

September 22, 2004

LICENSEE: Indiana Michigan Power Company
FACILITY: Donald C. Cook Nuclear Plant, Units 1 and 2
SUBJECT: SUMMARY OF TELEPHONE CONFERENCE HELD ON AUGUST 24, 2004,
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND INDIANA
MICHIGAN POWER COMPANY, CONCERNING FOLLOW-UP ITEMS TO
REQUEST FOR ADDITIONAL INFORMATION PERTAINING TO THE DONALD
C. COOK NUCLEAR PLANT, UNITS 1 AND 2, LICENSE RENEWAL
APPLICATION

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of Indiana Michigan Power Company (I&M) held a telephone conference call on August 24, 2004, to discuss and clarify follow-up items to requests for additional information (RAIs) concerning the Donald C. Cook Nuclear Plant, Units 1 and 2, license renewal application (LRA). Two RAIs, for which no previous conversation between the parties had taken place, were also incorporated into the agenda. The conference call was useful in clarifying the intent of the staff's questions.

Enclosure 1 provides a listing of the telephone conference participants. Enclosure 2 contains a listing of the items discussed with the applicant, including a brief description on the status of the items.

The applicant has had an opportunity to comment on this summary.

/RA/

Jonathan G. Rowley, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: As stated

cc w/encls: See next page

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PERTAINING TO THE DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2,
LICENSE RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of Indiana Michigan Power Company (I&M) held a telephone conference call on August 24, 2004, to discuss and clarify follow-up items to requests for additional information (RAIs) concerning the Donald C. Cook Nuclear Plant, Units 1 and 2, license renewal application (LRA). Two RAIs, for which no previous conversation between the parties had taken place, were also incorporated into the agenda. The conference call was useful in clarifying the intent of the staff's questions.

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TO DISCUSS THE DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION
AUGUST 24, 2004

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FOLLOW-UP ITEMS
DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

August 24, 2004

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of Indiana Michigan Power Company (I&M) held a telephone conference call on August 24, 2004, to discuss and clarify follow-up items concerning requests for additional information (RAIs) for the Donald C. Cook Nuclear Plant, Units 1 and 2 (Cook), license renewal applications (LRA). The following items were discussed during the telephone conference call.

1. Follow-up Item to RAI 2.3.3.1-1

Section 2.3.3.1, "Spent Fuel Pool" (SFP) of the LRA states that "The primary safety intended function of the spent fuel pool system is to maintain adequate water inventory for shielding and to prevent criticality of the stored fuel."

The applicant was asked to justify the exclusion of the piping and components linking the makeup water source from the CVC system hold-up tanks, and at least one other makeup water source to the SFP from being subject to an aging management review (AMR) in accordance with the requirements of 10 CFR 54.4(a)(1)(iii) and 10 CFR 54.21(a)(1).

Staff Comment

LRA Section 2.3.3.1 states that the primary safety intended function of the SFP system is to maintain adequate water inventory for shielding and to prevent criticality of the stored fuel. Therefore, a source of makeup water is required to be within the scope of license renewal for meeting criteria 10 CFR 54.4(a)(2) because makeup functionally supports the SFP system's intended function.

Status: The applicant indicated that the question is clear. The applicant will submit a revised response.

2. Follow-up Item to RAI 2.3.3.1-2

LRA Section 2.1.2.1.2, states that "licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review."

The staff requested I&M to confirm that the system components marked on licensing renewal drawings depict all the components within the spent fuel pool system (SFP) that perform an intended function (i.e., within the system evaluation boundary).

Staff Request

The applicant was requested to confirm that at license renewal system boundaries, including interfaces with other systems, the license renewal drawings depict all those components that are in scope of license renewal for meeting the criteria of 10 CFR 54.4(a)(1), (a)(2) [Functional Failure Only], and (a)(3), whether they are subject to an AMR or not. Also, the applicant was requested to identify any components that are not subject to an AMR but support a system intended function.

Status: The applicant directed the staff to the original response. The applicant clarified on the information stated in the response. The staff intends to evaluate this information to determine if it sufficiently addresses the RAI.

3. Follow-up Item to RAI 2.3.3.2-3

LRA Section 2.3.3.2 states that the license renewal drawings do not indicate components that are within the scope of license renewal in accordance with the requirements 10 CFR 54.4(a)(2) only. This section also states that “non-safety-related component types in the ESW system that require an AMR for 10 CFR 54.4(a)(2) are in the auxiliary building and screen house and consist of bolting, valves, tubing and piping.”

The applicant was asked to clarify whether all the bolting, valves, tubing and piping in the auxiliary building and screen house are in-scope and subject to an AMR in accordance with 10 CFR 54.4(a)(2) and 10 CFR 54.21(a)(1). If not, the applicant was asked to identify which components are in-scope and subject to an AMR.

Staff Comment

Questions of whether all bolting, valves, tubing, and piping in the auxiliary building and screen house are subject to an AMR for meeting the criteria of 10 CFR 54.4(a)(2) remain pending resolution of follow-up to RAI 2.3.3.11-2.

Status: The response to this issue will be provided as part of the response to Item 7. As a result of the discussion, RAI 2.3.3.2-3 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

4. Follow-up Item to RAI 2.3.3.2-4

LRA Section 2.1.2.1.2, states that “licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review.” Confirm that the system components marked on the licensing renewal drawing depict all the components within the ESW system that perform an intended function (i.e., within the system evaluation boundary).

Staff Request

The applicant was requested to confirm that at license renewal system boundaries, including interfaces with other systems, the license renewal drawings depict all those components that

are in scope of license renewal for meeting the criteria of 10 CFR 54.4(a)(1), (a)(2) [Functional Failure Only], and (a)(3), whether they are subject to an AMR or not. Identify any components that are not subject to an AMR but support a system intended function.

Status: The applicant directed the staff to the original response. The applicant clarified the information stated in the response. The staff intends to evaluate this information to determine if it sufficiently addresses the RAI.

5. Follow-up Item to RAI 2.3.3.3-6

LRA Section 2.1.2.1.2, states that “licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review.” Confirm that the system components marked on licensing renewal drawings depict all the components within the CCW system that perform an intended function (i.e., within the system evaluation boundary).

Staff Request

The applicant is requested to identify any components that are not subject to an AMR but support a system intended function.

Status: The applicant directed the staff to the original response. The applicant clarified the information stated in the response. The staff intends to evaluate this information to determine if it sufficiently addresses the RAI.

6. Follow-up Item to RAI 2.3.3.3-7

LRA Section 2.1.2.1.2, states that license renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review. Components that are within the scope of license renewal based solely on the criterion of 10 CFR 54.4(a)(2) are not generally indicated on the drawings but are described in Section 2.3 and listed in Table 3.3.2-11.

Staff Comment

Questions concerning the use of the “spaces” approach for scoping and screening of components meeting 10 CFR 54.4(a)(2) remain.

Status: The response to this issue will be provided as part of the response to item 7. As a result of the discussion, RAI 2.3.3.3-7 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

7. Follow-up Item to RAI 2.3.3.11-2

LRA Table 2.3.3-11 identifies component types and intended functions as a group for 17 systems. The staff is unable to identify which component types and intended functions in the table correlate to which of the 17 systems described in LRA Section 2.3.3.11. License renewal

drawings have not been provided for these systems, nor does the UFSAR provide sufficient descriptive information.

Staff Request

The applicant is requested to identify the components excluded from the scope of license renewal because no safety-related equipment is in the “area.” Describe what is meant by the term “area.”

Also, the applicant is requested to identify the components excluded from the scope of license renewal because protection of the safety-related equipment is provided by “design features.” Identify the “design features” and discuss whether they are within the scope of license renewal and subject to an AMR.

Status: The applicant indicated that the question is clear. The applicant will submit a revised response.

8. Follow-up Item to RAI 2.3.3.11-3

The LRA implies that the spent fuel pool cooling system does not perform an intended function as defined in 10 CFR 54.4. It is not clear that water in the spent fuel pool can maintain sufficient shielding and prevent the release of radioactive gases with the 180°F peak bulk pool temperature and 5.8 hours to boil criteria without activation of at least one cooling train. The applicant was asked to justify why at least one train of spent fuel pool cooling is not within the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Staff Comment

With both trains of SFP cooling system unavailable sufficient reliable sources of makeup water exists to exceed the maximum potential rate of evaporative losses to maintain pool level whereas, one train of SFP cooling in operation is sufficient to maintain SFP temperature less than 180°F. Therefore, either a source of makeup water or one train of the SFP cooling system is required to be within the scope of license renewal for meeting criteria 10 CFR 54.4(a)(2) for functionally supporting the SFP system's intended function.

Status: The response to this issue will be provided as part of the response to Item 1. As a result of the discussion, RAI 2.3.3.11-3 remains unsolved pending closure of follow-up to RAI 2.3.3.1-1

9. Follow-up Item to RAI 2.3.4.1-1

LRA Section 2.3.4.1 states that the main feedwater system is in the scope of license renewal due to the potential for spatial interactions with safety-related equipment.

Staff Comment

Pending Closure of follow-up to RAI 2.3.3.11-2.

Status: The response to this issue will be provided as part of the response to Item 7. As a result of the discussion, RAI 2.3.4.1-1 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

10. Follow-up Item to RAI 2.3.4.1-2

For those systems, structures, and components within the scope of license renewal in accordance with 10 CFR 54.4, 10 CFR 54.21(a)(1) requires the applicant to identify and list those structures and components subject to an AMR. All the components that perform an intended function have not been identified in the LRA.

The applicant was asked to confirm that the system components marked on license renewal drawings for the FW system depict all the components that perform an intended function.

Staff Request

NEI 95-10, Section 3.1.1 states that it is conceivable that plant specific SSCs may be designated as safety-related but not fulfill the criteria of 10 CFR 54.4(a)(1). In this case, the applicant shall include a discussion of the process for making this determination. LRA 2.3.4.1 does not include this discussion nor does it discuss that there are “active” safety-related valves. The applicant was asked to include this discussion in the LRA or to include the main feedwater isolation valves and FRVs in the AMR for main feedwater.

Status: The applicant directed the staff to the original response. The applicant clarified the information stated in the response. The staff intends to evaluate this information to determine if it sufficiently addresses the RAI.

11. Follow-up Item to RAI 2.3.4.1-3

LRA Section 2.1.2.1.2, states that licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review. Components that are within the scope of license renewal based solely on the criterion of 10 CFR 54.4(a)(2) are not generally indicated on the drawings but are described in Section 2.3 and listed in Table 3.3.2-11.

Staff Comment

Questions concerning the use of the “spaces” approach for scoping and screening of components meeting 10 CFR 54.4(a)(2) remain.

Status: The response to this issue will be provided as part of the response to Item 7. As a result of the discussion, RAI 2.3.4.1-3 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

12. Follow-up Item to RAI 2.3.4.2-4

LRA Section 2.1.2.1.2, states that licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation

boundaries that require an aging management review. Components that are within the scope of license renewal based solely on the criterion of 10 CFR 54.4(a)(2) are not generally indicated on the drawings but are described in Section 2.3 and listed in Table 3.3.2-11.

Staff Comment

Questions concerning the use of the “spaces” approach for scoping and screening of components meeting 10 CFR 54.4(a)(2) remain.

Status: The response to this issue will be provided as part of the response to Item 7. As a result of the discussion, RAI 2.3.4.2-4 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

13. Follow-up Item to RAI 2.3.4.4-3

LRA Section 2.1.2.1.2, states that licensing renewal drawings were created by marking mechanical flow diagrams to indicate only those components within the system evaluation boundaries that require an aging management review. Components that are within the scope of license renewal based solely on the criterion of 10 CFR 54.4(a)(2) are not generally indicated on the drawings but are described in Section 2.3 and listed in Table 3.3.2-11.

Staff Comment

Questions concerning the use of the “spaces” approach for scoping and screening of components meeting 10 CFR 54.4(a)(2) remain.

Status: The response to this issue will be provided as part of the response to Item 7. As a result of the discussion, RAI 2.3.4.4-3 remains unsolved pending closure of follow-up to RAI 2.3.3.11-2.

14. RAI 2.3.3.8-6

The failure of the following components could affect the ability of their associated emergency diesel generator (EDG) to perform its intended function and are therefore in the scope of license renewal for meeting criteria 10 CFR 54.4(a)(2):

- Exhaust silencer QT-104-AB and associated vent stack on LRA-1-5151B-0 at Location N7/8
- Exhaust silencer QT-104-CD and associated vent stack on LRA-1-5151D-0 at Location N7/8
- Exhaust silencer QT-104-AB and associated vent stack on LRA-2-5151B-0 at Location N6/7
- Exhaust silencer QT-104-CD and associated vent stack on LRA-2-5151D-0 at Location N6/7

The exhaust silencers and associated vent stacks are long-lived passive components and are therefore subject to an AMR.

The applicant is requested to confirm that the exhaust silencers and associated vent stacks are in scope and subject to an AMR and identify which “component type” on LRA Table 2.3.3-8 represents them or provide justification for their exclusion.

Staff Request

The applicant is requested to justification why this component is not included within AMR. The internals could degrade and break up partially or completely blocking the exhaust flow, therefore preventing the EDG from achieving the required power output.

Status: The applicant indicated that the question is clear. The applicant will submit a response.

15. RAI 2.3.3.8-7

The failure of the following components could affect the ability of their associated EDG to perform its intended function and are therefore in the scope of license renewal in accordance with 10 CFR 54.4(a)(2):

- Centrifugal exhauster QT-140-AB and associated piping on LRA-1-5151B-0 at Location L3
- Centrifugal exhauster QT-140-CD and associated piping on LRA-1-5151D-0 at Location L3
- Centrifugal exhauster QT-140-AB and associated piping on LRA-2-5151B-0 at Location M3
- Centrifugal exhauster QT-140-CD and associated piping on LRA-2-5151D-0 at Location M3

The centrifugal exhausters and their associated flexible connectors and piping are long-lived passive components and are therefore subject to an AMR.

Staff Request

The applicant is requested to confirm that the centrifugal exhausters and their associated flexible connectors and piping are in scope and subject to an AMR and identify which “component type” on LRA Table 2.3.3-8 represents them or provide justification for their exclusion.

Status: The applicant indicated that the question is clear. The applicant will submit a response.

Donald C. Cook Nuclear Plant, Units 1 and 2

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