



SERIAL: LAP-83-61

Carolina Power & Light Company

MAR 10 1983

Director of Nuclear Reactor Regulation  
Attention: Mr. D. B. Vassallo, Chief  
Operating Reactors Branch No. 2  
Division of Licensing  
United States Nuclear Regulatory Commission  
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 AND 50-324  
LICENSE NOS. DPR-71 AND DPR-62  
RELOAD ANALYSIS  
SUBMITTAL OF RELOAD LICENSING METHODOLOGIES

Dear Mr. Vassallo:

REFERENCES:

- 1) Carolina Power & Light Company letter from Mr. E. E. Utley to Mr. T. A. Ippolito (NRC) dated September 8, 1981.
- 2) U. S. NRC letter from Mr. T. A. Ippolito to Mr. J. A. Jones (CP&L) dated October 16, 1981 (Docket Nos. 50-325, 324).
- 3) Carolina Power & Light Company letter from Mr. P. W. Howe to Mr. D. B. Vassallo (NRC) dated February 5, 1982.
- 4) Carolina Power & Light Company letter from Mr. P. W. Howe to Mr. D. B. Vassallo (NRC) dated May 24, 1982.
- 5) Carolina Power & Light Company letter from Mr. S. R. Zimmerman to Mr. D. B. Vassallo (NRC) dated November 5, 1982.

SUMMARY

The purpose of this letter is to submit for NRC Staff review licensing topical reports that describe Carolina Power & Light Company's (CP&L) boiling water reactor (BWR) steady-state analysis methods for the Brunswick Steam Electric Plant. Our plans for establishing reload design capability for the Brunswick Plant have been discussed previously with members of the Staff as referenced above.

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*NF-1583-02 NP*  
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DISCUSSION

The documents enclosed herein form the basis for CP&L's BWR reload analysis methods and will be referenced in licensing applications beginning with Brunswick-2 Reload 5, presently scheduled to begin December 1984. The enclosed documents are submitted based on the discussions noted in the references above. The following documents are attached:

1. "A Description and Validation of Steady-State Analysis Methods for Boiling Water Reactors," CP&L NF-1583.01 [Enclosure 1 (40 copies)].
2. "Methods of PRESTO-B, A Three-Dimensional LWR Core Simulator Code," CP&L NF-1583.03. [Enclosure 2 (40 copies - proprietary version) and Enclosure 3 (40 copies - non-proprietary version)].
3. "Methods of RECORD, An LWR Fuel Assembly Burnup Code," CP&L NF-1583.02 [Enclosure 4 (40 copies - proprietary version) and Enclosure 5 (40 copies - non-proprietary version)].

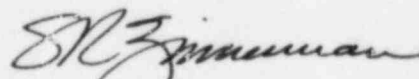
An affidavit describing the proprietary basis for Enclosure 2 is provided in Enclosure 6 and an affidavit describing the proprietary basis for Enclosure 4 is provided in Enclosure 7. Carolina Power & Light Company will submit one additional document, "Verification of CP&L Reference BWR Thermal-Hydraulic Methods using the FIBWR Code," in the near future.

ADMINISTRATIVE INFORMATION

We have evaluated this request in accordance with the criteria in 10 CFR 170.22. Since this request is for review of topical reports for a single technical issue, CP&L will remit the necessary fee upon completion of the review and billing by the NRC.

If you have any questions concerning this submittal, please contact our staff.

Yours very truly,



S. R. Zimmerman  
Manager

Licensing & Permits

WRM/kjr (6364WRM)  
Enclosures

cc: Mr. Carl Berlinger (NRC) (w/o attachments)  
Mr. Dan Fieno (NRC) (w/attachments)  
Mr. Wayne Hodges (NRC) (w/o attachments)  
Mr. S. D. MacKay (NRC) (w/o attachments)  
Mr. Ralph Meyers (NRC) (w/o attachments)  
Mr. D. O. Myers (NRC-BSEP) (w/o attachments)  
Mr. J. P. O'Reilly (NRC-RII) (w/o attachments)  
Mr. Larry Philips (NRC) (w/o attachments)

ENCLOSURE 6

AFFIDAVIT PURSUANT  
TO TITLE 10 CFR 2.790

Submission of Proprietary Commercial Data

Scandpower Inc.            )  
State of Maryland         )  
County of Montgomery     )        SS.:

I, R. D. Smith depose and say that I am the Executive Vice President of Scandpower Inc., duly authorized to make this affidavit, and have reviewed or caused to have reviewed the information which is identified as proprietary and referenced in the paragraph immediately below. I am submitting this affidavit in conformance with the provisions of 10 CFR 2.790 of the Commission's regulations for withholding this information.

The information for which proprietary treatment is sought is contained in the following document:

Methods of PRESTO-B - A Three Dimensional LWR Core Simulation Code

This document has been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Scandpower in designating information as a trade secret, privileged or as confidential commercial or financial information.

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, included in the above referenced document, should be withheld.

1. The information sought to be withheld from public disclosure is owned and has been held in confidence by Scandpower.
2. The information consists of test data or other similar data concerning a process, method or component, the application of which results in a substantial competitive advantage to Scandpower.
3. The information is of a type customarily held in confidence by Scandpower and not customarily disclosed to the public. Scandpower 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 criteria generally applied in deleting proprietary information are listed in Table 1. This system was applied in determining that the subject documents herein are proprietary.

4. The information is being transmitted to the Commission in confidence under the provisions of 10 CFR 2.790 with the understanding that it is to be received in confidence by the Commission.

5. The information, to the best of my knowledge and belief, is not available in public sources, and any disclosure to third parties has been made pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence.

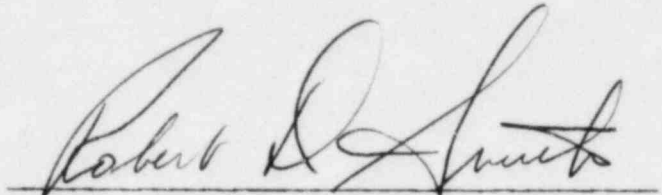
6. Public disclosure of the information is likely to cause substantial harm to the competitive position of Scandpower because:

- a. A similar computer code is being developed and sold by competitors of Scandpower.
- b. Development of this information by ScP required thousands of man-hours of effort and hundreds of thousands of dollars. To the best of my knowledge and belief a competitor would have to undergo similar expense in generating equivalent information.
- c. In order to acquire such information, a competitor would also require considerable time and inconvenience related to obtaining measurements, providing comparable calculational tools, and conducting the predictive comparisons.
- d. The information required significant effort and expense to obtain the approvals necessary for application of the information. Avoidance of this expense would decrease a competitor's cost in applying the information and marketing the product to which the information is applicable.
- e. The information consists of results of critical experiments and comparisons of predictions to the measured values, the application of which provides a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with Scandpower, take marketing or other actions to improve their product's position or impair the position of Scandpower's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.
- f. In pricing Scandpower's products and services, significant research, development, engineering, analytical, manufacturing, licensing, quality assurance and other costs and expenses must be included. The ability of Scandpower's competitors to utilize such information without similar expenditure of resources may

enable them to sell at prices reflecting significantly lower costs.

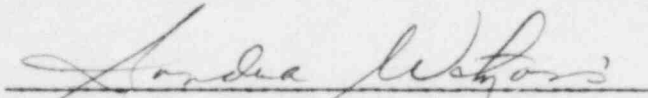
- g. Use of the information by competitors in the international marketplace would increase their ability to market their codes by reducing the costs associated with their technology development. In addition, disclosure would have an adverse economic impact on Scandpower's potential for obtaining or maintaining foreign licensees.

Further the deponent sayeth not.



Robert D. Smith  
Executive Vice President

Sworn to before me *in Montgomery County, Md.*  
this *18th* day of *February* 1988.



Notary Public

*Com. exp 7/1/86*

## CRITERIA FOR PROPRIETARY INFORMATION

Code numbers 1-6 have been used in the right hand margin of the text in deleting proprietary information. The following list explains the criteria associated with these code numbers.

<u>Code No.</u>	<u>Criteria</u>
1	Information reveals confidential cost or price information, commercial strategies, production production capabilities, or budget levels of Scandpower, its customers or suppliers.
2	The information reveals <u>data or material concerning Scandpower or customer funded research or development plans or programs of substantial present or potential competitive advantage to Scandpower.</u>
3	The use of the information by a competitor would substantially decrease his expenditures, in <u>time or resources</u> , in designing, producing or marketing a similar product.
4	The information <u>consists of test data or other similar data concerning a process, method or component</u> , the application of which results in a substantial competitive advantage to Scandpower.
5	The information reveals <u>special aspects of a process, method, component or the like, the exclusive use of which results in a substantial competitive advantage to Scandpower.</u>
6.	The information <u>contains ideas for which patent protection is likely to be sought.</u>



ENCLOSURE 7

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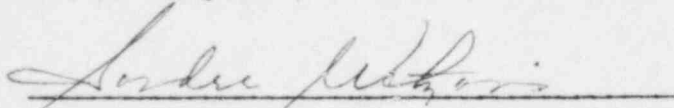
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