

Docket No.: 50-316

4-4-86

Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
c/o American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215

Dear Mr. Dolan:

Enclosed for your information is a "Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing" related to your March 14 and 27, 1986, requests concerning the D. C. Cook Unit 2, Cycle 6 reload. The notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

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B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A, NRR

Enclosure: As stated

cc w/enclosure:
See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSIONINDIANA AND MICHIGAN ELECTRIC COMPANYDOCKET NO. 50-316NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-74, issued to Indiana and Michigan Electric Company (the licensee), for operation of the Donald C. Cook Nuclear Plant Unit No. 2 located in Berrien County, Michigan.

The amendment would revise the Technical Specifications in accordance with the licensee's application for amendment dated March 14 and March 27, 1986.

The proposed Technical Specification changes are related to the Unit 2 cycle 6 reload, additional provisions consistent with safety analyses, clarifications to make Unit 2 Technical Specifications consistent with Unit 1 and the Standard Technical Specifications, and editorial corrections. These changes are described in 12 separate groups as follows.

Group One is editorial changes to enhance readability, correct errors, or achieve consistency of language or format between Unit 1 and 2 Technical Specifications, or with the Standard Technical Specifications. Group Two is the removal of Technical Specifications for 3-loop operation in Modes 1 and 2 since License Condition 2.C.3(j) prohibits the operation. Group Three is proposed new requirements to make the Technical Specifications consistent with the safety analyses for the Cycle 6 reload. Group Four is a clarification that the refueling water storage tank is not a source of boron dilution during

normal operation and a modification to cover boron dilution in Modes 4, 5, and 6 with new fuel in the core. Group Five is a change to a footnote on Table 3.3-3 which is related to 3-loop operation and requires tripping of bistables in the inactive loop to indicate low active loop steam pressure relative to the idle loop. The 3-loop operation is removed and the footnote revised for clarification. Group Six is a change to the power-operated relief valve (PORV) specification to ensure PORV relief capability is available to assist in reactor coolant system depressurization following a steam generator tube rupture without offsite power. The new specification will require at least two PORVs be "available" in Modes, 1, 2, and 3; "available" means the equipment and controlling circuitry is in its normal configuration with power available to perform the required safety function. Group Seven is the deletion of Section 4.0.4 requirements for certain Technical Specifications. Section 4.0.4 deletion will allow the unit to change modes without the surveillance requirements being met; i.e., the unit should be allowed to advance to the mode where the surveillance can be accomplished. The systems or components where the change will apply include flow measurement for the departure from nucleate boiling, source range and intermediate range detector calibrations, incore and excore power range detector cross-calibrations, power range neutron flux heat balance, incore and excore axial offset comparison, source range channel functional test, single loop and two loop loss-of-flow-trip calibrations, f-delta I penalties associated with Overpower delta T and Overttemperature delta T trips, steam generator stop valves, and for beginning of cycle physics tests. Group Eight is changes to parameters to reflect the assumptions used in the Cycle 6 reload analysis and includes setpoints as a result of the replacement

of Rosemount resistance temperature detectors (RTDS) with detectors manufactured by Rdf, and f-delta I penalties which now input to the Overpower delta T and Overtemperature delta T reactor trip setpoints to account for possible axial imbalance in neutron flux between the top and bottom half of the core. Group Nine is a change to separate flow rate and nuclear enthalpy hot channel factor. The proposed Technical Specifications define nuclear enthalpy hot channel factor as a function of rated thermal power and reactor coolant system flow rate for departure from nucleate boiling; previous Technical Specifications allowed for tradeoffs between flow rates and the nuclear enthalpy hot channel factor. Group Ten change is to the P-12 interlock description to more accurately represent the actual setpoints and functions of the interlock as allowed by the approved D. C. Cook Unit 2 engineered safety feature design. Group Eleven is a change to simplify Technical Specifications for the operator by defining a new term, Allowable Power Level (APL), which ensures that power distribution limits are satisfied. Previously this was accomplished by operating above APL and below Rated Thermal Power provided additional surveillance is performed using the Axial Power Distribution Monitoring System (APDMS). The new APL definition will account for the power distribution limits without the need for the APDMS corrections. This change also proposes to eliminate the need to place the Unit in Hot Standby to perform Overpower delta T setpoint reduction since this can be accomplished at power one channel at a time by placing the affected channel bistable in the tripped configuration. Group Twelve changes are to make the Unit 2 Technical Specifications consistent with the Standard Technical Specifications. These changes are actually corrections of errors which have been found in

the early version of the Standard Technical Specifications and apply to D. C. Cook. These are 1) changing the action statement on the Overpower delta T and Overttemperature delta T for inoperable channels to exclude taking action on power levels or the Quadrant Power Tilt Ratio since these actions relate to the nuclear instrumentation only, 2) adding a provision to allow changing modes if the Reactor Coolant Pump Breaker Position Trip channel above P-7 is inoperable since the action statement already places the trip in the safe mode, i.e., tripped position, and 3) deleting reference to reporting pressurizer relief valve failures since Section 6.9.1.5.c adequately requires these reports in the Annual Report.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The Commission has provided guidance concerning the application of the standards for making a no significant hazards consideration determination by providing certain examples (48 FR 14870). Each of the groups of changes proposed by the licensee is examined and related to these examples as follows.

Group One is editorial changes to enhance readability, correct errors, or achieve consistency of language or format between Unit 1 and 2 Technical Specifications or with the Standard Technical Specifications. All of the changes are purely administrative and are directly related to example (i) which is a purely administrative change to achieve consistency throughout the Technical Specification, correct an error, or a change in nomenclature. Group Two is the removal of Technical Specifications covering an operational mode (3 loop-operation) which is prohibited by License Condition 2.C.3.(j), therefore, consistency is achieved between the license and the Technical Specifications. Group Two is directly related to example (i) provided by the Commission. Group Three is licensee's proposed new requirements to the Technical Specifications to add actions, surveillance requirements, and applicable modes consistent with the Cycle 6 reload analysis. This group of changes is directly related to example (ii) in that it constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications. Group Four is a clarification that the refueling water storage tank is not a source of boron dilution during normal operation and a modification to cover boron dilution in Modes 4, 5, and 6 with new fuel in the core. The change includes a footnote to Technical Specifications on boron dilution, charging pump during shutdown, boric acid transfer pumps during shutdown, reactor coolant system during hot standby, reactor coolant system during shutdown, and residual heat removal and coolant circulation during refueling. The change also includes separation of boration control requirements for Modes 1, 2 and 3, and for Modes 4 and 5 for improved definition for the operations and increasing the minimum borated water levels in all modes to en-

sure shutdown margin after xenon decay and cooldown for the most limiting requirements at beginning of life with new fuel in the core. This group is directly related to example (vi) which is a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or components specified in the Standard Review Plan. The licensee's safety analysis for the boron dilution accident to cover all the modes and components supports the proposed changes including the footnote that the RWST as a source of makeup does not significantly change the reactivity considerations. Since some minor change of reactivity might occur, a safety margin may be reduced insignificantly, however, the safety analysis is performed to acceptable codes and standards and the resultant reactivity levels for each of the components and modes is within criteria previously found acceptable.

Group Five is a change to a footnote on Table 3.3-3 related to 3-loop operation and the differential pressure between steam line-high, ESF actuation signal. The footnote is corrected to exclude 3-loop consideration which is being deleted by this proposed amendment and corrected by choice of language for proper direction on bistables to be tripped. As such, this change is directly related to example (i) in that it is purely administrative to correct any potential error. Group Six is a change to the power operated relief

valves to add requirements which would ensure PORV relief capability is available to assist in reactor coolant system depressurization following a steam generator tube rupture without offsite power. This change is directly related to example (ii) in that it constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications.

Group Seven is the deletion of Section 4.0.4 requirements for certain Technical Specifications. This change is directly related to example (vi) which is a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan. Section 4.0.4 prohibits changing modes without surveillance requirements being met, however, for the components, systems, and functions listed by the licensee, under some circumstances the surveillance must be performed in the next mode. By going to the next mode where both the surveillance must be performed and the function is required, some reduction in margin may result until the surveillance is completed. The licensee's proposals are, however, clearly within all acceptable criteria as determined by the Commission reviews of previous submittals and changes to the Standard Technical Specifications. Since these changes are more like correcting a previous error in Technical Specifications, it is also somewhat like example (i) which is a purely administrative change to technical specifications for correction of an error.

Group Eight includes changes to parameters to reflect the assumption used in the Cycle 6 reload, revised setpoints as a result of installation of

Rdf resistance temperature detectors (RDTs), and use of f-delta I penalties which are input to the Overpower delta T and Overtemperature delta T reactor trip setpoints. For the first and third of these changes, the Cycle 6 reload is with fuel exactly like Cycle 5 and the transient analyses are performed with codes found acceptable for Cycle 5. The f delta I penalties are necessary as a result of the analyses. The loss-of-coolant accident code, however, is new and incorporates or is verified to data from the Fuel Test Facility. This code has been substantially reviewed and the remaining re-correlations of data are expected to have insignificant impact on the overall results. Nevertheless, the Cycle 6 parameters are scheduled to be based on the approved or near approved codes with appropriate compensation. The Cycle 6 reload will analyze all the necessary and applicable accidents previously analyzed and will not significantly increase the probabilities or consequences of any accident previously evaluated. Use of the fuel and codes as appropriately compensated will not create the possibility of a new or different kind of accident from any previously analyzed or evaluated. The margin of safety will not be significantly reduced even in the case where use of near approved codes results in a license condition with compensatory actions. The second change dealing with revised setpoints as a result of installation of Rdf RDTs is directly related to example (vi) which is a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan. The installation of the Rdf RTD's has been reviewed

and found acceptable in Unit 1 (See License Amendment No. 91 dated September 3, 1985). The setpoints are changed which may in some way reduce a safety margin but the change has been incorporated in the safety analyses and the results are clearly within all acceptable criteria.

Group Nine is a change to separate flow rate and nuclear enthalpy hot channel factor and is somewhat like example (i) which is a purely administrative change and like example (ii) which is a change that constitutes additional limitations, restrictions or controls. The current Technical Specifications allow reactor coolant system flow to be traded off for nuclear enthalpy hot channel factor. The proposed change would separate these without lessening the requirements which would be an administrative change and would no longer allow the trade off which would be an additional limitation or control. Group Ten is a change to the P-12 interlock description and is directly related to example (i) in that it is a clarification of the definition in the Technical Specifications to more accurately describe the existing interlock. There are no changes to the setpoints or function but rather, it is a purely administrative change to prevent any errors in understanding the P-12 interlock. Group Eleven is a change to simplify operations while considering power distributions and the Axial Power Distribution Monitoring System (APDMS). This group is like two of the examples; (ii) which is a change that constitutes additional limitations, restrictions, and controls, and example (vi) which is a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin. The licensee has proposed a new definition for Allowable Power Level (APL) which ensures that power distri-

bution limits are satisfied thereby eliminating the need to use the APDMS. Defining the APL in this fashion places additional limitations on the operation by not allowing use of the APDMS. The remaining applicable surveillances and requirements are maintained except for the requirement to place the unit in hot standby to perform the Overpower delta T trip setpoint reduction. The licensee has determined that the reduction can be performed while at power. The change in setpoint can be accomplished one channel at a time with bistables on the affected channel in the tripped configuration. By not reducing operation to hot standby, some insignificant reduction in the margin of safety may be implied, however, placing the bistables in the tripped condition assures a safe condition while the setpoints are changed. This is an acceptable and preferred alternative to possible transients in the power reduction to hot standby. The last group, Group Twelve, is proposed as changes to make the Unit 2 Technical Specifications consistent with the later revisions of the Standard Technical Specifications. These changes are actually corrections of errors which have been found in the earlier versions of the Standard Technical Specifications and are, therefore, directly related to example (i) which is a purely administrative change to, among other things, correct errors. The action statement for channels inoperable for Overpower delta T and Overtemperature delta T is changed to exclude conditions applicable to the nuclear instruments. The action for channels inoperable for Reactor Coolant Pump Breaker Position Trips is exempt from the Section 3.0.4 requirements of prohibiting changing modes without the action being taken since the action was to place the breaker in a tripped position which is safe in any of the modes. The Standard Technical Specifications had been previously

corrected to reflect these changes. The last change is to remove a footnote on PORV reporting which was overlooked when the reporting requirements were added to the Annual Report.

Therefore on the basis of the above considerations, the Commission proposes to determine that the changes do not involve a significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Written comments may be submitted to the Rules and Procedures Branch, Division of Rules and Records, Office of Administration, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555. Comments may also be delivered to Room 4000, Maryland National Bank Building, Bethesda, Maryland from 8:15 a.m. to 5:00 p.m. Monday through Friday. Copies of comments received may be examined at the NRC Public Document Room, 1717 H Street, N. W., Washington, D. C.

By May 9, 1986, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Request for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. If a

request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR §2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspects(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitation in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination of the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room 1717 H Street, N. W., Washington, D. C., by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to B. J. Youngblood: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to

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the Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, and to Gerald Charnoff, Esquire, Shaw, Pittman, Potts and Trowbridge, 1800 M Street, N.W., Washington, D.C. 20036, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

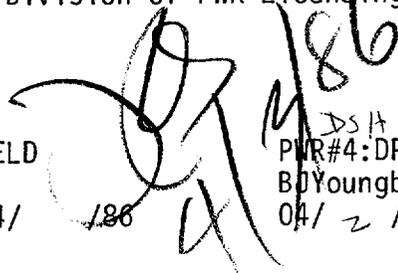
For further details with respect to this action, see the application for amendment which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Maude Reston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085.

Dated at Bethesda, Maryland, this _____ day of _____

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:
D. Hood

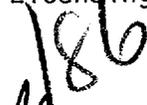
Darl S. Hood, Acting Director
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