ASEA BROWN BOVERI

25 January, 2000
LD-2000-0007

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: CENPD-397-P, REV. 01 SUPPLEMENTAL INFORMATION TRANSMITTAL {ENCLOSURE 1-P CONTAINS PROPRIETARY INFORMATION}

References:

1) CENPD-397-P, Rev. 01, "Improved Flow Measurement Accuracy Using CROSSFLOW Ultrasonic Flow Measurement Technology", January 2000
2) Letter, I. C. Rickard (ABB CENP) to U.S. NRC Document Control Desk, "Submittal of CENPD-397-P, Rev. 01 – "Improved Flow Measurement Accuracy Using Crossflow Ultrasonic Flow Measurement Technology", LD-2000-0002, JANUARY 6, 2000

The purpose of this letter is to provide supplemental information supporting the Nuclear Regulatory Commission (NRC) review of the ABB C-E Nuclear Power, Inc. (ABB CENP) Topical Report CENPD-397-P, Rev. 01, "Improved Flow Measurement Accuracy Using CROSSFLOW Ultrasonic Flow Measurement Technology", Reference 1. CENPD-397-P, Rev. 01 was submitted on January 6, 2000 (Reference 2). Following discussions with Mr. Iqbal Ahmed of the NRC staff regarding his review of CENPD-397-P, Rev. 01 it has been agreed that supplemental modifications will be made to the Topical Report. Generally, the supplemental information addresses two (2) items; 1) the de-proprietarization of selected parameter values and 2) clarification of material presented in Section 4.1, "CROSSFLOW Calibration", Section 4.2, "Profile Validation at Higher Reynolds Numbers" and Table 5-1, "Typical CROSSFLOW Uncertainty" of the Topical Report. The supplemental information is provided in Enclosure 1-P.

ABB CENP has determined that information contained in Enclosure 1-P is PROPRIETARY in nature. As such, ABB CENP requests that the information be safeguarded and withheld from public disclosure pursuant to 10 CFR 2.790. The reasons for this determination are documented in the PROPRIETARY AFFIDAVIT provided in Enclosure 2. Enclosure 3 provides a non-proprietary version of Enclosure 1-P for your use.

ABB Combustion Engineering Nuclear Power, Inc.

P.O. Box 500
2000 Day Hill Rd.
Windsor, CT 06095-0500

Telephone (860) 285-9678
Fax (860) 285-3253

T007 Ltr. Encl. 1 1 w/o prop.
Change: NRC PDR

If you have any questions concerning this matter, please do not hesitate to call me or Chuck Molnar of my staff at (860) 285-5205.

Very truly yours,
ABB C-E NUCLEAR POWER, INC.

Ian C. Rickard, Director
Nuclear Licensing

Enclosures: As stated

xc: (w/o Enclosures)
I. Ahmed (NRC)
R. A. Browning (DAEC)
Q. B. Chou (AMAG)
S. Dembek (NRC)
J. E. Donoghue
A. Lopez (AMAG)
E. C. Marinos (NRC)
N. N. Sikka (DAEC)

ABB C-E NUCLEAR POWER, INC.

PROPRIETARY AFFIDAVIT

FOR

ENCLOSURE 1-P TO LD-2000-0007

AFFIDAVIT PURSUANT

To 10 CFR 2.790

I, Ian C. Rickard, depose and say that I am the Director, Nuclear Licensing, of ABB C-E Nuclear Power, Inc. (ABB CENP), 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:

> Enclosure 1-P to LD-2000-0007 – "CENPD-397-P, Rev. 01 Supplemental Information Transmittal", January 25, 2000

This document has been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by of ABB CENP 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 ABB CENP. It consists of CROSSFLOW UFM System theoretical development, design, testing, validation and installation information.
2. The information consists of test data or other similar data concerning a process, method or component, the application of which results in substantial competitive advantage to ABB CENP.
3. The information is of a type customarily held in confidence by ABB CENP and not customarily disclosed to the public. ABB CENP 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 details of the aforementioned system were provided to the Nuclear Regulatory Commission via letter DP-537 from F. M. Stern to Frank Schroeder dated December 2, 1974. This system was applied in determining that the subject document herein is 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 that 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 ABB CENP because:

    a. A similar product is manufactured and sold by major pressurized and/or boiling water reactor competitors of ABB CENP.
    b. Development of this information by ABB CENP required hundreds of thousands of dollars and hundreds of man-hours of effort. 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 to develop a CROSSFLOW UFM System theoretical development, design, testing, validation and installation information.
    d. The information consists of CROSSFLOW UFM System theoretical development, design, testing, validation and installation information, 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 ABB CENP, take marketing or other actions to improve their product's position or impair the position of ABB CENP's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.
    e. In pricing ABB CENP's products and services, significant research, development, engineering, analytical, manufacturing, licensing, quality assurance and other costs and expenses must be included. The ability of ABB CENP's competitors to utilize such information without similar expenditure of resources may enable them to sell at prices reflecting significantly lower costs.
    f. Use of the information by competitors in the international marketplace would increase their ability to market nuclear steam supply systems, nuclear fuel, analyses or other support services by reducing the costs associated with their technology development. In addition, disclosure would have an adverse economic impact on ABB CENP's potential for obtaining or maintaining foreign licensees.

Further the deponent sayeth not.

Ian C. Rickard
Director, Nuclear Licensing

Sworn to before me
this 25th day of January, 2000

Catherine P. McCarthy
Notary Public
My commission expires: 1/31/03

Enclosure 3 to LD-2000-0007

ABB C-E NUCLEAR POWER, INC.

CENPD-397-P, Rev. 01
NON-PROPRIETARY SUPPLEMENTAL INFORMATION TRANSMITTAL

CENPD-397-P, Rev. 01

NON-PROPRIETARY SUPPLEMENTAL INFORMATION TRANSMITTAL

Pursuant to discussions with Mr. Iqbal Ahmed of the Nuclear Regulatory Commission (NRC) staff regarding his review of the ABB C-E Nuclear Power, Inc. (ABB CENP) Topical Report CENPD-397-P, Rev. 01, "Improved Flow Measurement Accuracy Using CROSSFLOW Ultrasonic Flow Measurement Technology", it has been agreed that supplemental modifications will be made to the Topical Report. In general, the supplemental information is in regard to; 1) the de-proprietarization of selected parameter values and 2) clarification of material presented in Section 4.1, "CROSSFLOW Calibration", Section 4.2, "Profile Validation at Higher Reynolds Numbers" and Table 5-1, "Typical CROSSFLOW Uncertainty".

The revised material, which is presented below, will be integrated into the Topical Report at the time the accepted version (i.e., "-A") is produced following NRC issuance of their Safety Evaluation Report (SER). It is our understanding that use of the information provided herewith will allow the NRC review to be completed without revision of the Topical Report prior to issuance of the SER.

ITEM 1: DE-PROPRIETARIZATION OF SELECTED PARAMETER VALUES

Section 1.4 **CROSSFLOW INSTALLATION AND OPERATING FEATURES**

This section will be revised to de-proprietarize the quoted CROSSFLOW UFM System accuracy (i.e., 0.5%), thereby allowing it to be included in the non-proprietary version of the Topical Report.

Section 1.5 **CROSSFLOW UFM SYSTEM ACCURACY**

This section will be revised to de-proprietarize the quoted CROSSFLOW UFM System accuracy (i.e., 0.5%), thereby allowing it to be included in the non-proprietary version of the Topical Report.

4.1 CROSSFLOW CALIBRATION

This section will be revised to de-proprietarize the quoted VPCF accuracy (i.e., 0.25%), thereby allowing it to be included in the non-proprietary version of the Topical Report.

ITEM 2: CLARIFICATION OF MATERIAL PRESENTED IN SECTIONS 4.1, 4.2 AND TABLE 5.1

Section 4.1 CROSSFLOW Calibration

This section will be replaced and superseded in it entirety by the following write-up to provide a clearer explanation of how calibration of the Velocity Profile Correction Factor (VPCF) was performed.

4.1 CROSSFLOW CALIBRATION

[

]

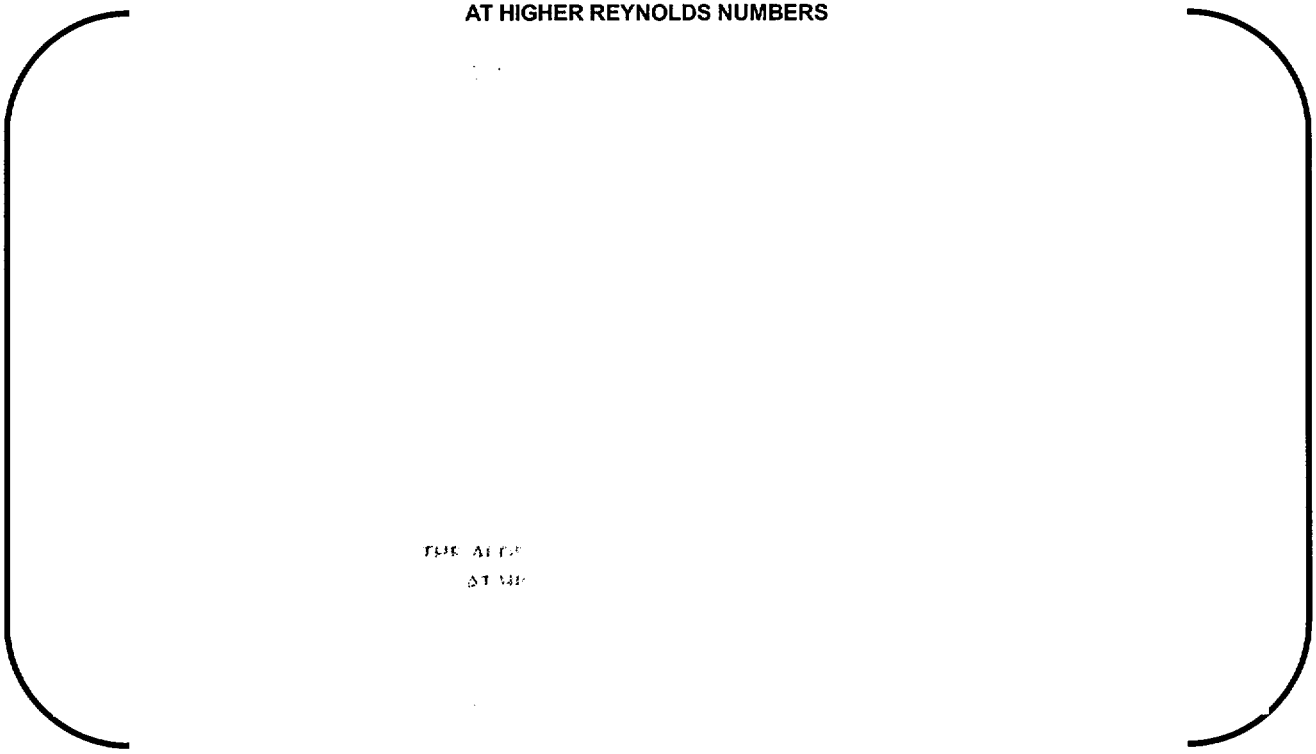
[

]

The accuracy of the VPCF is ±0.25%. [

]

FIGURE 4-3
VERIFICATION OF THE ALDEN RESEARCH LABORATORY CALIBRATION CURVE AT HIGHER REYNOLDS NUMBERS



SECTION 4.2 **PROFILE VALIDATION AT HIGHER REYNOLDS NUMBERS**

The words "plant data" in the second paragraph of this section will be modified to read "plant data 3".

TABLE 5-1 **TYPICAL CROSSFLOW UNCERTAINTY**

The following revised Table 5-1 will replace the current Table 5-1 in the Topical Report. The modification simply reflects that all values are reported in percent (%).

TABLE 5-1

TYPICAL CROSSFLOW UNCERTAINTY

PARAMETER	95% CONFIDENCE INTERVAL
Velocity Profile Correction Factor	±0.25%
[redacted]	