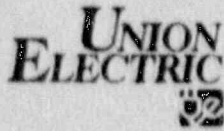


1901 Gratiot Street
Post Office Box 149
St. Louis, Missouri 63186
314-554-2650



April 12, 1990

Donald F. Schnell
Senior Vice President
Nuclear

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

Gentlemen:

ULNRC-2196

DOCKET NUMBER 50-483

CALLAWAY PLANT

REACTOR COOLANT SYSTEM RTD BYPASS ELIMINATION

- References:
1. ULNRC-1862 dated 11-18-88,
WCAP-11883, Steam Generator
Low-Low Level EAM/TTD
Modification
 2. ULNRC-1227 dated 12-13-85,
Cycle 2 OFA Setpoint Studies
 3. NRC Letter to Westinghouse,
T. W. Alexion to R. A. Wiesemann,
dated 1-18-89

Union Electric Company herewith
transmits one original and one conformed copy of
an application for amendment to Facility Operating
License No. NPF-30 for the Callaway Plant.

This amendment application includes
revisions to Technical Specification Tables 2.2-1,
3.3-4, and 4.3-1 and associated Bases to
accommodate the proposed replacement of the
current RTD bypass system with an RTD/thermowell
system mounted directly into the hot and cold legs
of the reactor coolant system. Tables 2.2-1 and
3.3-4 are revised to reflect minor changes to the
Z, S, and Allowable Value setpoint terms for the
Overpower Delta-T (OPDT) and Steam Generator Water
Level Low-Low Trip Time Delay (Vessel Delta-T,
Power 1 and Power 2) trip functions. These
changes reflect a conservative value for the hot
leg streaming temperature measurement bias
associated with the proposed modification as well
as an updated Delta-T gain, a conversion factor
between degrees F and % Delta-T span corresponding
to recent plant data. Changes to the notes for
Tables 2.2-1 and 4.3-1 as well as Bases page B2-5
are editorial in nature.

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PDR ADOCK 05000483
P PDC

APR 11 1990
Change
FOR: Don Prop Andy

Attachment 1 is a Licensing Report describing this modification in detail. This report contains information proprietary to Combustion Engineering (CE) in Section 3.1 (page 3), Section 3.4 (page 4), Section 4.1 (pages 6 and 7), Section 5.3 (page 16), and Figure 4-1 (page 11). As such, in accordance with the provisions of 10CFR2.790 and as required by our contract with CE, it is respectfully requested that the information indicated as being proprietary be withheld from public disclosure on the grounds that it contains trade secrets and confidential commercial information. The enclosed affidavit, executed by a duly authorized upper level management official of CE, the owner of the information, was submitted by Public Service Electric and Gas Company for the RTD bypass elimination at Salem Units 1 and 2. It sets forth a rational basis by which this information should be withheld from public disclosure by the Commission and addresses, with specificity, the provisions of paragraph (b)(4) of 10CFR2.790. This affidavit and accompanying cover letter state that the information indicated as being proprietary is held in confidence by the owner, CE, and is transmitted to NRC in confidence. This information is not publicly available and its public disclosure would cause harm to the competitive position of CE due to the significant effort and expense required to develop this information. The accompanying cover letter, MPS-90-311 dated 4-9-90, establishes the link between the affidavit for the Salem licensing submittal and this Callaway licensing submittal due to the similarity of the information held in confidence. In accordance with the regulations, proprietary and non-proprietary versions of this report are attached.

The Callaway Plant On-Site Review Committee and the Nuclear Safety Review Board have reviewed and approved this amendment application. Attachments 2 through 5 provide the Safety Evaluation, Significant Hazards Evaluation, Technical Specification changes, and draft FSAR revisions, respectively. It has been determined that this amendment application does not involve any unreviewed safety questions, as defined in 10CFR50.59, nor a significant hazard consideration as determined per 10CFR50.92.

Attachment 6 provides the setpoint calculations in support of this modification. This attachment contains proprietary Westinghouse calculational methodology on pages 4-7 and 10-17. The affidavits attached to References 1 and 2 requested the withholding of the Westinghouse setpoint methodology based on the following:

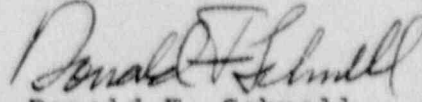
- (i) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
- (ii) Its use by a 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.

These affidavits, executed by a duly authorized upper level management official of Westinghouse, the owner of the information, establish a rational basis, with specificity, by which the information indicated as being proprietary should be withheld from public disclosure in order to protect trade secrets and Westinghouse's competitive position. This information is held in confidence by Westinghouse, was submitted to NRC in confidence in References 1 and 2, and is not publicly available. This setpoint methodology is being used in this submittal in a similar manner as it was used in References 1 and 2. Reference 3 substantiated the Westinghouse request for withholding. Again, proprietary and non-proprietary versions of this attachment are provided.

Attachment 7 provides a list of acronyms (general terms, 7300 cards, and setpoint terms) used throughout this amendment application.

It is requested that NRC approve this amendment request by September 15, 1990 to support the Refuel 4 outage schedule.

Very truly yours,


Donald F. Schnell

GGY/kea

- Attachments:
1. Licensing Report (proprietary and non-proprietary versions)
 2. Safety Evaluation
 3. Significant Hazards Evaluation
 4. Technical Specification Changes
 5. Draft FSAR Revisions
 6. Setpoint Calculations (proprietary and non-proprietary versions)
 7. List of Acronyms

STATE OF MISSOURI)
) S S
CITY OF ST. LOUIS

Donald F. Schnell, of lawful age, being first duly sworn upon oath says that he is Senior Vice President-Nuclear and an officer of Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Donald F. Schnell
Donald F. Schnell
Senior Vice President
Nuclear

SUBSCRIBED and sworn to before me this 12th day
of April, 1990.

Barbara J. Pfaff
BARBARA J. PFAFF
NOTARY PUBLIC, STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 22, 1993
ST. LOUIS COUNTY

cc: Gerald Charnoff, Esq.
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Jefferson City, MO 65102

ATTACHMENT 1

LICENSING REPORT
FOR
RTD BYPASS ELIMINATION



April 9, 1990
MPS-90-311

Mr. David Ostrander
Union Electric Company
1901 Chouteau Avenue
P. O. Box 149
St. Louis, MO 63166

Subject: **RTD Bypass Elimination Licensing**

Enclosure: Copy of Affidavit concerning proprietary information
for Salem 1 and 2 RTD Bypass Elimination.

Reference: (A) PSE&G Licensing Report S-87-05, "Licensing
Report for New Narrow Range Temperature
Measurement System (RTD Bypass Elimination)
Public Service Electric and Gas Salem 1 and 2,
April 1987.

Dear MR. Ostrander:

CE has identified information which we consider proprietary in Union
Electric's Licensing Report (Attachment 1 to your amendment
application). This information is the same as was previously
identified to the NRC as proprietary in PSE&G's Licensing Report for
Salem, Reference (A). The docket numbers for the Salem submittals
are 50-272/50-311.

Enclosed is a copy of the affidavit which was provided to PSE&G in
April 1987 for submittal to the NRC supporting CE's proprietary
declaration.

If there are any questions on this subject, please call me at (203)
285-2030.

Very truly yours,

John T. McGarry
Project Manager

JTM/prr
JTM112

ABB Combustion Engineering Nuclear Power

AFFIDAVIT PURSUANT

TO 10 CFR 2.790

Combustion Engineering, Inc.)
State of Connecticut)
County of Hartford) SS.:

I, A.E. Scherer, depose and say that I am the Director, Nuclear Licensing, of Combustion Engineering, 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 and in conjunction with Public Service Electric and Gas Company for withholding this information.

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

Licensing Report S-87-05, Licensing Report for New Narrow Range Temperature Measurement System (RTD Bypass Elimination) Public Service Electric & Gas Salem 1&2, April 1987

This document has been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Combustion Engineering 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 are descriptions of the design, configuration, and performance for a new narrow range temperature measurement system, which is owned and has been held in confidence by Combustion Engineering.
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 Combustion Engineering.
3. The information is of a type customarily held in confidence by Combustion Engineering and not customarily disclosed to the public. Combustion Engineering 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 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 Combustion Engineering because:

a. A similar product is manufactured and sold by major pressurized water reactor competitors of Combustion Engineering.

b. Development of this information by C-E required hundreds of manhours and tens 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 the development of a design and performance evaluation for a new narrow range temperature measurement system.

d. The information required significant effort and expense to obtain the licensing 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 a description of the design, configuration, and performance for a new narrow range temperature measurement system, 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 Combustion Engineering, take marketing or other actions to improve their product's position or impair the position of Combustion Engineering's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.

f. In pricing Combustion Engineering's products and services, significant research, development, engineering, analytical, manufacturing, licensing, quality assurance and other costs and expenses must be included. The ability of Combustion Engineering's competitors to utilize such

information without similar expenditure of resources may enable them to sell at prices reflecting significantly lower costs.

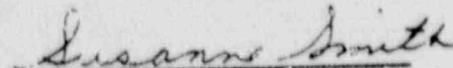
g. Use of the information by competitors in the international marketplace would increase their ability to market nuclear steam supply systems by reducing the costs associated with their technology development. In addition, disclosure would have an adverse economic impact on Combustion Engineering's potential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

Further the deponent sayeth not.



A.E. Scherer
Director
Nuclear Licensing

Sworn to before me
this 22nd day of *April*, 1987.


Notary Public

SUSANNE SMITH, NOTARY PUBLIC
State of Connecticut No. 74148
Commission Expires March 31, 1990