

Indiana Michigan
Power Company
500 Circle Drive
Buchanan, MI 49107 1395



December 7, 2004

AEP:NRC:4034-18
10 CFR 51.70

Docket Nos. 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2
COMMENTS ON DRAFT NUREG-1437, SUPPLEMENT 20
GENERIC ENVIRONMENTAL IMPACT STATEMENT
FOR LICENSE RENEWAL OF NUCLEAR PLANTS
REGARDING DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2
(TAC Nos. MC1221 and MC1222)

Dear Sir or Madam:

By letter dated October 31, 2003, Indiana Michigan Power Company (I&M) submitted an application to renew the operating licenses for Donald C. Cook Nuclear Plant (CNP), Units 1 and 2. In September 2004, in accordance with the requirements of 10 CFR 51.70, the Nuclear Regulatory Commission (NRC) issued for comment a draft environmental impact statement, NUREG-1437, Supplement 20, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Donald C. Cook Nuclear Plant, Units 1 and 2*, in response to the CNP license renewal application. This letter summarizes I&M's review and provides I&M's comments on the draft NUREG-1437, Supplement 20, also referred to as the supplemental environmental impact statement (SEIS).

I&M performed a comprehensive review of the draft SEIS to confirm the NRC evaluations accurately reflected information presented in the Applicant's Environmental Report – Operating License Renewal Stage (ER), provided as Attachment E to the CNP License Renewal Application, supplemental ER information, and responses to NRC requests for additional information submitted in subsequent correspondence. I&M's review determined the information presented in the draft SEIS was accurate and confirmed I&M's understanding of the environmental issues and impacts was congruent with the discussions presented in the draft SEIS. Although this review identified a number of minor comments, these comments are not expected to affect the environmental impacts or conclusions presented in the draft SEIS.

A104

Attachment 1 to this letter provides I&M's comments on the draft SEIS. Attachment 2 provides changes to draft SEIS Table E-2, Federal, State, Local and Regional Licenses, Permits, Consultations, and Other Approvals for CNP Units 1 and 2. There are no new or revised commitments made in this letter.

Should you have any questions, please contact Mr. Richard J. Grumbir, Project Manager, License Renewal, at (269) 697-5141.

Sincerely,



Joseph N. Jensen
Site Vice President

NH/rdw

- Attachments:
1. Comments on Draft NUREG-1437, Supplement 20, Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Donald C. Cook Nuclear Plant, Units No. 1 and 2
 2. Changes to Supplemental Environmental Impact Statement Table E-2 - Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals for Donald C. Cook Nuclear Plant, Units 1 and 2

c: J. L. Caldwell – NRC Region III
K. D. Curry – AEP Ft. Wayne, w/o attachments
W. L. Dam – NRC Washington DC
J. T. King – MPSC, w/o attachments
C. F. Lyon – NRC Washington DC
MDEQ – WHMD/HWRPS, w/o attachments
NRC Resident Inspector

Comments on Draft NUREG-1437, Supplement 20
Generic Environmental Impact Statement for License Renewal of Nuclear Plants
Regarding Donald C. Cook Nuclear Plant, Units No. 1 and 2

<u>No.</u>	<u>Page</u>	<u>Line</u>	<u>Section</u>	<u>Comment</u>																																																			
1.			General	<p>In a several locations within the supplemental environmental impact statement (SEIS), the term "cost-beneficial SAMAs," is used. Based on the bounding severe accident mitigation alternative (SAMA) analysis presented in I&M's Environmental Report (ER), these SAMAs are only considered to be <i>potentially</i> cost beneficial. Should Indiana Michigan Power Company (I&M) opt to implement these or any other risk-beneficial changes in the future, the impact on the plant risk model would impact the results of this analysis. Whether or not the 16 potentially cost beneficial SAMAs actually turn out to be cost-beneficial depends upon conservatism in the evaluation and the order in which these activities are implemented.</p> <p>NOTE: This comment applies to text in the following locations:</p> <table><tr><th><u>Page</u></th><th><u>Line</u></th><th><u>Section</u></th></tr><tr><td>xix</td><td>9</td><td>Executive Summary</td></tr><tr><td>5-5</td><td>25, 27</td><td>5.2.1</td></tr><tr><td>5-9</td><td>29</td><td>5.2.5</td></tr><tr><td>5-10</td><td>10, 14</td><td>5.2.5</td></tr><tr><td>5-10</td><td>25, 26, 28</td><td>5.2.6</td></tr><tr><td>9-5</td><td>21</td><td>9.1</td></tr><tr><td>G-2</td><td>16</td><td>G.1</td></tr><tr><td>G-6</td><td>40</td><td>G.2.2</td></tr><tr><td>G-11</td><td>29</td><td>G.3.1</td></tr><tr><td>G-14</td><td>5</td><td>G.4</td></tr><tr><td>G-24</td><td>1 (two occurrences)</td><td>Table G.5</td></tr><tr><td>G-29</td><td>16</td><td>G.6.1</td></tr><tr><td>G-31</td><td>17</td><td>G.6.1</td></tr><tr><td>G-31</td><td>25, 26</td><td>G.6.2</td></tr><tr><td>G-32</td><td>23, 36</td><td>G.6.2</td></tr><tr><td>G-33</td><td>20, 37, 40</td><td>G.7</td></tr></table>	<u>Page</u>	<u>Line</u>	<u>Section</u>	xix	9	Executive Summary	5-5	25, 27	5.2.1	5-9	29	5.2.5	5-10	10, 14	5.2.5	5-10	25, 26, 28	5.2.6	9-5	21	9.1	G-2	16	G.1	G-6	40	G.2.2	G-11	29	G.3.1	G-14	5	G.4	G-24	1 (two occurrences)	Table G.5	G-29	16	G.6.1	G-31	17	G.6.1	G-31	25, 26	G.6.2	G-32	23, 36	G.6.2	G-33	20, 37, 40	G.7
<u>Page</u>	<u>Line</u>	<u>Section</u>																																																					
xix	9	Executive Summary																																																					
5-5	25, 27	5.2.1																																																					
5-9	29	5.2.5																																																					
5-10	10, 14	5.2.5																																																					
5-10	25, 26, 28	5.2.6																																																					
9-5	21	9.1																																																					
G-2	16	G.1																																																					
G-6	40	G.2.2																																																					
G-11	29	G.3.1																																																					
G-14	5	G.4																																																					
G-24	1 (two occurrences)	Table G.5																																																					
G-29	16	G.6.1																																																					
G-31	17	G.6.1																																																					
G-31	25, 26	G.6.2																																																					
G-32	23, 36	G.6.2																																																					
G-33	20, 37, 40	G.7																																																					
2.			General	<p>It is recommended that the word "stage" (or similar wording) be used in place of "store" when discussing radioactive waste. The Donald C. Cook Nuclear Plant (CNP) is not a permanent waste storage facility as the current wording may imply. (examples: see page 2-9, line 40; page 2-10, line 3; page 2-15, lines 12, 25, 26, 36; and page 2-16, line 3 and 4).</p>																																																			
3.	xviii	24	Executive Summary	<p>The text indicates that the I&M license renewal application (LRA) presents a site-specific analysis of chronic effects from electromagnetic fields. This text should be deleted because the LRA did not present such an analysis. (Also see Comment on Page 9-4, lines 33-36.)</p>																																																			

<u>No.</u>	<u>Page</u>	<u>Line</u>	<u>Section</u>	<u>Comment</u>
4.	xix	9	Executive Summary	It is recommended that the last paragraph in Section 5.2.1 (page 5-6, lines 1-4) be inserted after the paragraph summarizing the SAMA analysis on page xix, line 9. As written, the Executive Summary does not explain what does or does not need to be done regarding implementation of potentially cost-beneficial SAMAs.
5.	2-11	1-3	2.1.4	The annual dose limits of 40 CFR 190 are not stated in their entirety. The Offsite Dose Calculation Manual controls also ensure the annual dose equivalent does not exceed 75 millirem to the thyroid and 25 millirem to any other organs, as specified by 40 CFR 190.10(a).
6.	2-12	9	2.1.4.1	The capacity of the boric acid / radioactive waste evaporator should be changed to "114 L/min (30 gpm)," per CNP's Updated Final Safety Analysis Report Chapter 9, page 19, and Table 9.2-3, page 13.
7.	2-25 4-10 4-14 4-18	4 26-28 5-6 23-25	2.2.3 4.1.1 4.1.2 4.1.3	The statements addressing the status of the National Pollutant Discharge Elimination System (NPDES) permit should be updated. On September 24, 2004, the Michigan Department of Environmental Quality renewed CNP's discharge permit (Permit No. MI0005827). As indicated in Attachment 2 to this letter, this permit will be effective on January 1, 2005.
8.	2-58	10-16	Table 2-7	The water use and capacity values in Table 2-7 are reported to have been taken from the ER (Table 2-5); however, the values and units do not match and the unit conversion was performed incorrectly. For example, the St. Joseph average daily water usage is 5.8 million gallons per day (not million liters per day), which is equivalent to 22.0 million liters per day (not 1.5 million liters per day).
9.	2-59	33	2.2.8.3	The statement that less than 2 percent of the land is devoted to public and semipublic uses does not agree with the corresponding entry on Page 2-60 in Table 2-8, Line 7 (3.5 percent).
10.	4-35	8	4.4.6	The paragraph states that low-income data were taken from the 1991 census. The ER, which is cited as the source, used 2000 census data (see USCB 2000).
11.	4-34 4-40 4-43 4-49 4-50 4-52	3 7,9 15,22 23 38 20	4.4.5 4.6.1 4.6.2 4.8.4 4.8.6 4.9	The word "preliminary" is used in the discussion of the Nuclear Regulatory Commission's (NRC's) conclusion regarding two Category 2 issues, Historic and Archaeological Resources and Threatened or Endangered Species. While it is understood that the NRC reviews may still be considered preliminary pending receipt of agency responses to consultation requests, it is recommended that "preliminary" be deleted in the final SEIS.

No.	Page	Line	Section	Comment									
12.	5-5	16	5.2.1	The third screening factor, "would involve major plant design or structural changes," differs from that stated in ER Section 4.20, Page 4-35, "would require extremely large implementation costs," and in Draft SEIS Appendix G, Section G.7, Page G-33, lines 13-14, "had implementation cost greater than any possible risk benefit." SAMAs that were screened out based on Criterion "C" (ER page F-77) were determined to have implementation costs that would exceed the bounding benefit (i.e., >>\$2,700,000). (Also see Comment on Page G-11, lines 16-17.)									
13.	5-5	37-38	5.2.1	<p>The last sentence in this paragraph states, "I&M is conducting analyses to allow them to select the specific actions which achieve the most cost-beneficial risk reduction in each category." This could be misinterpreted to imply a commitment to perform some future action. However, more detailed evaluations are needed for specific implementation options. The detailed evaluations may show that no actions are cost-beneficial. The sentence should make it clear that more detailed benefit and cost evaluations are required.</p> <p>It is recommended that text such as that in ER Appendix F, Section F.7, <u>Summary</u>, Page F-34, "I&M is further evaluating these SAMAs and has not made any decision to implement them," or Draft SEIS Section 5.2.6, Page 5 - 10, Lines 27-28, and Section G.7, Page G-33, Lines 38-39, "...the staff agrees with I&M that further evaluation of these SAMAs by I&M is warranted," be used.</p> <p>NOTE: This comment applies to text in the following locations:</p> <table><tr><td><u>Page</u></td><td><u>Line</u></td><td><u>Section</u></td></tr><tr><td>G-2</td><td>13-14</td><td>G.1</td></tr><tr><td>G-33</td><td>26-27</td><td>G.7</td></tr></table>	<u>Page</u>	<u>Line</u>	<u>Section</u>	G-2	13-14	G.1	G-33	26-27	G.7
<u>Page</u>	<u>Line</u>	<u>Section</u>											
G-2	13-14	G.1											
G-33	26-27	G.7											
14.	5-7	7-8	Table 5-3	The interfacing systems loss of coolant accident (ISLOCA) initiating event shown in ER Table F.2-1, Page F-35, is omitted from Draft SEIS Table 5-3. (Also see Comment on Page G-3, lines 25-26.)									
15.	5-9	33-34	5.2.5	The sentence states, "I&M is continuing to study the 16 SAMAs in groups to determine the optimum subset of the 16." It should be emphasized that studying or evaluating these SAMAS does not necessarily mean that I&M will implement any or all of them. It would be more accurate to indicate that, "I&M is further evaluating these SAMAs and has not made any decision to implement them," as indicated in ER Appendix F, Section F.7, <u>Summary</u> , Page F-34. (See also Comment on Page G-29, lines 20-21.)									

<u>No.</u>	<u>Page</u>	<u>Line</u>	<u>Section</u>	<u>Comment</u>
16.	8-10	25-27	8.2.1.1	The draft Supplement states that additional land would be needed for construction of a coal-fired plant. The CNP ER estimates for ground-disturbing activities during construction of a coal-fired plant included clearing and grubbing for staging areas and laydown yards. The CNP ER assessment determined that additional land would not be needed during construction, particularly since areas designated for coal and ash storage could be used for staging during the construction phase.
17.	9-4	33-36	9.1	The text indicates that the I&M application presents a site-specific analysis of chronic effects from electromagnetic fields. This text should be deleted because the I&M application did not present such an analysis. (see Comment, page xviii, line 24)
18.	E-2 - E-5	---	Table E-2	Several of the permits listed in Table E-2 appear to be past their expiration dates. These permits have either been renewed, or the covered activity has been completed. Attachment 2 to this letter provides a revised list of active permits, including expiration dates, and a list of expired permits and those for which work has been completed. (NOTE: Based on renewed NPDES permit, as discussed in comment on Page 2-25, line 4, the current footnote (a) to this table may be deleted from the draft SEIS.)
19.	G-3	25-26	Table G-1	The ISLOCA initiating event shown in ER Table F.2-1, Page F-35, is omitted from Draft SEIS Table G-1. (Also see Comment on Page 5-7, lines 7-8.)
20.	G-5	8	G.2.2	<p>The sentence indicates a revised IPE was provided in 1995. I&M's October 26, 1995 letter (see reference below) provided Revision 1 to the Individual Plant Examination (IPE) Summary Report, which reflected changes resulting from modifications to the human reliability analysis methodology. The entire IPE was not resubmitted.</p> <p>Reference: Letter from E. E. Fitzpatrick (I&M) to U. S. NRC. Subject: Individual Plant Examination Response to NRC Audit Concerns and Request for Additional Information. AEP:NRC:10820. October 26, 1995.</p>
21.	G-11	16-17	G.3.1	The third screening factor, "would involve major plant design or structural changes," differs from that stated in ER Section 4.20, Page 4-35, "would require extremely large implementation costs," and in Draft SEIS Appendix G, Section G.7, Page G-33, Lines 13-14, "had implementation cost greater than any possible risk benefit." SAMAs that were screened out based on Criterion "C" (ER page F-77) were determined to have implementation costs that would exceed the bounding benefit (i.e., >>\$2,700,000). (Also see Comment on Page 5-5, line 16.)

<u>No.</u>	<u>Page</u>	<u>Line</u>	<u>Section</u>	<u>Comment</u>
22.	G-16	4	Table G-5	The Assumptions column entry for SAMA 27 states, "Benefits and costs are between those of SAMA 25 and 26." SAMA 26 is based on the same assumptions as SAMA 25. For SAMA 27, the low end Benefit value corresponds to the value for SAMAs 25 and 26, and the high end value corresponds to the value for SAMA 28. Therefore, the Assumption for SAMA 27 should state, "Benefits and costs are between those of SAMA 25, 26, and 28."
23.	G-25	27	G.5	The number of SAMAs eliminated should be 16 vice 13. The 16 SAMAs with negligible or no benefit are SAMA Nos. 34, 35, 53, 72, 94, 103, 126, 162, 163, 166, 170, 177, 179, 191, 192, and 193) Also, it is recommended that the phrase "negligible benefit" be revised to read, "negligible or zero benefit," as some SAMAs provide no benefit.
24.	G-25	31	G.5	The remaining SAMAs should be "40" vice "43."
25.	G-29	20-21	G.6.1	The sentence states, "I&M is continuing to study the 16 SAMAs in groups to determine the optimum subset of the 16." It should be emphasized that studying or evaluating these SAMAS does not necessarily mean that I&M will implement any or all of them. It would be more accurate to indicate that, "I&M is further evaluating these SAMAs and has not made any decision to implement them," as indicated in ER Appendix F, Section F.7, <u>Summary</u> , Page F-34. (See also Comment on Page 5-9, 33-34.)

**Changes to Supplemental Environmental Impact Statement Table E-2
Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals
for Donald C. Cook Nuclear Plant, Units 1 and 2**

New or Revised Permits

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
DOT	49 USC 5108	Registration	062304002 033M (Replaces permit 052703 013 027L)	06/23/04	06/30/05	Hazardous materials shipments
MDEQ	Clean Water Act (33 USC Section 1251 et. seq.), Michigan Act 451. Public Acts of 1994, as amended, Parts 31 and 41, et. al.	NPDES permit (surface water)	M10005827 (Renewed)	09/24/04 (Effective 01/01/05)	10/1/08	CNP discharges to Lake Michigan
MDEQ	Clean Water Act (33 USC Section 1251 et. seq.), Michigan Act 451. Public Acts of 1994, as amended, Parts 31 and 41, et. al.	NPDES permit (stormwater)	Part I.A.9 of NPDES permit (Renewed)	09/24/04 (Effective 01/01/05)	10/1/08	CNP discharges to the State of Michigan groundwater and Lake Michigan
MDEQ	Michigan Act 451. Public Acts of 1994, as amended, Part 325	Dredging permit	03-11-0127-P (Replaces permits 98-12-0414, 01-11-0069-P and 98-12-0414-P)	02/10/04	02/10/09	Dredging water intake forebays and circulating water tunnels
MDEQ	Michigan Act 451. Public Acts of 1994, as amended, Part 325	Critical dunes permit	04-11-0070-P (New permit)	07/15/04	12/31/05	Placement of security barrier steel pilings

**Changes to Supplemental Environmental Impact Statement Table E-2
Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals
for Donald C. Cook Nuclear Plant, Units 1 and 2**

New or Revised Permits

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources and Environmental Protection Act	Soil and erosion permit	4161 (New permit)	06/01/04	06/01/05	Security upgrades
COE	Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403)	COE permit	01-056-136-5 (New permit)	07/27/04	12/31/07	Placement of security barrier steel posts
SCDHEC	South Carolina Radioactive Waste Transportation and Disposal Act (S.C. Code of Laws 13-7-110 et seq)	Radioactive waste transport permit	0055-21-04 (Renewed)	01/09/04	12/31/04	Transportation of radioactive waste in South Carolina
TDEC	Tennessee Code Annotated 68-202-206	License to ship radioactive material	T-MI001-L04 (Renewed)	01/13/04	12/31/04	Shipment of radioactive material to processing facility in Tennessee
CNP	=	Donald C. Cook Nuclear Plant				
COE	=	U. S. Army Corps of Engineers				
DOT	=	U.S. Department of Transportation				
MDEQ	=	Michigan Department of Environmental Quality				
NPDES	=	National Pollutant Discharge Elimination System				
NREPA	=	Natural Resources and Environmental Protection Act				
SCDHEC	=	South Carolina Department of Health and Environmental Control				
TDEC	=	Tennessee Department of Environment and Conservation				
USC	=	United States Code				

**Changes to Supplemental Environmental Impact Statement Table E-2
Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals
for Donald C. Cook Nuclear Plant, Units 1 and 2**

Expired Permits and Permits for Completed Work (Delete from Table; No Replacement)

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
MDEQ	Michigan Act 451. Public Acts of 1994, as amended, Parts 353 and 325	Critical dunes permit	02-11-0045-P	NA	04/23/04	Security upgrades near critical dunes
MDEQ	Michigan Act 451. Public Acts of 1994, as amended, Parts 353 and 325	Critical dunes permit	02-11-0111-P	NA	12/31/04 ^(a)	North security fence upgrade near critical dunes
MDEQ	Michigan Act 451. Public Acts of 1994, as amended, Parts 353 and 325	Critical dunes permit	03-11-0096-P	NA	05/08/04	Installation of fish avoidance system
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources and Environmental Protection Act	Soil and erosion permit	3535R	NA	04/16/04	Security upgrades
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources and Environmental Protection Act	Soil and erosion permit	3448R	NA	10/10/04	North security fence upgrades
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources	Soil and erosion permit	3449R	NA	10/10/03	Construction of beach ramp

**Changes to Supplemental Environmental Impact Statement Table E-2
Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals
for Donald C. Cook Nuclear Plant, Units 1 and 2**

Expired Permits and Permits for Completed Work (Delete from Table; No Replacement)

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
	and Environmental Protection Act					
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources and Environmental Protection Act	Soil and erosion permit	3690	NA	08/05/04	Installation of fish avoidance system
Berrien County	Part 91 NREPA – Soil Erosion and Sedimentation Control of Natural Resources and Environmental Protection Act	Soil and erosion permit	3585	NA	09/29/03	Concrete removal in vicinity of dunes
COE	Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) Section 404 of the Clean Water Act (33 USC 1344) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 USC 1413)	COE permit	03-056-043-1	NA	08/06/04	Installation of fish avoidance system

(a) This permit will have expired upon issuance of the Final NUREG-1437, Supplement 20.