MAY 04 1983

DISTRIBUTION
Docket File
NRC PDR
Local PDR
ORB 1 File
D. Eisenhut
C. Parrish
D. Wigginton
OELD
SECY (w/trans form)
L. J. Harmon
E. Jordan
J. Taylor
T. Barnhart (8)
W. Jones
D. Brinkman
ACRS (10)
OPA-Clare Miles
R. Diggs
NSIC

Docket Nos. 50-315
and 50-316

Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
Post Office Box 18
Bowling Green Station
New York, New York 10004

Dear Mr. Dolan:

The Commission has issued the enclosed Amendment No. 73 to Facility Operating License No. DPR-58 and Amendment No. 55 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the license conditions and Technical Specifications in response to your application transmitted by letter dated February 28, 1983.

These amendments revise the license conditions and Technical Specifications to permit storage of Westinghouse 15 X 15 optimized fuel assemblies with uranium enrichment of less than or equal to 4.00 weight percent of U-235.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

ORIGINAL SIGNED

David L. Wigginton, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:
1. Amendment No. 73 to DPR-58
2. Amendment No. 55 to DPR-74
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

5/3/83
NRC
with comments
in Note to Wigginton

SEE PREVIOUS NRC 318 FOR PREVIOUS CONCURRENCES*

OFFICE	ORB 1	ORB 1	ORB 1	AD:OR *	OELD *		
	CParrish	DWigginton	SVarga	GLainas	WPatterson		
SURNAME	4/27/83	4/27/83	4/27/83	4/27/83	4/27/83		
DATE							

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-960

DISTRIBUTION
Docket File
NRC PDR
Local PDR
ORB 1 File
D. Eisenhut
C. Parrish
D. Wigginton
OELD
SECY (w/trans form)
L. J. Harmon
E. Jordan
J. Taylor
T. Barnhart (8)
W. Jones
D. Brinkman
ACRS (10)
OPA, Clare Miles
R. Diggs
NSIC

Docket Nos. 50-315
and 50-316

Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
Post Office Box 18
Bowling Green Station
New York, New York 10004

Dear Mr. Dolan:

The Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-58 and Amendment No. to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specification in partial response to your application transmitted by letter dated February 28, 1983.

These amendments change the Technical Specification by adding a temporary provision to allow Westinghouse 15 X 15 optimized fuel assemblies to be stored in the new fuel vaults. The Safety Evaluation, however, includes our review of the new fuel in both the new fuel vaults and the spent fuel pool. The license amendments to allow this new fuel to be put in the spent fuel pool will be the subject of separate correspondence.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

David L. Wigginton, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:
1. Amendment No. to DPR-58
2. Amendment No. to DPR-74
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

OFFICE	ORB 1	ORB 1	ORB 1	AD/OR	OELD		
	CParrish	DWigginton/rs	SVarga	GLainas			
SURNAME							
DATE	4/27/83	4/27/83	4/27/83	4/27/83	4/27/83		

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-960

Mr. John Dolan
Indiana and Michigan Electric Company

cc: Mr. M. P. Alexich
Assistant Vice President
for Nuclear Engineering
American Electric Power
Service Corporation
2 Broadway
New York, New York 10004

Mr. William R. Rustem (2)
Office of the Governor
Room 1 - Capitol Building
Lansing, Michigan 48913

Mr. Wade Schuler, Supervisor
Lake Township
Baroda, Michigan 49101

W. G. Smith, Jr., Plant Manager
Donald C. Cook Nuclear Plant
P. O. Box 458
Bridgman, Michigan 49106

U. S. Nuclear Regulatory Commission
Resident Inspectors Office
7700 Red Arrow Highway
Stevensville, Michigan 49127

Gerald Charnoff, Esquire
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Honorable James Bemenek, Mayor
City of Bridgman, Michigan 49106

U.S. Environmental Protection Agency
Region V Office
ATTN: EIS COORDINATOR
230 South Dearborn Street
Chicago, Illinois 60604

Maurice S. Reizen, M.D.
Director
Department of Public Health
P.O. Box 30035
Lansing, Michigan 48109

William J. Scanlon, Esquire
2034 Pauline Boulevard
Ann Arbor, Michigan 48103

The Honorable Tom Corcoran
United States House of Representatives
Washington, D. C. 20515

James G. Keppler
Regional Administrator - Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

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

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 73
License No. DPR-58

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

   A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated February 28, 1983, 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 Specification

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 73 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. In addition, paragraph 2.C.(5) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

   "Spent Fuel Pool Storage

   The licensee is authorized to store D. C. Cook, Unit 1 and Unit 2 fuel assemblies, new or irradiated in any combination, up to a total of 2050 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

   Fuel stored in the spent fuel pool shall not have an enrichment greater than 4.00% Uranium-235 or a fissile fuel density greater than 50.5 grams of Uranium-235 per axial centimeter of fuel assembly or the reactivity equivalent thereof."

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 4, 1983

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

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55
License No. DPR-74

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

   A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated February 28, 1983, 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 Specification

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 55, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. In addition, paragraph 2.C.(3)(5) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

   "Spent Fuel Pool Storage

   The licensee is authorized to store D. C. Cook, Unit 1 and Unit 2 fuel assemblies, new or irradiated in any combination, up to a total of 2050 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

   Fuel stored in the spent fuel pool shall not have an enrichment greater than 4.00% Uranium-235 or a fissile fuel density greater than 50.5 grams of Uranium-235 per axial centimeter of fuel assembly or the reactivity equivalent thereof."

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 4, 1983

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 73 TO FACILITY OPERATING LICENSE NO. DPR-58

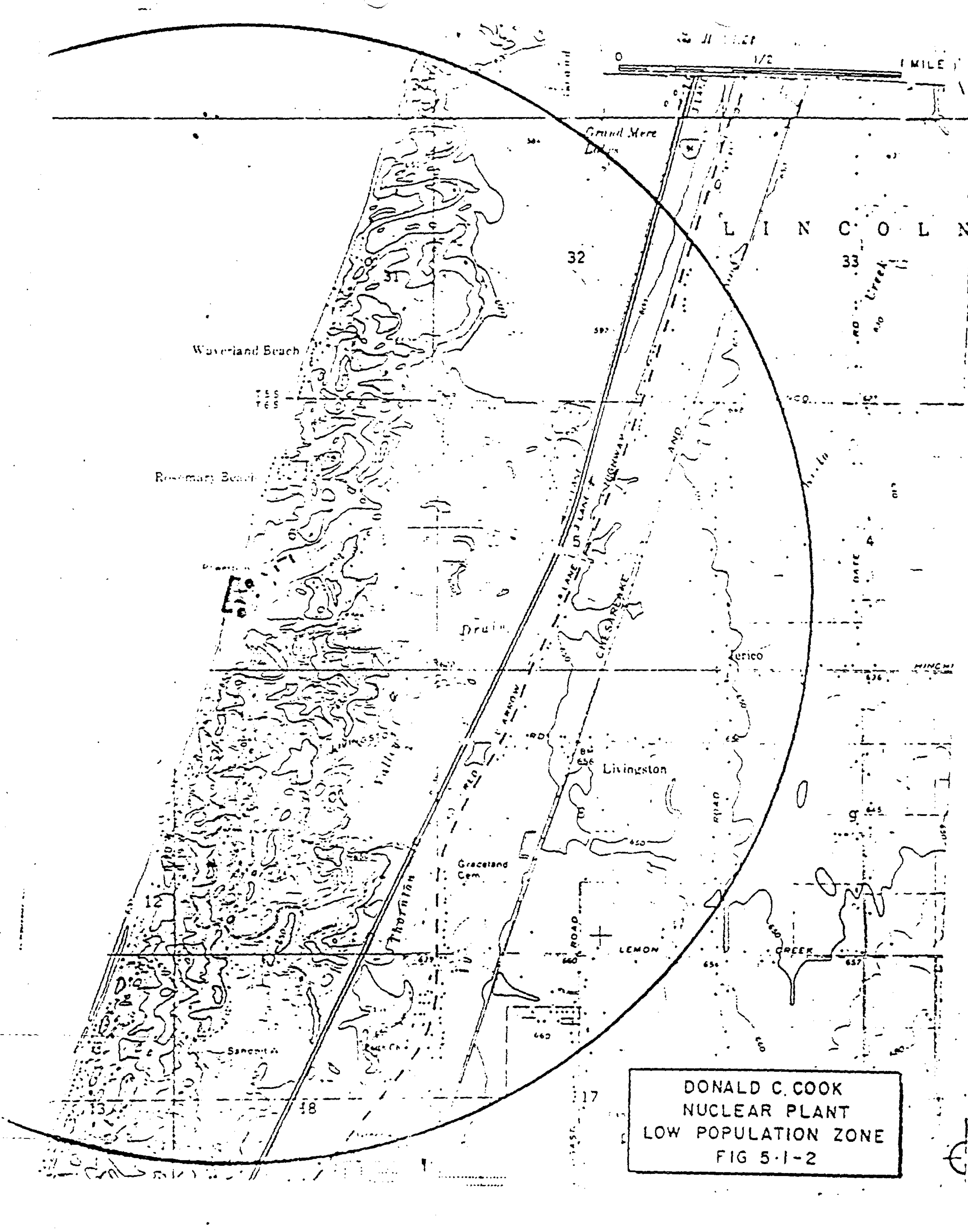
AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NOS. 50-315 AND 50-316

Revise Appendix A as follows:

Remove Pages	Insert Pages
Unit 1	
5-3*	5-3*
5-4	5-4
5-5	5-5
Unit 2	
5-5	5-5

*For convenience only.


0
1/2
1 MILE
Grand Mere Lakes
L I N C O L N
32
33
31
Waveriand Beach
T5S
T6S
Rosemary Beach
5
4
Drain
Livingston
Graceland Cem.
LEMON
CREEK
12
13
18
17
9
DONALD C. COOK
NUCLEAR PLANT
LOW POPULATION ZONE
FIG 5-1-2

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 Zircoloy -4. Each fuel rod shall have a nominal active fuel length of 144 inches and contain a maximum total weight of 2236 grams uranium. 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 enrichment of 4.0 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.

VOLUME

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

5.5 EMERGENCY CORE COOLING SYSTEMS

5.51 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.

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 10.5 inch center-to-center distance between fuel assemblies placed in the storage racks.

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

Fuel Type	Description		Maximum Nominal Fuel Assembly Enrichment Wt. % ^{235}U
I	Westinghouse	15 x 15	3.50
II	Exxon	15 x 15	3.50
III	Westinghouse	17 x 17	3.50
IV	Exxon	17 x 17	3.84
V	Westinghouse OFA	15 x 15	4.00

CRITICALITY - NEW FUEL

5.6.2 The new fuel pit storage racks are designed and shall be maintained with a nominal 21 inch center-to-center distance between new fuel assemblies such that K_{eff} will not exceed 0.98 when Fuel Types I, II, III, IV & V (as defined in Section 5.6.1.2) are placed in the pit and aqueous foam moderation is assumed.

VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 12,612 ± 100 cubic feet at a nominal T_{avg} of 70°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

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 10.5 inch center-to-center distance between fuel assemblies, placed in the storage racks.

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

Fuel Type	Description		Maximum Nominal Fuel Assembly Enrichment Wt. % ^{235}U
I	Westinghouse	15 x 15	3.50
II	Exxon	15 x 15	3.50
III	Westinghouse	17 x 17	3.50
IV	Exxon	17 x 17	3.84
V	Westinghouse	15 x 15	4.00

CRITICALITY - NEW FUEL

5.6.2 The new fuel pit storage racks are designed and shall be maintained with a nominal 21 inch center-to-center distance between new fuel assemblies such that K_{eff} will not exceed 0.98 when Fuel Types I, II, III, IV & V (as defined in Section 5.6.1.2) are placed in the pit and aqueous foam moderation is assumed.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 73 TO FACILITY OPERATING LICENSE NO. DPR-58

AND AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA AND MICHIGAN ELECTRIC COMPANY

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

DOCKET NOS. 50-315 AND 50-316

INTRODUCTION

By letter dated February 28, 1983, Indiana and Michigan Electric Company has requested amendments to Facility Operating License No. DPR-58 for D. C. Cook Unit 1 and Facility Operating License No. DPR-74 for D. C. Cook Unit 2. This proposed change will increase the maximum reload fuel enrichment for Unit 1 from 3.5 weight percent U-235 to 4.0 weight percent U-235. The submittal includes analyses of the effects of the higher enrichment on the criticality aspects of both the new and spent fuel racks at the D. C. Cook Units. These changes will permit the storage of the Westinghouse 15x15 Optimized Fuel Assembly (OFA) design fuel in the D. C. Cook new fuel storage area and spent fuel pool. The effect of the proposed change on plant operating characteristics is still under staff review. However, we have completed our review of those portions of the amendment request which relate to the storage of the new fuel in the new fuel vaults and to new fuel storage in the spent fuel pool in preparation for loading into the reactor, if operation with such reload is subsequently authorized by the NRC. There is no change in the total number of assemblies authorized for storage in the spent fuel storage pools.

DISCUSSION

Analysis Methods

The Westinghouse 15x15 OFA enrichment will not exceed 4.0 weight percent U-235. Therefore, the proposed Technical Specification changes limit the maximum reload fuel enrichment for Westinghouse reload fuel in D. C. Cook Unit 1 to 4.0 weight percent U-235. However, the criticality aspects of the storage of Westinghouse 17x17 standard fuel assemblies with 4.5 weight percent U-235 fuel in the new fuel racks and Westinghouse 15x15 OFAs with 4.05 weight percent U-235 fuel in the spent fuel pool have been analyzed using the KENO-IV Monte Carlo computer code for reactivity determination with neutron cross sections generated by the AMPX code package. A 218 energy energy group cross section library is generated from ENDF/B-IV data.

These codes have been benchmarked against a set of 27 critical experiments in the range of pellet diameters, water-to-fuel ratios and U-235 enrichments that encompasses the D. C. Cook design. This benchmarking led to the conclusion that the calculational model is capable of determining the multiplication factor (k_{eff}) of the new and spent fuel racks to within 1.3 percent with a 95 percent probability at the 95 percent confidence level.

New Fuel Storage Rack Analysis

The criticality of fuel assemblies in the new fuel storage rack is prevented by maintaining a minimum separation of 21 inches between assemblies. Although new fuel is normally stored in a dry configuration, the NRC acceptance criteria for new fuel storage is that there is a 95 percent probability at a 95 percent confidence level (including uncertainties) that k_{eff} of the fuel assembly array will be; (1) no greater than 0.95 when fully loaded and flooded with unborated water and (2) no greater than 0.98 under conditions of optimum moderation if higher reactivities can be attained at achievable moderation conditions other than full density unborated water.

In addition to the calculational method uncertainty mentioned previously, uncertainties and biases due to mechanical tolerances such as stainless steel thickness, cell inner diameter, center-to-center spacing, and asymmetric assembly position are included either by using worst case initial conditions or by performing sensitivity studies to obtain the appropriate values. Credit is taken for the neutron absorption in the full length stainless steel angle irons at the corners of each fuel assembly.

Using these methods and assumptions, the nominal k_{eff} of the new fuel storage racks fully flooded with unborated water is calculated as 0.9189. The fuel is assumed to be the Westinghouse 17x17 standard fuel assembly design at a U-235 enrichment of 4.5 weight percent. This fuel is similar neutronically to the 15x15 standard fuel assembly design. Any additional neutronic differences between the standard and OFA 15x15 assemblies are conservatively accounted for by use of the higher enrichment in the calculations, i.e., 4.5 rather than 4.0 weight percent U-235. Adding the appropriate 95/95 probability/confidence

uncertainties and biases yields a value of 0.9343 for the multiplication factor. This meets our acceptance criterion of 0.95. Physically achievable water densities which could be caused by fire fighting operations such as sprinklers or fog nozzles are considerably too low (much less than 0.01 gm/cc) to yield k_{eff} values higher than full density water, and boiling between cells is prevented by the rack design. In addition, events such as the inadvertent drop of an assembly between the outside periphery of the rack and the pit wall would not cause a criticality accident because of the assumption of the double contingency principle. This states that it is unnecessary to assume two unlikely, independent, concurrent events to ensure protection against a criticality accident. Therefore, for accidents such as this, the absence of water in the new fuel storage pit can be assumed since assuming its presence would be a second unlikely event. Without water, any postulated assembly drop accident would result in a k_{eff} value very much less than our acceptance criterion of 0.95. We, therefore, conclude that fuel assemblies of the Westinghouse (OFA) 15x15 design having enrichments no greater than 4.0 weight percent may be stored in the D. C. Cook new fuel racks.

Spent Fuel Storage Rack Analysis

The criticality of fuel assemblies in the spent fuel storage rack is prevented by maintaining a minimum separation of 10.5 inches between assemblies and by inserting the neutron absorber, Boral, between assemblies. Although spent fuel is normally stored in borated pool water containing approximately 2000 ppm boron, the NRC acceptance criterion for spent fuel storage is that there is a 95 percent probability at a 95 percent confidence level (including uncertainties) that k_{eff} of the fuel assembly array will be less than 0.95 when fully flooded with unborated water.

In addition to the calculational method uncertainty mentioned previously, uncertainties and biases due to mechanical tolerances, thermal conditions, and B_4C particle self-shielding are included either by using worst case initial conditions or by performing sensitivity studies to obtain the appropriate values. Credit is taken for the neutron absorption in full length structural materials and in solid materials added specifically for neutron absorption. However, for conservatism, the minimum poison loading is assumed in these cases.

Using these methods and assumptions, the nominal k_{eff} of the spent fuel racks fully flooded with unborated water is calculated as 0.9284. The fuel is assumed to be Westinghouse 15x15 OFA at a higher than expected enrichment of 4.05 weight percent U-235. The temperature of the water is taken as that which yields the largest reactivity. A conservative value of 1.0 gm/cc is used for the density of the water. Adding the appropriate 95/95 probability/confidence uncertainties and biases yields a value of 0.9482 for the multiplication factor. This meets our acceptance criterion of 0.95. Postulated events such as the inadvertent drop of an assembly between the outside periphery of the rack and the pool wall would not cause a criticality accident because of the assumption of the double contingency principle. In other words, for accident conditions, the presence of soluble boron in the storage pool can be assumed and would result in a k_{eff} value very much less than our acceptance criterion of 0.95. We, therefore, concluded that fuel assemblies of the Westinghouse (OFA) 15x15 design having enrichments no greater than 4.0 weight percent may be stored in the D. C. Cook spent fuel pool.

New Fuel Handling

The new fuel arriving at the site is typically placed in the new fuel vault for initial storage. Before insertion in the reactor core, the fuel is tranferred to the spent fuel pool. Upon insertion in the spent fuel pool, the fuel becomes slightly contaminated due to the environment. Subsequent to the spent fuel pool storage of new fuel and upon determining that a new fuel assembly must be removed from the pool for examination, measurements, or for other reasons, special handling is required. From discussions with the licensee, this fuel handling will be done in accordance with plant procedures concerning handling of components having a low level of activity. We find this acceptable.

Conclusions

Based on our review, we conclude that the storage racks meet the requirements of General Design Criterion 62 as regards criticality. Also, we conclude that any number of Westinghouse (OFA) 15x15 fuel assemblies of maximum enrichment no greater than 4.0 weight percent U-235 may be stored in the new and spent fuel racks of D. C. Cook Units 1 and 2. These conclusions are based on the following considerations:

1. State-of-the-art calculational methods which have been verified by comparison with experiment have been used.

2. Conservative assumptions have been made about the enrichment of the fuel to be stored and the pool conditions.

3. Credible accidents have been considered.

4. Suitable uncertainties have been considered in arriving at the final value of the multiplication factor.

5. The final effective multiplication factor value meets our acceptance criterion.

We also conclude that the proposed changes to Section 5 of the D. C. Cook Technical Specifications adequately account for the reload fuel enrichment increase and are, therefore, acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: May 4, 1983

Principal Contributor:
L. Kopp

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-315 AND 50-316

INDIANA AND MICHIGAN ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 73 to Facility Operating License No. DPR-58, and Amendment No. 55 to Facility Operating License No. DPR-74 issued to Indiana and Michigan Electric Company (the licensee), which revised Technical Specifications for operation of Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2 (the facilities) located in Berrien County, Michigan. The amendments are effective as of the date of issuance.

The amendments revise the license conditions and Technical Specifications to permit the storage of Westinghouse 15 X 15 optimized fuel assemblies with a uranium enrichment of less than or equal to 4.00 weight percent of U-235. The portion of the licensee's request relating to authorization to operate with such new fuel in still under NRC staff review.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated February 28, 1983, (2) Amendment Nos. 73 and 55 to License Nos. DPR-58 and DPR-74, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Maude Reston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 4th day of May, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing