



Consumers  
Power  
Company

James W Cook

Vice President - Projects, Engineering  
and Construction

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

October 5, 1982

Harold R Denton, Director  
Office of Nuclear Reactor Regulation  
Division of Licensing  
US Nuclear Regulatory Commission  
Washington, DC 20555

MIDLAND NUCLEAR COGENERATION PLANT  
MIDLAND DOCKET NOS 50-329, 50-330  
EFFECTS OF NEUTRON IRRADIATION  
ON WF-70 WELD METAL  
FILE: M-1.1, 0485.13 SFRIAL: 19588

ENCLOSURE: AFFIDAVIT OF JAMES H TAYLOR, B&W MANAGER  
OF LICENSING, WITH ATTACHED EXHIBIT A  
AND PROPRIETARY EXHIBIT B

The Midland Safety Evaluation Report (SER) (NUREG-0793) contains two different estimates for the number of effective full power years (EFPY) which are estimated to result in the drop in upper shelf energy to 50 ft-lbs for the lower circumferential beltline weld in the Midland Unit 1 reactor pressure vessel. The weld procedure qualification number for this weld is WF-70. On Page 5-19 of the Midland SER, the estimates are  $3 \times 10^{18}$  n/cm<sup>2</sup> and 9 EFPY. On Page C-10 of SER Appendix C, the estimate is 15.1 EFPY, which corresponds to a fluence of  $5 \times 10^{18}$  n/cm<sup>2</sup>. The estimate on Page C-10 is consistent with the Midland FSAR Table 5.3-2.

This discrepancy in estimates has been identified by the ASLB as relevant to a contention which has been admitted by the August 14, 1982 Prehearing Conference Order. Consumers Power maintains that the estimate which is contained in the FSAR and on Page C-10 of the SER is a conservative estimate for predicting when the material will reach the 50 ft-lb upper shelf energy. In support of this position, the enclosed proprietary reactor test data, Exhibit B attached to the enclosed affidavit, for WF-70 weld material is submitted. The irradiation temperature was 560°F and the neutron fluxes were higher than those resulting from irradiation in power reactors. The enclosed

ATTACHMENTS CONTAIN PROPRIETARY INFORMATION  
WITHHOLD FROM PUBLIC DISCLOSURE

oc0982-2707a100

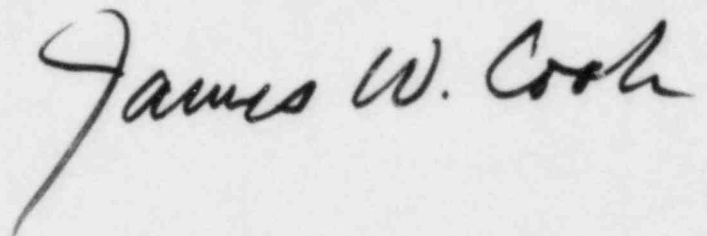
8210190520 821005  
PDR ADOCK 05000329  
E PDR

P301

Exhibit B data demonstrates that the upper shelf energy for WF-70 remains above 50 ft-lbs at test reactor fluences of  $9 \times 10^{18}$  n/cm<sup>2</sup>.

This data should be more applicable to an estimation of the performance of the WF-70 material than the two B&W surveillance capsule reports, BAW-1697 and BAW-1699, which formed only a partial basis for the estimates on Page 5-19 of the Midland SER. These reports evaluated a weld material (WF-209-1) which is similar (the same heat of filler metal a but different manufacturing lot of welding flux) to the WF-70 material. Therefore, use of 15.1 EFPY and  $5 \times 10^{18}$  n/cm<sup>2</sup> is a conservative estimate for predicting when the upper shelf energy of the WF-70 material will drop to 50 ft-lbs.

Since the attached Exhibit B and the document listed in the attached Exhibit A contain trade secrets or privileged and confidential commercial information within the meaning of 10 CFR 2.790 and 9.5(a)(4), we are requesting that this information be withheld from public disclosure pursuant to 10 CFR 2.790 and 9.12. In support of this application for the withholding of proprietary information, we are submitting the enclosed affidavit of Mr J H Taylor, Manager of Licensing in the Nuclear Power Generation Division of Babcock & Wilcox. Mr Taylor's affidavit contains a full statement of the reasons which support our claim that the subject documents should be withheld from public disclosure.



JWC/RLT/HWS/jlh

CC Atomic Safety and Licensing Appeal Board, w/o  
 CBechhoefer, ASLB, w/o  
 MMCherry, Esq, w/o  
 FPCowan, ASLB, w/o  
 RJCook, Midland Resident Inspector, w/o  
 RSDecker, ASLB, w/o  
 SGadler, Esq, w/o  
 JHarbour, ASLB, w/o  
 DSHood, NRC, w/a (2)  
 DFJudd, B&W, w/a  
 FJKelley, Esq, w/o  
 WHMarshall, w/o  
 WDPatton, Esq, w/o  
 BStamiris, w/o  
 CRStephens, NRC Docketing & Service Branch, w/a (3)  
 MSinclair, w/o  
 LLBishcp, w/o

ATTACHMENTS CONTAIN PROPRIETARY INFORMATION  
 WITHHOLD FROM PUBLIC DISCLOSURE

Babcock & Wilcox

AFFIDAVIT OF JAMES H. TAYLOR

- A. My name is James H. Taylor. I am Manager of Licensing in the Nuclear Power Generation Division of Babcock & Wilcox, and as such I am authorized to execute this Affidavit.
- B. I am familiar with the criteria applied by Babcock & Wilcox to determine whether certain information of Babcock & Wilcox is proprietary and I am familiar with the procedures established within Babcock & Wilcox, particularly the Nuclear Power Generation Division (NPGD), to ensure the proper application of these criteria.
- C. In determining whether a Babcock & Wilcox document is to be classified as proprietary information, an initial determination is made by the unit manager who is responsible for originating the document as to whether it falls within the criteria set forth in Paragraph D hereof. If the information falls within any one of these criteria, it is classified as proprietary by the originating unit manager. This initial determination is reviewed by the cognizant section manager. If the document is designated as proprietary, it is reviewed again by Licensing personnel and other management within NPGD as designated by the Manager of Licensing to assure that the regulatory requirements of 10 CFR Section 2.790 are met.
- D. The following information is provided to demonstrate that the provisions of 10 CFR Section 2.790 of the Commission's regulations have been considered:
- (i) The information has been held in confidence by the Babcock & Wilcox Company. Copies of the document are clearly identified as proprietary. In addition, whenever Babcock & Wilcox transmits the information to a customer, customer's agent, potential customer or regulatory agency, the transmittal requests the recipient to hold the information as proprietary. Also, in order to strictly limit any potential or actual customer's use of proprietary information, the following

AFFIDAVIT OF JAMES H. TAYLOR (Cont'd)

provision is included in all proposals submitted by Babcock & Wilcox, and an applicable version of the proprietary provision is included in all of Babcock & Wilcox's contracts:

"Purchaser may retain Company's Proposal for use in connection with any contract resulting therefrom, and, for that purpose, make such copies thereof as may be necessary. Any proprietary information concerning Company's or its Suppliers' products or manufacturing processes which is so designated by Company or its Suppliers and disclosed to Purchaser incident to the performance of such contract shall remain the property of Company or its Suppliers and is disclosed in confidence, and Purchaser shall not publish or otherwise disclose it to others without the written approval of Company, and no rights, implied or otherwise, are granted to produce or have produced any products or to practice or cause to be practiced any manufacturing processes covered thereby.

Notwithstanding the above, Purchaser may provide the NRC or any other regulatory agency with any such proprietary information as the NRC or such other agency may require; provided, however, that Purchaser shall first give Company written notice of such proposed disclosure and Company shall have the right to amend such proprietary information so as to make it non-proprietary. In the event that Company cannot amend such proprietary information, Purchaser shall, prior to disclosing such information, use its best efforts to obtain a commitment from NRC or such other agency to have such information withheld from public inspection.

AFFIDAVIT OF JAMES H. TAYLOR (Cont'd)

Company shall be given the right to participate in pursuit of such confidential treatment."

(ii) The following criteria are customarily applied by Babcock & Wilcox in a rational decision process to determine whether the information should be classified as proprietary. Information may be classified as proprietary if one or more of the following criteria are met.

- a. Information reveals cost or price information, commercial strategies, production capabilities, or budget levels of Babcock & Wilcox, its customers or suppliers.
- b. The information reveals data or material concerning Babcock & Wilcox research or development plans or programs of present or potential competitive advantage to Babcock & Wilcox.
- c. The use of the information by a competitor would decrease his expenditures, in time or resources, in designing, producing or marketing a similar product.
- d. The information consists of test data or other similar data concerning a process, method or component, the application of which results in a competitive advantage to Babcock & Wilcox.
- e. The information reveals special aspects of a process, method, component or the like, the exclusive use of which results in a competitive advantage to Babcock & Wilcox.
- f. The information contains ideas for which patent protection may be sought.

Babcock & Wilcox

AFFIDAVIT OF JAMES H. TAYLOR (Cont'd)

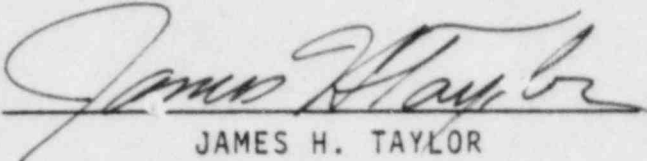
The document(s) listed on Exhibit "A", which is attached hereto and made a part hereof, has been evaluated in accordance with normal Babcock & Wilcox procedures with respect to classification and has been found to contain information which falls within one or more of the criteria enumerated above. Exhibit "B", which is attached hereto and made a part hereof, specifically identifies the criteria applicable to the document(s) listed in Exhibit "A".

- (iii) The document(s) listed in Exhibit "A", which has been made available to the United States Nuclear Regulatory Commission was made available in confidence with a request that the document(s) and the information contained therein be withheld from public disclosure.
- (iv) The information is not available in the open literature and to the best of our knowledge is not known by Combustion Engineering, EXXON, General Electric, Westinghouse or other current or potential domestic or foreign competitors of B&W.
- (v) Specific information with regard to whether public disclosure of the information is likely to cause harm to the competitive position of Babcock & Wilcox, taking into account the value of the information to Babcock & Wilcox; the amount of effort or money expended by Babcock & Wilcox developing the information; and the ease or difficulty with which the information could be properly duplicated by others is given in Exhibit "B".

E. I have personally reviewed the document(s) listed on Exhibit "A" and have found that it is considered proprietary by Babcock & Wilcox because it contains information which falls within one or more of the criteria enumerated in Paragraph D, and it is information which is customarily held in confidence and protected as proprietary information by Babcock & Wilcox. This report comprises information utilized by Babcock & Wilcox in its business which afford Babcock & Wilcox an opportunity to obtain a competitive advantage over

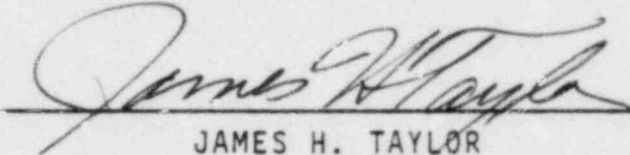
Babcock & Wilcox

those who may wish to know or use the information contained in the document(s).

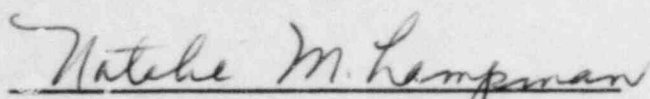
  
JAMES H. TAYLOR

State of Virginia )  
City of Lynchburg ) SS. Lynchburg

James H. Taylor, being duly sworn, on his oath deposes and says that he is the person who subscribed his name to the foregoing statement, and that the matters and facts set forth in the statement are true.

  
JAMES H. TAYLOR

Subscribed and sworn before me  
this 22<sup>nd</sup> day of Sept. 1982

  
Notary Public in and for the City  
of Lynchburg, State of Virginia

My Commission Expires Aug. 18, 1985