



A unit of American Electric Power

Indiana Michigan Power  
One Cook Place  
Bridgman, MI 49106  
IndianaMichiganPower.com

PROPRIETARY INFORMATION

Attachments 1 and 2 to Enclosure 1 to this letter contain proprietary information.

Withhold from public disclosure under 10 CFR 2.390.

Upon removal of Attachments 1 and 2 to Enclosure 1, this letter is decontrolled.

February 16, 2010

AEP-NRC-2010-20  
10 CFR 50.55a

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

Subject: Donald C. Cook Nuclear Plant Unit 1  
Docket No. 50-315  
Response to Request for Additional Information Regarding Third Ten-Year Interval  
Inservice Inspection Program Relief Request ISIR-32

Reference: Letter from R. A. Hruby, Indiana Michigan Power Company, to Nuclear Regulatory  
Commission Document Control Desk, "Third Ten-Year Interval Inservice Inspection  
Program Relief Request ISIR-32," AEP-NRC-2009-53, dated September 15, 2009  
(ML092680143).

Dear Sir or Madam:

In the referenced letter, Indiana Michigan Power Company (I&M) submitted a request for relief from American Society of Mechanical Engineers code examination requirements associated with the Donald C. Cook Nuclear Plant, Unit 1. The relief request (ISIR-32) proposes an alternative to the volumetric examination of the Steam Generator Inlet and Outlet Primary Manway Studs. I&M proposed that during the U1C23 refueling outage, a visual examination (VT-2) of the steam generator manway area with the insulation installed at nominal operating temperature and pressure be performed in lieu of a volumetric examination. Based on the Nuclear Regulatory Commission (NRC) staff's review of the referenced letter, additional information is required to complete the evaluation. The NRC staff's requested additional information was electronically transmitted to I&M on February 4, 2010. This letter provides I&M's response to the request for additional information (RAI).

Enclosure 1 to this letter provides I&M's response to the RAI. Babcock & Wilcox has designated certain information in Enclosure 1, Attachments 1 and 2, as proprietary pursuant to 10 CFR 2.390. Therefore, it is requested that Enclosure 1, Attachments 1 and 2, be withheld from public disclosure. Enclosure 2 provides an affidavit from Babcock & Wilcox setting forth the basis on which information contained in Enclosure 1, Attachments 1 and 2, may be withheld from public disclosure. The extent of proprietary information contained in Attachments 1 and 2 is such that issuance of a nonproprietary version is considered impractical.

A047  
NRR

There are no new or revised commitments in this letter. Should you have any questions, please contact Mr. James M. Petro, Jr., Regulatory Affairs Manager, at (269) 466-2489.

Sincerely,



Raymond A. Hruby, Jr.  
Vice President – Site Support Services

RSP/rdw

- Enclosures:
1. Response to Request for Additional Information Regarding ISIR-32
  2. Application for Withholding Proprietary Information in Enclosure 1, Attachment 1 and Attachment 2 from Public Disclosure

c: T. A. Beltz – NRC Washington, DC  
J. T. King – MPSC  
S. M. Krawec, Ft. Wayne AEP, w/o enclosures  
MDEQ – WHMD/RPS  
NRC Resident Inspector  
M. A. Satorius – NRC Region III

## Enclosure 1 to AEP-NRC-2010-20

### Response to Request for Additional Information Regarding ISIR-32

In the referenced letter, Indiana Michigan Power Company (I&M) submitted a request for relief from American Society of Mechanical Engineers (ASME) code examination requirements associated with the Donald C. Cook Nuclear Plant (CNP), Unit 1. The relief request (ISIR-32) proposes an alternative to the volumetric examination of the Steam Generator Inlet and Outlet Primary Manway Studs. I&M proposed that during the U1C23 refueling outage, a visual examination (VT-2) of the steam generator primary manway area with the insulation installed at nominal operating temperature and pressure be performed in lieu of the volumetric examination. Based on the Nuclear Regulatory Commission (NRC) staff's review of the referenced letter, additional information is required to complete the evaluation. The requested additional information is provided below.

#### **NRC Request for Additional Information (RAI) 1**

*Please provide a detailed description and/or drawing of the manway connection configuration.*

#### **I&M Response to NRC RAI 1**

The primary head manway assembly connection configuration is provided in Attachment 1, drawing 1-AEP-BAWI-7803E040. The associated primary manway stud and elongation rod details are provided in Attachment 2, drawing 1-BAWI-7803D324. Both Attachment 1 and 2 are proprietary.

#### **NRC RAI 2**

*Please provide any operating experience associated with the manways (e.g., any leaks, how often they have been removed, occurrences of stuck studs) since the steam generators were replaced in 2000.*

#### **I&M Response to NRC RAI 2**

The operating experience associated with the CNP Unit 1 manways since the steam generators were replaced in 2000 is as follows. There has been no experience of primary manway leakage. Primary manways have been removed on the Unit 1 steam generators on three occasions. In 2002 and 2006, steam generator manway studs were removed on all eight manways (2 per steam generator). In 2003, steam generator eddy current examinations were performed on one steam generator (#14); as a result only two manways were removed. The below tables provide the manway removal details and our associated stuck stud experience.



**U1C21 (2006) Primary Stuck Stud Status**

	<b>11 Hot Leg</b>	<b>11 Cold Leg</b>	<b>12 Hot Leg</b>	<b>12 Cold Leg</b>	<b>13 Hot Leg</b>	<b>13 Cold Leg</b>	<b>14 Hot Leg</b>	<b>14 Cold Leg</b>
Manway Removed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Studs initially stuck*	4 (Note 4)	4 (Note 4)	4 (Note 4)	4 (Note 5)	2 (Note 6)	2 (Note 7)		
Stuck studs mechanically removed (wrench)				1	1	1		
Stuck studs drilled out				1				
Stuck studs dispositioned to be left in place								

\* Not removable using normal detensioning practices and standard detensioning tooling settings.

Notes: (1) Total includes one manway lifting device hoisting support beam stud.

(2) One stuck stud that was left in place in 2002 was still stuck but mechanically removed in 2003.

(3) Total includes one manway lifting device jacking guide stud stuck.

(4) Studs successfully removed after a 500 - 1500 psi (varies by stud location) increase in the allowable detensioning pressure.

(5) Four studs were initially stuck, two studs were successfully removed after a 1500 psi increase in the allowable detensioning pressure and one stud was removed mechanically using hand tooling. The remaining stud was removed by drilling.

Note: One additional stud was removable by hand and therefore it was not considered stuck; however, it was considered difficult to remove. This stud is not reflected in the stuck stud count.

(6) Two studs were initially stuck; one was successfully removed after a 500 psi increase in the maximum allowable detensioning pressure, while the remaining stud was removed mechanically using hand tooling.

Note: One additional stud was removable by hand and therefore it was not considered stuck; however, it was considered difficult to remove. This stud is not reflected in the stuck stud count.

- (7) Two studs were initially stuck, one was successfully removed after an increase in detensioning pressure. The remaining stud was mechanically removed using hand tooling after an increase in detensioning pressure and injection of a lubricant.

Note: Two additional studs were removable by hand and therefore not considered stuck; however, they were considered difficult to remove. These studs are not reflected in the stuck stud count.

### **NRC RAI 3**

*Please describe the hardship that would be involved with performing a visual examination for leakage of the manways with the insulation removed during the U1C23 refueling outage (i.e., essentially a baremetal visual examination).*

### **I&M Response to NRC RAI 3**

A bare metal visual examination (VT-2) of the manways for leakage during U1C23 will be performed during depressurized conditions as required by, and in accordance, with the CNP Inservice Inspection (ISI) Program plan. The proposed alternative VT-2 performed with the insulation installed, requested in the relief request (ISIR-32), is in addition to the bare metal visual examination performed depressurized. The proposed alternate VT-2 specified in the relief request is to be performed at nominal operating pressure and temperature (NOP/NOT). This examination is conducted with insulation installed in accordance with ASME Code Section XI, Table IWB-2500-1, examination Category B-P, Item B15.50 as required by CNP's ISI Program. At NOP/NOT the removal and reinstallation of insulation to perform a bare metal VT-2 is a personnel safety concern due to the high temperature and radiological conditions.

### **Reference**

Letter from R. A. Hruby, I&M, to NRC Document Control Desk, "Third Ten-Year Interval Inservice Inspection Program Relief Request ISIR-32," AEP-NRC-2009-53, dated September 15, 2009 (ML092680143).

Enclosure 2 to AEP-NRC-2010-20

Application for Withholding Proprietary Information in Enclosure 1,  
Attachment 1 and Attachment 2 from Public Disclosure



**babcock & wilcox canada ltd.**

▶ 581 coronation boulevard ▶ cambridge, on n1r 5v3 canada  
▶ phone 519.621.2130 ▶ fax 519.621.2310 ▶ www.babcock.com

February 16, 2010

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
U.S.A.

**APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE**

**Subject: Babcock & Wilcox Canada Ltd. manway drawing (B&W 7803E040 – AEP drawing number 1-AEP-BAWI-7803E040) (Proprietary) and Babcock & Wilcox Canada Ltd. stud drawing (B&W 7803D324 – AEP drawing number 1-BAWI-7803D324) (Proprietary)**

Dear Sir/Madam:

The proprietary information for which withholding is being requested in the above-referenced drawings is identified in the attached affidavit signed by the owner of the proprietary information, Babcock & Wilcox Canada Ltd. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and address with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

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

Correspondence with respect to the proprietary aspects of the application for withholding or the Babcock & Wilcox Affidavit should reference this letter, and should be addressed to the undersigned.

Yours truly,

BABCOCK & WILCOX CANADA LTD.

Jeffrey Millman,  
Manager, Nuclear Engineering

Attach./

Cc: V.J. Manica  
J. MacQuarrie  
J. Albert

PROVINCE OF ONTARIO

REGIONAL MUNICIPALITY OF WATERLOO

AFFIDAVIT OF JEFFREY MILLMAN

I, Jeffrey Millman, of the Village of Ayr, in the Township of North Dumfries, Regional Municipality of Waterloo, in the Province of Ontario, being sworn, make oath and say as follows:

1. I am the Manager, Nuclear Engineering of Babcock & Wilcox Canada Ltd. ("B&W"), 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 rulemaking proceedings, and am authorized to apply for its withholding on behalf of B&W.
2. I am making this Affidavit in conformance with the provisions of 10CFR Section 2.390 of the Commission's regulations and in conjunction with the Babcock & Wilcox Canada Ltd. Application for Withholding accompanying this Affidavit.
3. I have personal knowledge of the criteria and procedures utilized by B&W in designating information as a trade secret, proprietary or as confidential commercial or financial information.
4. Pursuant to the provisions of paragraph (b)(4) of Section 2.390 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 B&W.
  - (ii) The information is of a type customarily held in confidence by B&W and not customarily disclosed to the public. B&W 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 B&W 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 follow:

- (a) The information reveals the distinguishing aspects of a process, component, structure, tool, method, etc., where prevention of its use by

any of B&W's competitors without license from B&W constitutes a competitive economic advantage over other companies.

- (b) Its use by a competitor would reduce its expenditure of resources or improve its competitive position in the design, manufacture, shipment, installation, quality assurance, or licensing of a similar product.
- (c) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the B&W system which include the following:

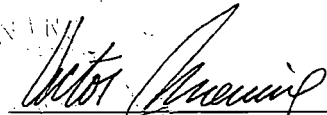
- (a) The use of such information by B&W gives B&W a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect B&W's competitive advantage.
  - (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the B&W ability to sell products and services involving the use of such information.
  - (c) Use by a competitor of B&W would put B&W at a competitive disadvantage by reducing the competitor's expenditure of resources at B&W's expense.
  - (d) B&W's 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 2.390, 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 identified as Babcock & Wilcox Canada Ltd. manway drawing (B&W 7803E040 - AEP drawing number 1-AEP-BAWI-7803E040) and Babcock & Wilcox Canada Ltd. stud drawing (B&W 7803D324 - AEP drawing number 1-BAWI-7803D324).

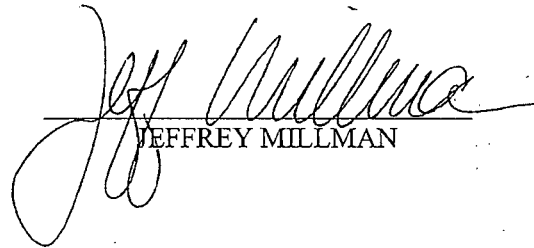
Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of B&W because it would enhance the ability of competitors to provide similar technical documentation for commercial power reactors without commensurate expenses. Also, public disclosure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

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

In order for competitors of B&W to duplicate this information, similar design programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

SWORN BEFORE ME in the )  
City of Cambridge in the )  
Province of Ontario, this )  
16<sup>th</sup> day of February, 2010. )

  
\_\_\_\_\_  
Victor J. Manica  
A Commissioner for the taking of  
oaths in the Province of Ontario..

  
\_\_\_\_\_  
JEFFREY MILLMAN