: ISSUANCE OF AMENDMENTS - DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2, RE: FUEL ROD ZIRLO CLADDING AND INTEGRAL FUEL BURNABLE ABSORBER REQUIREMENTS (TAC NOS. MA7041 AND MA7042)

Dear Mr. Powers:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 239 to Facility Operating License No. DPR-58 and Amendment No. 220 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated November 3, 1999.

The amendments allow use of fuel rods with ZIRLO cladding, specify an alternate methodology to determine the integral fuel burnable absorber (IFBA) requirements for Westinghouse fuel assemblies stored in the new fuel storage racks, and delete the designation of the fuel assembly types allowed in the spent fuel storage racks and the new fuel storage racks.

A copy of our related safety evaluation is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

CFlyon for

John F. Stang, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 239 to DPR-58
2. Amendment No. 220 to DPR-74
3. Safety Evaluation

cc w/encls: See next page

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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 239
License No. DPR-58

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Indiana Michigan Power Company (the licensee) dated November 3, 1999, 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:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 239 , 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 its date of issuance and shall be implemented within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Claudia M. Craig

Claudia M. Craig, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: January 6, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 239

TO FACILITY OPERATING LICENSE NO. DPR-58

DOCKET NO. 50-315

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE	INSERT
5-4	5-4
5-6	5-6
5-8	5-8
-	5-8a

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 or ZIRLO, 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 analysis 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.

5.6 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

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 FUEL STORAGE (Continued)

CRITICALITY - NEW FUEL

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

a. Westinghouse fuel assemblies having either a maximum enrichment of 4.55 weight % U-235, or an enrichment between 4.55 and 4.95 weight % U-235 with greater than or equal to the minimum number of integral fuel burnable absorber pins as shown on Figure 5.6-4(interpolation of the Boron-10 loading between 1.0X and 1.5X and between 1.5X and 2.0X is acceptable);

b. $k_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR;

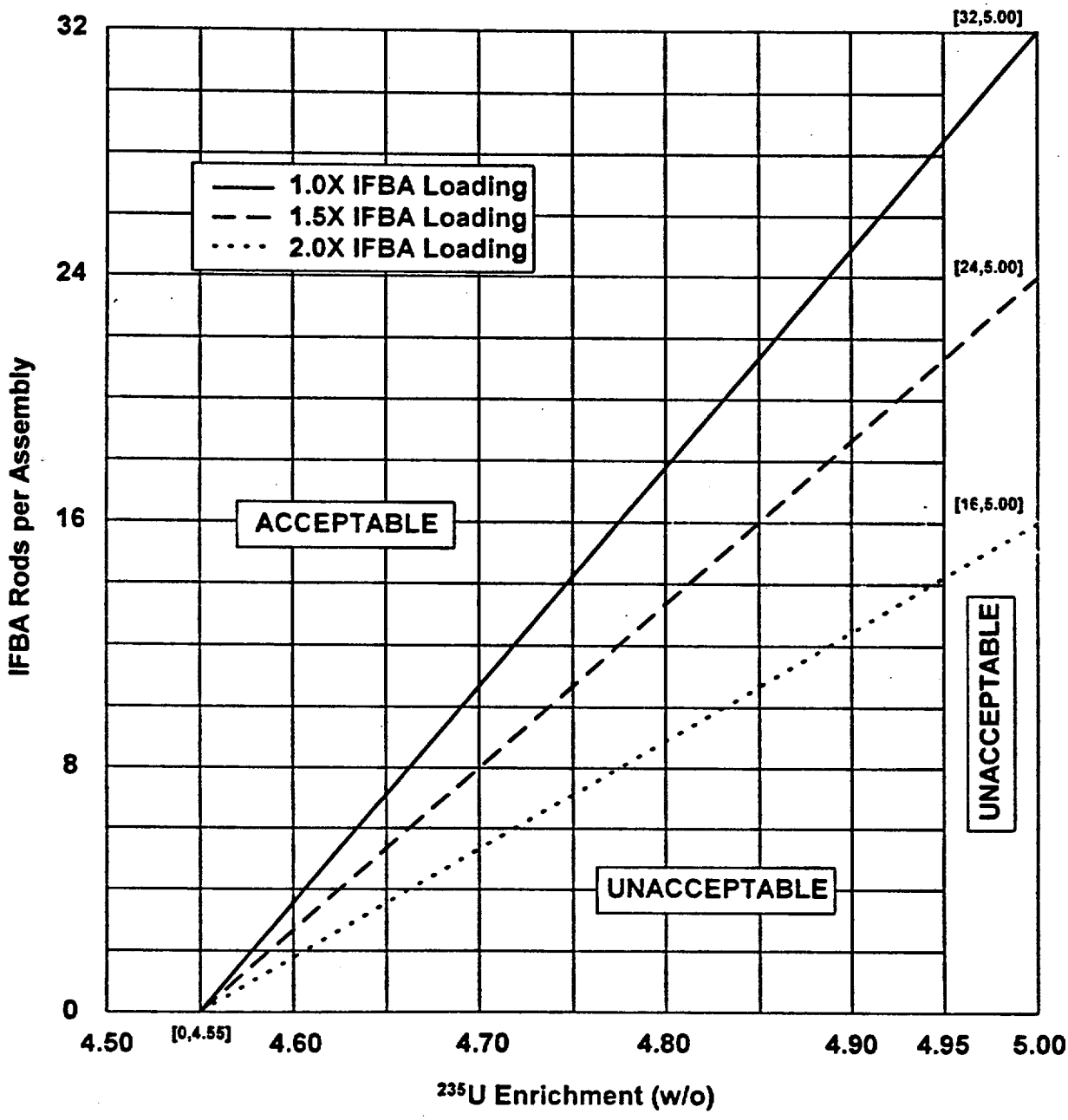
c. $k_{eff} \leq 0.98$ if moderated by aqueous foam, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR; and

d. A nominal 21 inch center to center distance between fuel assemblies placed in the storage racks.

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".

Figure 5.6-4: New Fuel Storage Rack Integral Fuel Burnable Absorber (IFBA) Requirements



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 220
License No. DPR-74

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Indiana Michigan Power Company (the licensee) dated November 3, 1999, 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:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 220 , 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 its date of issuance and shall be implemented within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Claudia M. Craig

Claudia M. Craig, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: January 6, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 220

FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 50-316

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE	INSERT
5-4	5-4
5-6	5-6
5-9	5-9
-	5-9a

5.3 REACTOR CORE

FUEL ASSEMBLIES

5.3.1 The reactor core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4 or ZIRLO, 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 3.3 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and may be nominally enriched up to 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.

5.4 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.

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 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 either a maximum enrichment of 4.55 weight % U-235, or an enrichment between 4.55 and 4.95 weight % U-235 with the minimum number of integral fuel burnable absorber pins as shown on Figure 5.6-4 (interpolation of the Boron-10 loading between 1.0X and 1.5X and between 1.5X and 2.0X is acceptable);

b. $k_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.7 of the UFSAR;

c. $k_{eff} \leq 0.98$ 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.

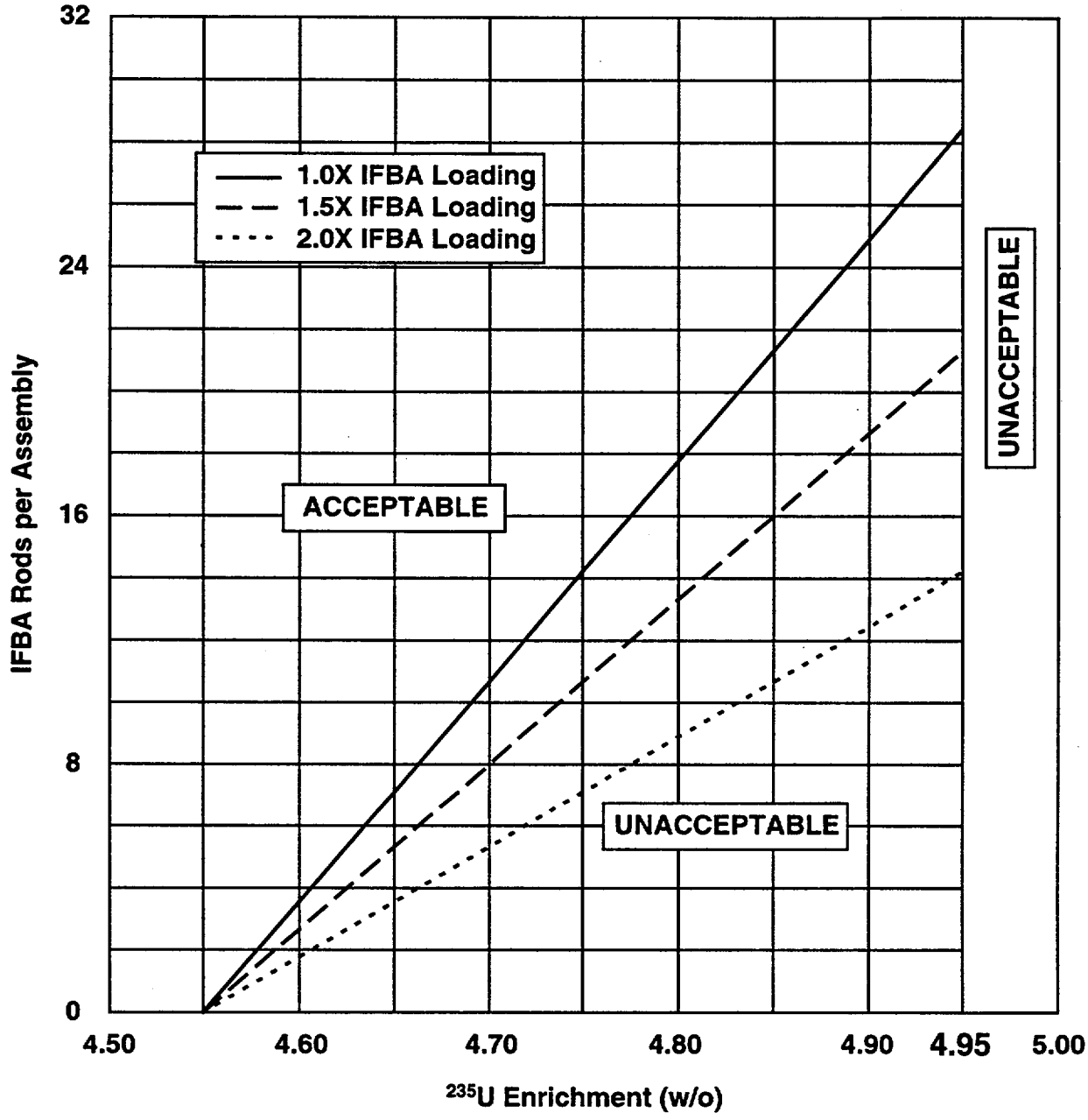
DRAINAGE

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.

Figure 5.6-4: New Fuel Storage Rack Integral Fuel Burnable Absorber (IFBA) Requirements



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 239 TO FACILITY OPERATING LICENSE NO. DPR-58

AND AMENDMENT NO. 220 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By application dated November 3, 1999, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TSs) for the Donald C. Cook Nuclear Plant (CNP), Units 1 and 2. The proposed amendments would allow use of fuel rods with ZIRLO cladding, specify an alternate methodology to determine the integral fuel burnable absorber (IFBA) requirements for Westinghouse fuel assemblies stored in the new fuel storage racks, and delete the designation of the fuel assembly types allowed in the spent fuel storage racks and the new fuel storage racks.

2.0 EVALUATION

2.1 USE OF FUEL RODS WITH ZIRLO CLADDING

TS 5.3.1 requires, in part, that each fuel assembly shall consist of fuel rods clad with Zircaloy-4. 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 analysis to comply with all fuel safety design bases. The licensee proposes to change TS 5.3.1 to allow fuel rods to be clad with either Zircaloy-4 or ZIRLO. The licensee is transitioning to a more advanced Westinghouse fuel assembly design consisting of the VANTAGE 5 fuel assembly design currently used at CNP with the addition of ZIRLO cladding. The new fuel assembly design has become the standard fuel design. It is used at many other Westinghouse plants and provides improved corrosion resistance, enhanced fuel reliability, and the capability to support future increased discharge burnups.

The use of ZIRLO cladding in Westinghouse fuel was described in Westinghouse Topical Report WCAP-12610, "VANTAGE+ Fuel Assembly Reference Core Report," and was approved by the staff for irradiation up to 60,000 MWD/MTU rod average burnup in a safety evaluation transmitted by letter from A. Thadani (NRC) to S. Tritch (Westinghouse) dated July 1, 1991. The safety evaluation concluded that:

a. The mechanical design bases and limits for ZIRLO clad fuel assembly design are the same as those for the previously licensed Zircaloy-4 clad fuel assembly design, except those specified for clad corrosion which are improved.

b. The neutronic evaluations have shown that ZIRLO clad fuel nuclear design bases are satisfied and that key safety parameter limits are applicable. The nuclear design models and methods accurately describe the behavior of ZIRLO clad fuel.

c. The thermal and hydraulic design bases for ZIRLO clad fuel is unchanged from those of fuel clad with Zircaloy-4.

d. The methods and computer codes used in the analysis of the non-LOCA (loss-of-coolant accident) licensing-basis events are valid for ZIRLO clad fuel, and all licensing-basis criteria are met.

e. The large-break LOCA evaluation model was adapted (without effecting model parameters as approved consistent with Appendix K of 10 CFR Part 50) only to reflect the behavior of the ZIRLO clad material during a LOCA. Consequently, the revised evaluation model satisfies 10 CFR 50.46 and 10 CFR Part 50, Appendix K.

In a safety evaluation transmitted by letter from A. Thadani (NRC) to S. Tritch (Westinghouse) dated October 9, 1991, for WCAP-12610, Appendices F and G, the NRC concluded that the LOCA analyses and methods used demonstrated conformance with the criteria given in 10 CFR 50.46 and 10 CFR Part 50, Appendix K. The evaluation stated that its conclusions were based upon the close similarity between the material properties of the ZIRLO alloy of zirconium to those of other zirconium materials that have been previously licensed for use as cladding material. Based on this similarity, the NRC staff found that it is appropriately conservative to apply the criteria of 10 CFR 50.46 and 10 CFR Part 50, Appendix K, when reviewing VANTAGE+ (ZIRLO) fuel applications, including WCAP-12610, Appendices F and G.

The change from Zircaloy-4 to ZIRLO is consistent with 10 CFR 50.44, 10 CFR 50.46, and NUREG-1431, Rev.1, "Standard Technical Specifications - Westinghouse Plants," which includes ZIRLO as an acceptable cladding material. TS 5.3.1 requires, in part, that "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." TS 5.3.1 requires the licensee to justify the use of ZIRLO by cycle-specific reload analyses in accordance with NRC-approved applications of fuel rod configurations.

The licensee proposes to use fuel rods with ZIRLO cladding in order to take advantage of improvements in fuel clad corrosion margin and fuel integrity. Due to the similarities in hydraulic, mechanical, and thermal characteristics of the Zircaloy-4 and ZIRLO clad fuel, and since the licensee's proposal is consistent with NUREG-1431, the regulations, and references the staff-approved WCAP-12610, the staff concludes that the use of ZIRLO clad fuel at D.C. Cook is acceptable.

2.2 METHODOLOGY FOR DETERMINING IFBA REQUIREMENTS

The TS design requirements for the new fuel storage racks are intended to ensure that adequate reactivity margin is maintained to prevent an inadvertent criticality. Reactivity margin

is maintained by controlling maximum enrichment and spacing of fuel assemblies in the new fuel storage racks. In addition, the use of IFBA is necessary for Westinghouse fuel assemblies with higher base reactivity (high enrichments) to maintain the required reactivity margin.

The current TS requirement for determining the amount of IFBA present in each stored Westinghouse fuel assembly for reactivity control employs the K-infinity (or K_∞) methodology. This methodology and an additional methodology called reactivity equivalencing, based on use of a CNP site-specific IFBA-enrichment curve for Westinghouse fuel assemblies, were both described in CDB-95-175, "Criticality Analysis of the Donald C. Cook Nuclear Plant New Fuel Storage Vault with Credit for Integral Fuel Burnable Absorbers," previously reviewed and approved by the NRC staff for Amendment Nos. 213 and 198 for CNP, Units 1 and 2, respectively, dated February 27, 1997.

The K-infinity methodology uses the reactor core configuration rather than a site-specific new fuel storage rack configuration. A review of this methodology was recently performed by Westinghouse and documented in Nuclear Safety Advisory Letter (NSAL) 99-003, dated February 26, 1999. This review determined that the K-infinity methodology could lead to IFBA requirements that are nonconservative compared to those required by the methodology involving use of an IFBA-enrichment curve as described in CDB-95-175.

The licensee proposes to revise TS 5.6.2.a and add a new TS Figure 5.6-4, "New Fuel Storage Rack Integral Fuel Burnable Absorber (IFBA) Requirements," to specify maximum enrichments and IFBA requirements for Westinghouse fuel in the new fuel storage racks. Specifically, TS 5.6.2.a is proposed to state that the new fuel storage racks are designed and shall be maintained with "Westinghouse fuel assemblies having either a maximum enrichment of 4.55 weight % U-235, or an enrichment between 4.55 and 4.95 weight % U-235 with greater than or equal to the minimum number of integral fuel burnable absorber pins as shown on Figure 5.6-4 (interpolation of the Boron-10 loading between 1.0X and 1.5X and between 1.5X and 2.0X is acceptable)." The new TS Figure 5.6-4 specifically covers IFBA requirements between 4.55 and 4.95 weight % U-235. The licensee proposes to delete the footnote for TS Table 5.6-1 since it is superseded by the proposed change to TS 5.6.2.a.

New TS Figure 5.6-4 is based on the reactivity equivalencing calculational method described in CDB-95-175, which was previously reviewed and approved by the NRC for Amendment Nos. 213 and 198. Use of this method ensures the required reactivity margin is maintained for storage of Westinghouse fuel assemblies in the new fuel storage racks. Therefore, the staff considers the proposed method for determining IFBA requirements and resulting TS changes acceptable.

2.3 DELETION OF SPECIFIED STORED FUEL ASSEMBLY TYPES

TS 5.6.1.2 and TS Table 5.6-1 list the specific fuel assembly types allowed in the spent fuel storage racks and the specific fuel assembly types allowed in the new fuel storage racks. These include Westinghouse and Exxon/ANF fuel designs.

The design and operational requirements for the spent fuel storage racks and new fuel storage racks are intended to ensure that adequate reactivity margin is maintained to prevent an inadvertent criticality. Reactivity margin is maintained by controlling maximum enrichment, overall reactivity of the stored fuel assemblies, and spacing of fuel assemblies in the spent fuel

storage racks and new fuel storage racks. The listing of specific fuel assembly types and their maximum nominal enrichment illustrates the different specific fuel assembly designs that have been determined to meet the design requirements for storage to ensure the reactivity margin requirements of the TS are maintained.

The licensee proposes to delete the specific fuel assembly types from the TS, specifically TS 5.6.1.2 and TS Table 5.6-1, to eliminate the need to revise the TS in the future for changes in specific fuel assembly types that otherwise do not affect TS requirements or require NRC review and approval under 10 CFR 50.59. The current criticality requirements specified in TS 5.6.1.1 and TS 5.6.2 for the spent fuel storage racks and new fuel storage racks remain unchanged.

Identifying specific fuel assembly types is not necessary in the TS, because the maximum enrichment and criticality requirements in TS 5.6.1.1 and TS 5.6.2 ensure the safety of stored fuel assemblies. In addition, changes in specific fuel assembly types must be justified by cycle-specific reload analyses in accordance with 10 CFR 50.59. This proposed change is consistent with both NUREG-0452, Rev.4, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors," and NUREG-1431, Rev.1, "Standard Technical Specifications - Westinghouse Plants." Therefore, the staff considers the proposed deletion of specific fuel assembly types acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments change the requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (64 FR 67335). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 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: F. Lyon

Date: January 6, 2000