



November 13, 2002

AEP:NRC:2075-02
10 CFR 50.90
10 CFR 2.790

Docket No.: 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
SECOND SUPPLEMENT TO LICENSE AMENDMENT REQUEST
REGARDING CONTROL ROOM HABITABILITY

- References:
- 1) Letter from R. P. Powers, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC) Document Control Desk, "License Amendment Request for Control Room Habitability and Generic Letter 99-02 Requirements," C0600-13, dated June 12, 2000
 - 2) Letter from J. E. Pollock, I&M, to NRC Document Control Desk, "Final Response to Second Nuclear Regulatory Commission Request for Additional Information and Verbal Concerns Regarding License Amendment Request for Control Room Habitability," AEP:NRC:2075, dated June 5, 2002
 - 3) Letter from J. E. Pollock, I&M, to NRC Document Control Desk, "Supplement to License Amendment Request Regarding Control Room Habitability," AEP:NRC:2075-01, dated September 20, 2002

This letter provides a second supplement to a proposed license amendment addressing control room habitability issues at Donald C. Cook Nuclear Plant (CNP).

AP01

By Reference 1, I&M proposed to amend Facility Operating Licenses DPR-58 and DPR-74 to address control room habitability issues at CNP Unit 1 and Unit 2. Reference 2 transmitted partial responses to an NRC request for additional information and to NRC concerns identified in telephone conferences regarding the proposed amendment. Reference 3 provided a supplement to the proposed amendment.

Reference 2 and Reference 3 contained information that was designated as proprietary to Westinghouse Electric Company LLC (Westinghouse). The information consisted of numerical values associated with the departure from nucleate boiling ratio during a reactor coolant pump locked rotor event. The proprietary aspects of the information were addressed in Reference 2 and Reference 3 as follows:

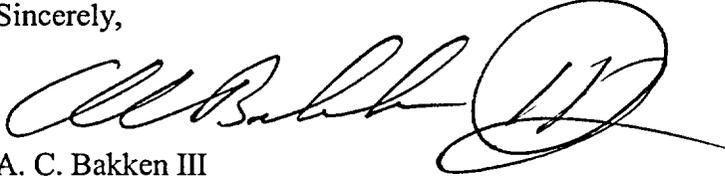
- Attachment 4 to Reference 2 and Attachment 3 to Reference 3 contained proprietary information.
- Attachment 5 to Reference 2 and Attachment 7 to Reference 3 provided Westinghouse applications, pursuant to 10 CFR 2.790, to withhold from public disclosure the proprietary information in Attachment 4 to Reference 2 and Attachment 3 to Reference 3, respectively.
- Attachment 6 to Reference 2 and Attachment 8 to Reference 3 provided non-proprietary versions of Attachment 4 to Reference 2 and Attachment 3 to Reference 3, respectively.

It has been determined that portions of the information designated as proprietary in Attachment 4 to Reference 2, and Attachment 3 to Reference 3 should not have been so designated. In accordance with 10 CFR 2.790(c), I&M is withdrawing the above identified attachments and replacing them with revised versions. The revised attachments are enclosed with this letter. Note that a single application to withhold proprietary information from public disclosure serves as the revised application for both Reference 2 and Reference 3 (Attachments 5 and 7, respectively). I&M understands that the withdrawn information will be returned.

This supplement involves only the proprietary designation of previously submitted information. The information is not affected. This supplement does not alter the proposed amendment, and does not affect the validity of the original evaluation of significant hazards considerations performed in accordance with 10 CFR 50.92, as documented in Attachment 4 to Reference 1. The environmental assessment provided in Attachment 5 to Reference 1 also remains valid.

This letter contains no new regulatory commitments. Should you have any questions, please contact Mr. Brian A. McIntyre, Manager of Regulatory Affairs, at (269) 697-5806.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. C. Bakken III', with a large circular flourish at the end.

A. C. Bakken III
Senior Vice President, Nuclear Operations

JRW/rdw

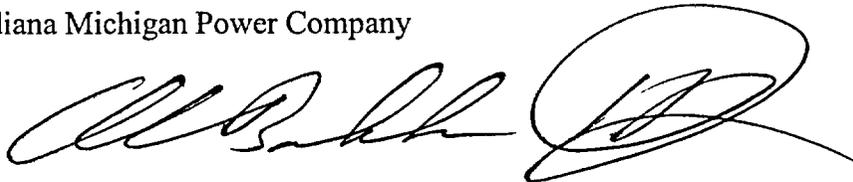
Enclosure: Revised Attachments

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

AFFIRMATION

I, A. Christopher Bakken III, being duly sworn, state that I am Senior 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



A. C. Bakken III
Senior Vice President, Nuclear Operations

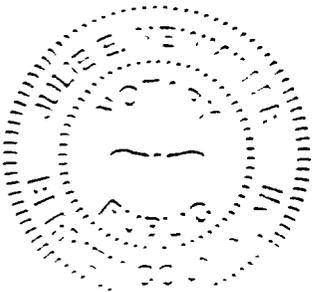
SWORN TO AND SUBSCRIBED BEFORE ME

THIS 13th DAY OF November, 2002

Julie E. Newmiller
Notary Public

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

My Commission Expires 8-22-04



bc: A. C. Bakken III
M. J. Finissi, w/o attachments
S. A. Greenlee
D. R. Hafer/R. J. Kohrt
D. W. Jenkins, w/o attachments
J. A. Kobyra, w/o attachments
B. A. McIntyre, w/o attachments
J. E. Newmiller
J. E. Pollock
M. K. Scarpello, w/o attachments
H. A. Sepp
T. R. Stephens
T. K. Woods, w/o attachments

AFFIDAVIT

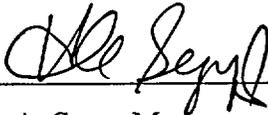
COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

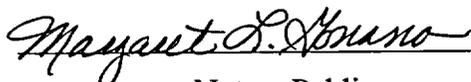
Before me, the undersigned authority, personally appeared H. A. Sepp, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC ("Westinghouse"), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



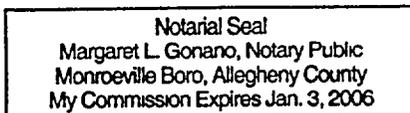


H. A. Sepp, Manager
Regulatory and Licensing Engineering

Sworn to and subscribed
before me this 8th day
of November, 2002



Notary Public



- (1) I am Manager, Regulatory and Licensing Engineering, in Nuclear Services, Westinghouse Electric Company LLC ("Westinghouse"), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Electric Company LLC.
- (2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Electric Company LLC in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
 - (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
 - (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.
 - (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10CFR Section 2.790, it is to be received in confidence by the Commission.

- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in letters LTR-ESI-02-165, Revision 1 (Proprietary), November 2002 and CAA-02-96, Revision 3 (Proprietary), November 2002 for D. C. Cook Units 1 and 2 being transmitted by the American Electric Company letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk, Attention Mr. Samuel J. Collins. The proprietary information as submitted for use by American Electric Company for D. C. Cook Units 1 and 2 is expected to be applicable in other licensee submittals in response to certain NRC requests for information to support the locked rotor rods-in-DNB analysis for D. C. Cook Unit 1 or 2.

This information is part of that which will enable Westinghouse to:

- (a) Justify no rods-in-DNB for the locked rotor analysis.

- (b) Assist the customer to respond to NRC requests for information.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.

- (b) Westinghouse can sell support and justification for no rods-in-DNB for the locked rotor analysis.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar support documentation and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing testing and analytical methods and performing tests.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) contained within parentheses located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith bears a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary version of this report, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.



Westinghouse Electric Company LLC

Box 355
Pittsburgh Pennsylvania 15230-0355

November 8, 2002

CAW-02-1570

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Mr. Samuel J. Collins

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-ESI-02-165, Revision 1, "Response to NRC RAIs on the Locked Rotor Rods-in-DNB Analysis for D. C. Cook Units 1 and 2, Revision 1", November 2002 and CAA-02-96, Revision 3, "D. C. Cook Units 1 and 2 Locked Rotor Analyses, Revision 3", November 2002.

Dear Mr. Collins:

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-02-1570 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by American Electric Power Company.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-02-1570 and should be addressed to the undersigned.

Very truly yours,

A handwritten signature in black ink, which appears to read "H. A. Sepp", is written over the typed name.

H. A. Sepp, Manager
Regulatory and Licensing Engineering

Enclosures

cc: M Scott, NRR/OWFN/DRPW/PDIV2 (Rockville, MD) 1L

ATTACHMENT 6 TO AEP:NRC:2075 (revised by AEP:NRC:2075-02)

WESTINGHOUSE PROPRIETARY CLASS 3

Donald C. Cook Nuclear Plant

Departure From Nucleate Boiling Ratio (DNBR)

Margins and Allocations for Revised Thermal Design Procedure Analyses (Locked Rotor) from Westinghouse Letter CAA-02-96, Revision 4, November 2002

Unit 1 Cycle 18

	Typical	Thimble
DNBR Design Limit (DL)	1.23	1.22
DNBR Safety Analysis Limit (SAL)	1.40	1.42
Margin = $1 - \text{DNBR DL} / \text{DNBR SAL}$, %	12.1	14.1
Margin allocated to locked rotor analysis, %	[]
All other existing margin allocations, %	[]
Net remaining margin, %	[]

(a, b, c)

Unit 2 Cycle 13

	Typical	Thimble
DNBR DL	1.23	1.22
DNBR SAL (Reduced [] (a, b, c))	1.41	1.344
Margin = $1 - \text{DNBR DL} / \text{DNBR SAL}$, %	12.8	9.2
Margin allocated to locked rotor analysis, %	[]
All other existing margin allocations, %	[]
Net remaining margin, %	[]

(a, b, c)

ATTACHMENT 8 TO AEP:NRC:2075-01 (revised by AEP:NRC:2075-02)

Supporting Tables for Attachment 2

Information from Westinghouse Letter LTR-ESI-02-166, Revision 1, November 2002

WESTINGHOUSE PROPRIETARY CLASS 3

Table 1 - Unit 1 Fuel Cycle 18 DNBR vs. Time

Time - Seconds	DNBR	
	Typical Cell	Thimble Cell
2.4	[]
2.6*		
2.8		

(a, b, c)

* Time at which minimum DNBR occurs.

Table 2 - Unit 2 Fuel Cycle 13 DNBR vs. Time

Time - Seconds	DNBR	
	Typical Cell	Thimble Cell
1.0	[]
1.5		
2.0		
2.1		
2.2		
2.3*		
2.4		
3.0		

(a, b, c)

* Time at which minimum DNBR occurs.

WESTINGHOUSE PROPRIETARY CLASS 3Table 3 - Unit 1 Cycle 18 DNBR Margin Allocations

	Typical Cell	Thimble Cell
DNBR Design Limit (DL)	1.23	1.22
DNBR Safety Analysis Limit (SAL)	1.40	1.42
Margin available= $1 - \text{DNBR DL} / \text{DNBR SAL}$, %	12.1	14.1
Margin allocated to locked rotor analysis, %	[]
Margin allocated to rod bow penalty, %		
Margin allocated to one degree temperature bias from plant instrumentation, %		
Margin allocated to increase in bypass flow due to thimble plug removal, %		
Total margin allocated, %		
Net remaining margin available, %		

(a, b, c)

Table 4 - Unit 2 Cycle 13 DNBR Margin Allocations

	Typical Cell	Thimble Cell
DNBR DL	1.23	1.22
DNBR SAL	1.41	1.34
DNBR SAL (Reduced [] (a, b, c))	1.41	1.34
Margin available = $1 - \text{DNBR DL} / \text{DNBR SAL (Reduced)}$, %	12.8	9.2
Margin allocated to locked rotor analysis, %	[]
Margin allocated to rod bow penalty (No rod bow penalty with IFMs), %		
Margin allocated to THINC IV penalty due to use of the old THINC IV model, %		
Margin allocated to pressure drop penalty (difference between pressurizer and core), %		
Margin allocated to cold leg streaming – equivalent to 1 degree bias, %		
Margin allocated to 0.2% flow shortfall, %		
Margin allocated to increase in bypass flow due to thimble plug removal, %		
Total margin allocated, %		
Net remaining margin available, %		

(a, b, c)

ENCLOSURE TO AEP:NRC:2075-02

REVISED ATTACHMENT 4 TO AEP:NRC:2075

REVISED ATTACHMENT 6 TO AEP:NRC:2075

REVISED ATTACHMENT 3 TO AEP:NRC:2075-01

REVISED ATTACHMENT 8 TO AEP:NRC:2075-01

REVISED ATTACHMENT 5 TO AEP:NRC:2075 AND
ATTACHMENT 7 TO AEP:NRC:2075-01