



January 24, 2003

AEP:NRC:3349
10 CFR 50.90

Docket No.: 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 Unit 2
CORRECTION OF RESPONSE TO NUCLEAR REGULATORY
COMMISSION REQUESTS FOR ADDITIONAL INFORMATION
REGARDING PROPOSED LICENSE AMENDMENT FOR UNIT 2
REACTOR COOLANT SYSTEM PRESSURE-TEMPERATURE CURVES,
(TAC NO. MB5699)

- Reference:
1. Letter from J. E. Pollock, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC) Document Control Desk, "License Amendment Request for Unit 2 Reactor Coolant System Pressure-Temperature Curves, and Request for Exemption from Requirements in 10 CFR 50.60(a) and 10 CFR 50, Appendix G," AEP:NRC:2349-01, dated July 23, 2002
 2. Letter from J. F. Stang, NRC, to A. C. Bakken III, I&M, "Donald C. Cook Nuclear Plant, Unit 2 – Request for Additional Information Regarding License Amendment Request, 'Reactor Coolant System Pressure – Temperature Curves,' dated July 23, 2002, (TAC No. MB5699)," dated September 27, 2002
 3. Letter from J. E. Pollock, I&M, to U. S. NRC Document Control Desk, "Response to Nuclear Regulatory Commission Requests for Additional Information Regarding Proposed License Amendment for Unit 2 Reactor Coolant System Pressure-Temperature Curves, and Request for Exemption from Requirements in 10 CFR 50 (TAC No. MB5699)," AEP:NRC:2349-02, dated November 15, 2002

A001

This letter corrects certain data provided in a response to NRC requests for additional information regarding a proposed license amendment for Donald C. Cook Nuclear Plant (CNP), Unit 2.

By Reference 1, I&M proposed to amend Facility Operating License DPR-74 to revise the reactor coolant system pressure-temperature curves in the CNP Unit 2 Technical Specifications. By Reference 2 and by a telecopy dated October 7, 2002, the NRC staff requested additional information regarding the proposed amendment. By Reference 3, I&M provided the requested additional information. The response to NRC Question 4 on page 6 of Attachment 1 to Reference 3 contained a table showing the U-238 gamma ray induced fission corrections for four Unit 2 fission sensors. The correction values were erroneously indicated to be 0.985 for all four sensors. The table should have indicated a value of 0.958 as the U-238 gamma ray induced fission correction for all four sensors. Page 6 of Attachment 1 to Reference 3 has been revised accordingly. A copy of the revised page is provided in the attachment to this letter. The changed portion of the page is indicated by a revision bar in the right margin.

I&M has revalidated all other data provided in Reference 3. The submittal of erroneous information to the NRC via Reference 3 is being addressed by the CNP corrective action program. There are no new regulatory commitments made in this letter. Should you have any questions, please contact Mr. Brian A. McIntyre, Manager of Regulatory Affairs, at (269) 697-5806.

Sincerely,



J. E. Pollock
Site Vice President

JRW/rdw

Attachment

Revised Page 6 of Attachment 1 to Letter from J. E. Pollock, I&M, to U. S. NRC Document Control Desk, AEP:NRC:2349-02, dated November 15, 2002

c: K. D. Curry, Ft. Wayne AEP
 J. E. Dyer, NRC Region III
 J. T. King, MPSC
 MDEQ - DW & RPD
 NRC Resident Inspector
 J. F. Stang, Jr., NRC Washington, DC

AFFIRMATION

I, Joseph E. Pollock, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

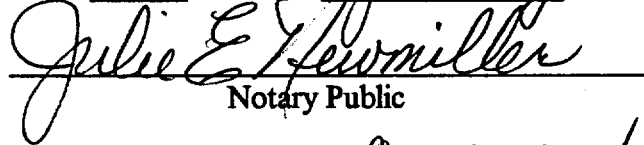
Indiana Michigan Power Company



J. E. Pollock
Site Vice President

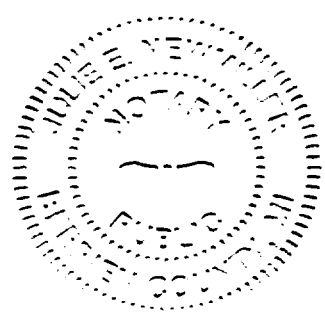
SWORN TO AND SUBSCRIBED BEFORE ME

THIS 24th DAY OF January, 2003


Notary Public

My Commission Expires 8-22-2004

JULIE E. NEWMILLER
Notary Public, Berrien County, MI
My Commission Expires Aug 22, 2004



bc: A. C. Bakken III
M. J. Finissi
S. A. Greenlee
D. W. Jenkins, w/o attachment
J. A. Kobyra, w/o attachment
B. A. McIntyre, w/o attachment
J. E. Newmiller
J. E. Pollock
D. J. Poupard
T. Satyan-Sharma/P. G. Schoepf
M. K. Scarpello, w/o attachment
T. K. Woods, w/o attachment

ATTACHMENT TO AEP:NRC:3349

REVISED PAGE 6 OF ATTACHMENT 1 TO LETTER FROM
J. E. POLLOCK, I&M, TO U. S. NRC DOCUMENT CONTROL DESK,
AEP:NRC:2349-02, DATED NOVEMBER 15, 2002

Capsule ID and Location	Ratio [U-238(γ ,f)]/[U-238 (n,f)]	(γ ,f) Correction (1+Ratio) ⁻¹
T (40 Degrees)	0.0439	0.958
Y (40 Degrees)	0.0439	0.958
X (40 Degrees)	0.0439	0.958
U (40 Degrees)	0.0439	0.958

Capsule ID and Location	Ratio [Np-237(γ ,f)]/[Np-237(n,f)]	(γ ,f) Correction (1+Ratio) ⁻¹
T (40 Degrees)	0.0156	0.985
Y (40 Degrees)	0.0156	0.985
X (40 Degrees)	0.0156	0.985
U (40 Degrees)	0.0156	0.985

The data in the above tables indicate that the gamma ray induced fission corrections for the Unit 2 fission sensors are approximately 4 percent and 1.5 percent for U-238 and Np-237, respectively.

Additional corrections for trace impurities of U-235 and for the build-in of plutonium isotopes in U-238 fission sensors has always been a part of dosimetry evaluations performed by Westinghouse. Due to the conversion of U-238 to Pu-239 over time, these corrections are a function of the total fluence accrued by the individual sensors. That is, the longer the irradiation, the greater the impact of plutonium fissioning. The corrections used in the Unit 2 dosimetry evaluations were obtained using the ORIGEN code to develop a correlation defining the U-238(n,f) contribution to the total integrated fissions in the dosimeter as a function of the neutron fluence experienced by the sensor. The specific corrections used in the evaluation of the Unit 2 U-238 sensors are summarized as follows:

Capsule ID and Location	Calculated Fluence (E > 1.0 MeV) [n/cm ²]	Fractional U-238 Contribution
T (40 Degrees)	2.38E+18	0.875
Y (40 Degrees)	6.64E+18	0.859
X (40 Degrees)	1.02E+19	0.845
U (40 Degrees)	1.58E+19	0.823

NRC Question 5

It is stated that a 10 percent positive bias was applied to the neutron sources for Cycles 13 and on. Was there also an assumption of low leakage loadings made for the same cycles?