



**INDIANA
MICHIGAN
POWER**

A unit of American Electric Power

Indiana Michigan Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49116
AEP.com

April 12, 2006

AEP:NRC:6381-01
10 CFR 50.91(a)(5)

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

SUBJECT: Donald C. Cook Nuclear Plant Unit 1 and Unit 2
Docket Nos. 50-315 and 50-316
Supplement to License Amendment Request to Increase Voltage Limit for
Emergency Diesel Generator Load Rejection Surveillance Test

Reference: Letter from J. N. Jensen, Indiana Michigan Power Company (I&M) to U. S.
Nuclear Regulatory Commission (NRC) Document Control Desk, "License
Amendment Request to Increase Voltage Limit for Emergency Diesel
Generator Load Rejection Surveillance Test," dated April 10, 2006.

Dear Sir or Madam:

This letter provides supplemental information regarding a proposed license amendment for the Donald C. Cook Nuclear Plant (CNP), Unit 1 and Unit 2.

By the referenced letter, I&M proposed to amend Facility Operating Licenses DPR-58 and DPR-74 for CNP. I&M proposed to increase the voltage limit for the emergency diesel generator (DG) full load rejection Technical Specification (TS) Surveillance Requirement (SR). The proposed amendment was requested on an emergency basis for Unit 2, pursuant to 10 CFR 50.91(a)(5). The proposed amendment was not requested on an emergency basis for Unit 1.

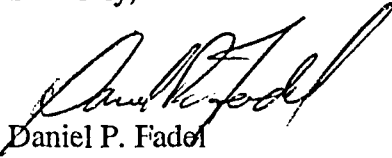
I&M is providing supplemental information in response to discussions with the NRC staff regarding the proposed amendment. The supplemental information involves the ability of the DG and certain associated components to withstand the voltage that may be applied in accordance with the increased TS limit. The information provided in this letter consists of supporting information for the amendment request previously submitted by the referenced letter. The information in this letter does not alter the validity of the original evaluation of significant hazards considerations performed in accordance with 10 CFR 50.92, and documented in Enclosure 2 to the referenced letter. The environmental assessment provided in Enclosure 2 to the referenced letter also remains valid.

A001

Enclosure 1 to this letter provides an affirmation affidavit pertaining to the supplemental information. Enclosure 2 provides the supplemental information. Copies of this letter and its enclosures are being transmitted to the Michigan Public Service Commission and Michigan Department of Environmental Quality, in accordance with the requirements of 10 CFR 50.91.

There are no new regulatory commitments in this letter. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Supervisor, at (269) 466-2649.

Sincerely,



Daniel P. Fadel
Engineering Vice President

JRW/jen

Enclosures:

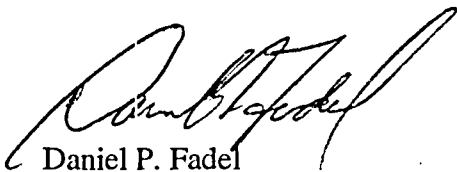
1. Affirmation
2. Supplemental Information Regarding Application for License Amendment Request to Increase Voltage Limit for Emergency Diesel Generator Load Rejection Surveillance Test

c: J. L. Caldwell, NRC Region III
K. D. Curry, AEP Ft. Wayne, w/o enclosures
J. T. King, MPSC
MDEQ – WHMD/RPMWS
NRC Resident Inspector
P. S. Tam, NRC Washington, DC

AFFIRMATION

I, Daniel P. Fadel, being duly sworn, state that I am Engineering 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.

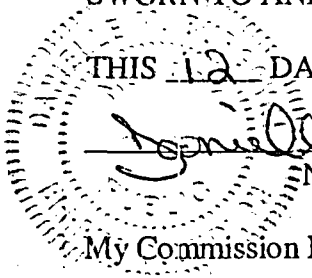
Indiana Michigan Power Company



Daniel P. Fadel
Engineering Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 12 DAY OF April, 2006


Danielle M. Burgoyne
Notary Public

My Commission Expires April 4, 2008

DANIELLE M. BURGOYNE
Notary Public, State of Michigan
County of Berrien
My Commission Expires Apr. 4, 2008
Acting in the County of Berrien

SUPPLEMENTAL INFORMATION REGARDING APPLICATION FOR LICENSE
AMENDMENT REQUEST TO INCREASE VOLTAGE LIMIT FOR EMERGENCY DIESEL
GENERATOR LOAD REJECTION SURVEILLANCE TEST

The current Donald C. Cook Nuclear Plant (CNP) Technical Specification (TS) Surveillance Requirement (SR) 3.8.1.11 requires verification that emergency diesel generator (DG) voltage is maintained less than or equal to (\leq) 5000 volts following a DG full load rejection. I&M has proposed a license amendment that would increase this limit to \leq 5350 volts.

The basis for the voltage limit is to provide DG damage protection following the full load rejection. Voltage overshoot following a full load rejection is a transient condition typically lasting for only a few seconds, with the peak voltages lasting for a much shorter period. The DG control components quickly reduce excitation and return voltage to its normal control point. DG full load rejection tests show that the maximum voltage is present for approximately two cycles. The following supplemental information is provided regarding three of the components subjected to these transient voltages: the generator, the cables that connect the DG to the safety buses, and the 4160 volt switchgear.

Generator

Discussions were conducted with a representative of General Electric, the generator vendor, regarding the ability of the generator to withstand elevated voltages. The representative stated that the transient overshoot voltage of 5350 volts that may be experienced every 18 months does not adversely impact the generator.

Cables

Discussions were conducted with a representative of Okonite, the vendor of the cables from the DG to the breaker, regarding the ability of the cables (EPR 1500MCM Shielded 5,000 volt Cable) to withstand elevated voltages. The representative stated that the cables are subjected to high-potential ("hi-pot") testing at 28,000 volts, and are suitable for continuous operation at 5 percent above the 5,000 volt nominal rating and for 15 minutes of operation at 10 percent above the 5,000 volt nominal rating.

Switchgear

Discussions were conducted with a representative of the DG switchgear vendor, ABB, regarding the ability of the switchgear (Manufacturer Model 5HK) to withstand elevated voltages. The representative stated that these models are factory tested at 19,000 volts for 1 minute. The representative confirmed that there would be no adverse affect on the ability of the switchgear to operate following a voltage transient of 5350 volts for short durations.