



Entergy Operations, Inc.
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Michael A. Krupa
Director
Nuclear Safety & Licensing

July 6, 2001

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

Subject: Entergy Operations, Inc.
Power Uprate Meeting – Caldon Presentation

Waterford Steam Electric Station – Unit 3
Docket No. 50-382
License No. NPF-38

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

River Bend Station
Docket No. 50-458
License No. NPF-47

CNRO-2001-00028

On June 26, 2001, representatives of Entergy and Caldon, Inc. met with the NRC Staff to discuss Entergy plans for requesting power uprates based on the revised 10CFR50 Appendix K. Portions of the Caldon presentation were identified as proprietary and it was requested they be withheld from public disclosure. Enclosed are copies of the Caldon slides presented during the meeting with an affidavit supporting the request to treat the slides as proprietary.

One copy of both the proprietary and non-proprietary versions of the presentation slides are attached. The proprietary version includes an identifying note on the cover page as well as a note on the appropriate pages. An affidavit signed by an officer of Caldon, Inc. is attached in support of a request that the proprietary version be withheld from public disclosure. This request is made pursuant to 10CFR2.790. The address of Caldon is provided in the cover memorandum included in Attachment 3.

AP01

This letter contains no commitments. Should you have any questions regarding this submittal, please contact Jerry Burford at (601) 368-5755.

Very truly yours,



MAK/FGB/baa

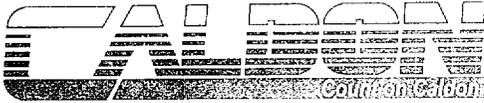
attachment: 1. Caldon 6/26/01 Meeting Presentation Slides (Proprietary)
2. Caldon 6/26/01 Meeting Presentation Slides (Non-Proprietary)
3. Affidavit Concerning Proprietary Information

cc: (All cc's w/o attachments)
Mr. W. A. Eaton (G-ESC3-VPO)
Mr. R. K. Edington (R-GSB-40)
Mr. J. T. Herron (W-GSB-300)
Mr. P. D. Hinnenkamp (M-ECH-579)

Mr. T. R. Farnholtz, NRC Senior Resident Inspector (W-3)
Mr. T. L. Hoeg, NRC Senior Resident Inspector (GGNS)
Mr. N. Kalyanam, NRR Project Manager (W-3)
Mr. E. W. Merschoff, NRC Region IV Regional Administrator
Mr. W. E. Moody, NRR Project Manager (RBS)
Mr. T. W. Pruett, NRC Senior Resident Inspector (RBS)
Mr. S. P. Sekerak, NRR Project Manager (GGNS)

ATTACHMENT 3
to letter CNRO-2001-00028

**Affidavit for Request to Withhold Caldon 6/26/01 Meeting
Presentation Slides from Public Disclosure**



Caldon, Inc.

June 28, 2001
CAW 01-06

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

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Caldon, Inc. Presentation to the NRC during Entergy Operations Meeting
on June 26, 2001

Gentlemen:

This application for withholding is submitted by Caldon, Inc. ("Caldon") pursuant to the provisions of paragraph (b)(1) of Section 2.790 of the Commission's regulations. It contains commercial strategic information proprietary to Caldon and customarily held in confidence.

The proprietary information for which withholding is being requested is identified in the subject submittal. In conformance with 10 CFR Section 2.790, Affidavit CAW-01-06 accompanies this application for withholding setting forth the basis on which the identified proprietary information may be withheld from public disclosure.

Accordingly, it is respectfully requested that the subject information, which is proprietary to Caldon, be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations.

Correspondence with respect to this application for withholding or the accompanying affidavit should reference CAW-01-06 and should be addressed to the undersigned.

Very truly yours,

Ernest M. Hauser
President, Nuclear Division

Enclosures

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Ernest M. Hauser, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Caldon, Inc. ("Caldon") and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

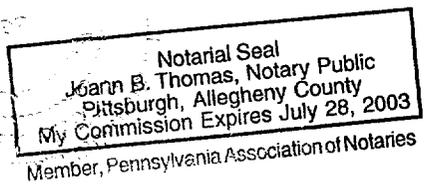


Ernest M. Hauser,
President, Nuclear Division
Caldon, Inc.

Sworn to and subscribed before me

this 28th day of

June, 2001



1. I am the President, Nuclear Division of Caldon, Inc. 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 Caldon.
2. I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Caldon application for withholding accompanying this Affidavit.
3. I have personal knowledge of the criteria and procedures utilized by Caldon in designating information as a trade secret, privileged or as confidential commercial or financial information.
4. 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 should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Caldon.
 - (ii) The information is of a type customarily held in confidence by Caldon and not customarily disclosed to the public. Caldon 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 Caldon 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 advantage, as follows:

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

competitors without license from Caldon constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, and assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Caldon, its customer or suppliers.
- (e) It reveals aspects of past, present or future Caldon or customer funded development plans and programs of potential customer value to Caldon.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Caldon system, which include the following:

- (a) The use of such information by Caldon gives Caldon a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Caldon competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Caldon ability to sell products or services involving the use of the information.
- (c) Use by our competitor would put Caldon at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Caldon of a competitive advantage.
- (e) Unrestricted disclosure would jeopardize the position of prominence of Caldon in the world market, and thereby give a market advantage to the competition of those countries.
- (f) The Caldon 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 2.790, 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 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 appropriately marked in the enclosure, Caldon, Inc. Presentation to the NRC during Entergy Operations Meeting on June 26, 2001. This information is submitted for use by the NRC Staff and is expected to be applicable in other license submittals for justification of the use of Ultrasonic Flow Measurement Instrumentation to increase reactor plants' thermal power.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Caldon because it would enhance the ability of competitors to provide similar flow and temperature measurement systems and licensing defense services 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 licensing documentation without the right to use the information.

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

In order for competitors of Caldon to duplicate this information, similar products would have to be developed, similar technical programs would have to be performed, and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing analytical methods and receiving NRC approval for those methods.

Further the deponent sayeth not.

ATTACHMENT 2
to letter CNRO-2001-00028

Caldon 6/26/01 Meeting Presentation Slides (Non-Proprietary)

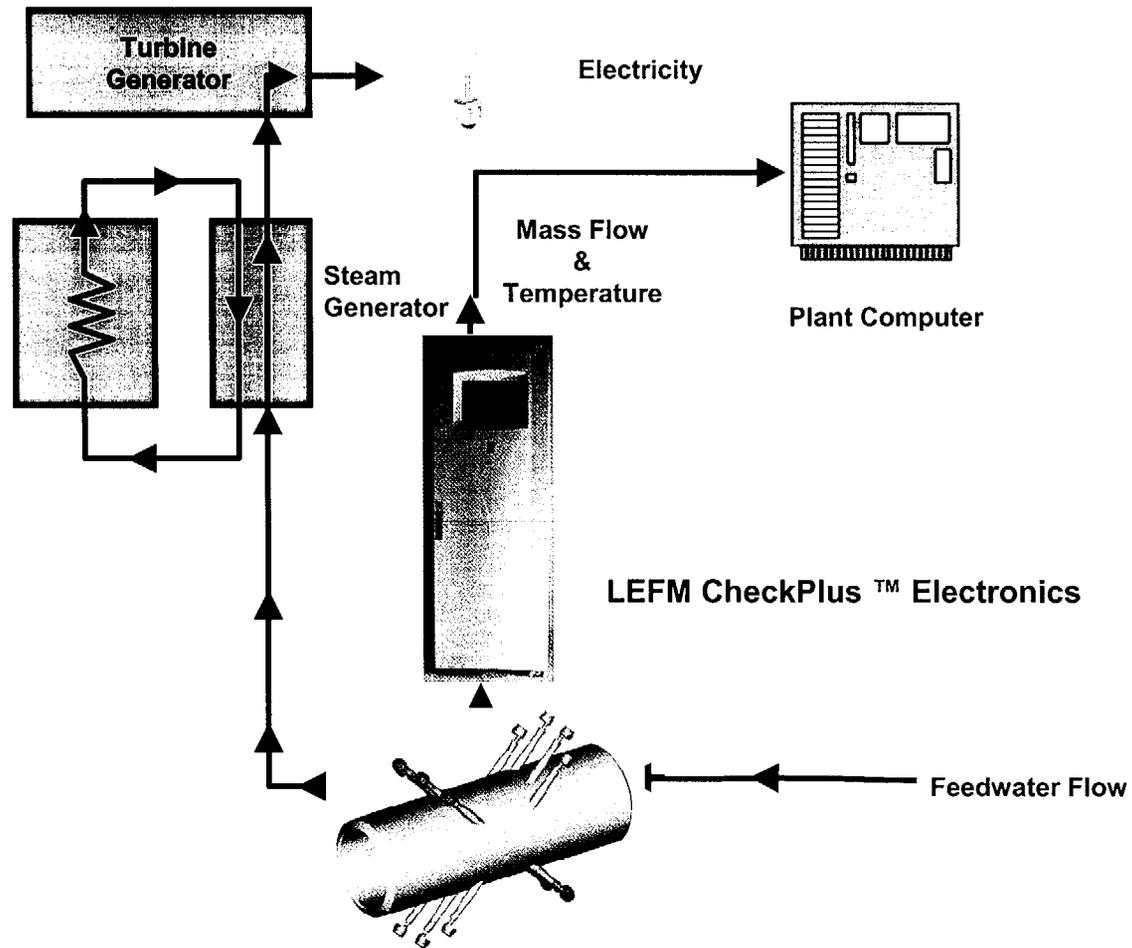
Entergy Operations, Inc.



June 26, 2001

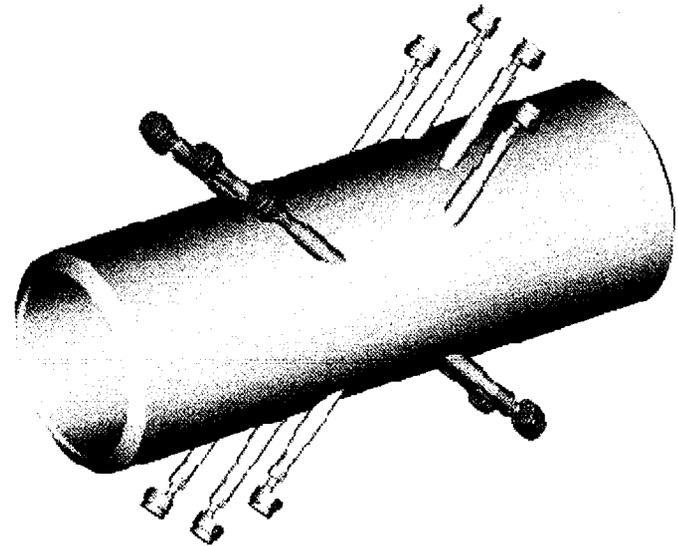
Non-Proprietary Version

LEFM CheckPlus for Entergy Plants



LEFM CheckPlus Metering Section

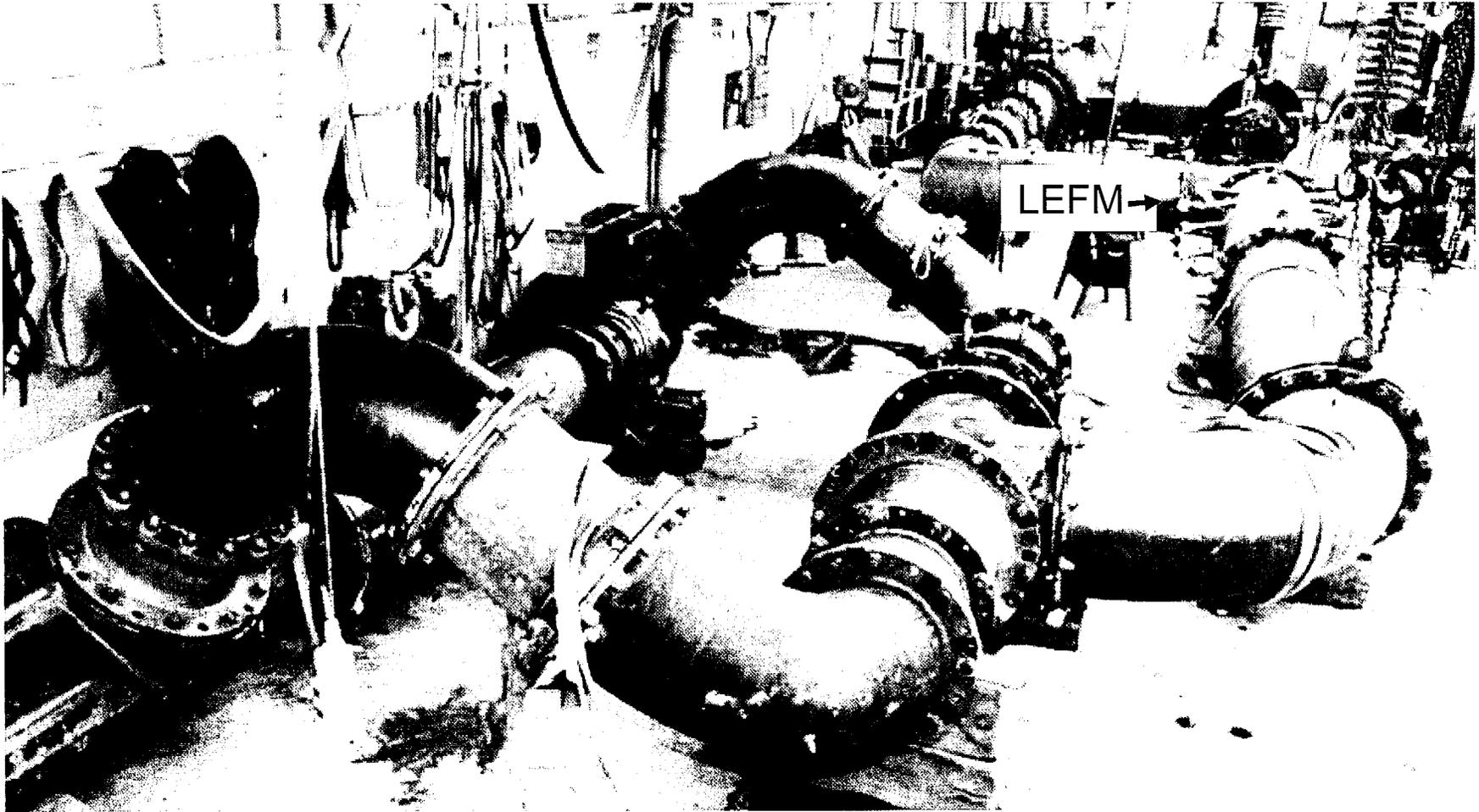
- Spool piece configuration has 8 acoustic paths; identical to Beaver Valley Unit 2:
 - Spool piece calibrated in site specific pipe model
 - Automatically cancels cross flow and swirl effects
 - Two planes of measurement permit redundancy
 - Taking advantage of improved hydraulic lab facility uncertainty



8 Path Meter Handles Challenging Pipe Geometry

- Examples:
 - Beaver Valley
 - Grand Gulf
 - Waterford

8 Path Meter at Alden - Beaver Valley Model



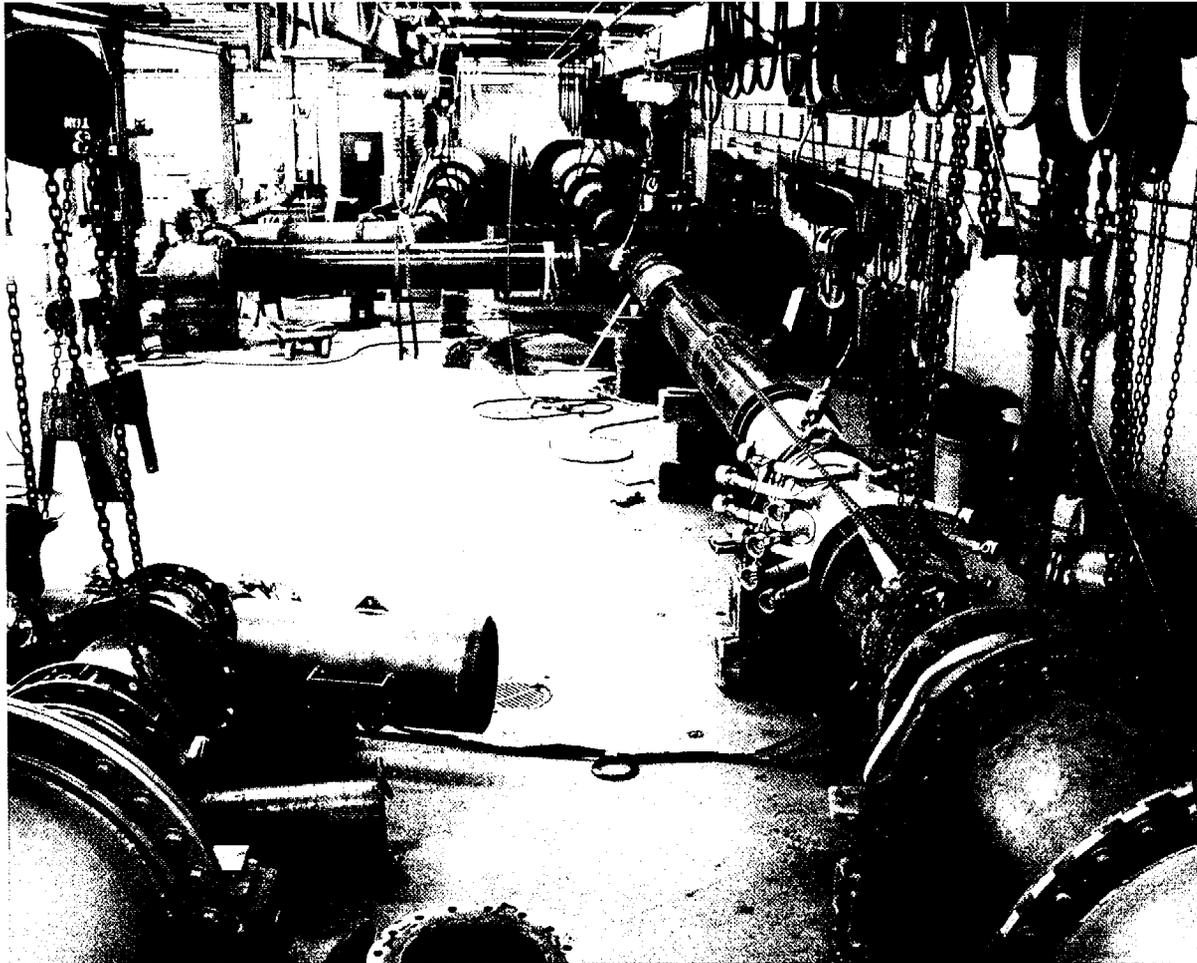
Grand Gulf Configuration Modeled

- 2 LEFM CheckPlus spool pieces
- Each is installed directly downstream of venturi
- Alden models incorporated Grand Gulf - specific venturi

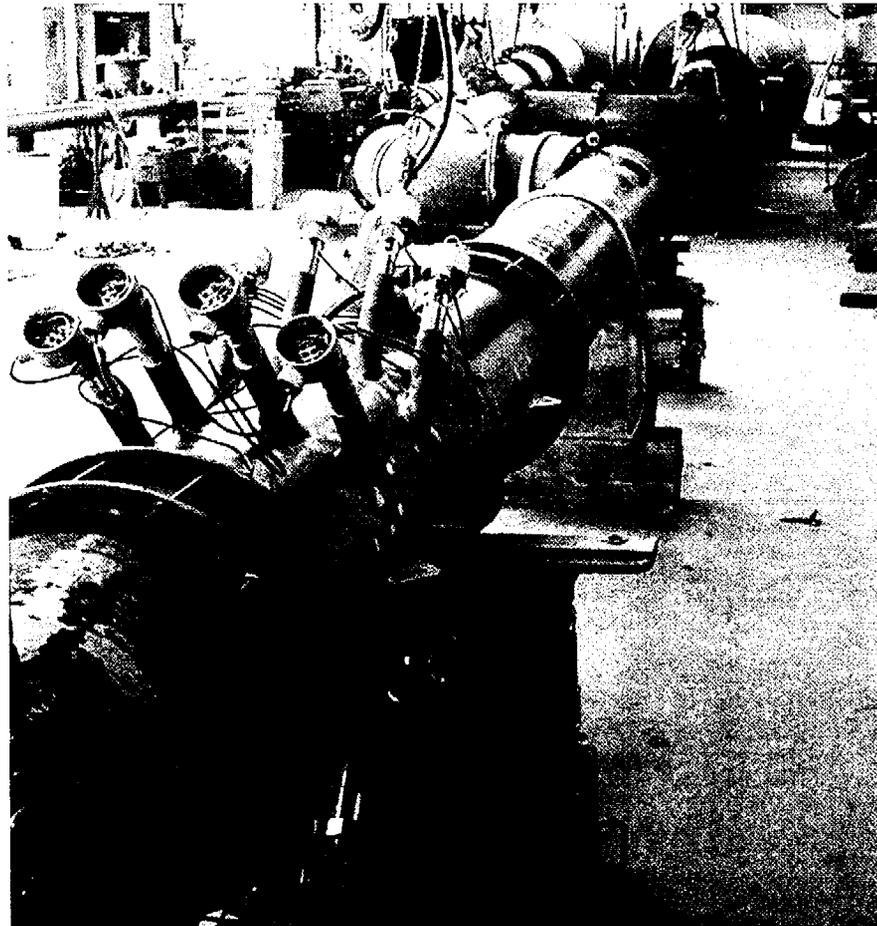
Waterford Configuration Modeled

- 2 LEFM CheckPlus spool pieces
- Loop A 14.4 dia. (24 ft.) downstream of single LR elbow
- Loop B 14.4 dia. (24 ft.) downstream of combination planar elbows

Waterford Loop A Model



Waterford Loop B Model



Caldon ER-157P Compared to ER-80P

- ER-157P uses exactly the same uncertainty analysis approach as ER-80P
- ER-80P analyzes the LEFM Check System, shows power accuracy bounded by +/- 0.6%, requests 1% uprate
- ER-157P responds to Appendix K Rulemaking:
 - Shows LEFM Check System within 0.5%, corresponds to 1.5% uprate
 - Shows LEFM CheckPlus System within between 0.4% and 0.3%, corresponds to 1.6% to 1.7% uprate
 - LEFM CheckPlus range due to differing steam moisture uncertainty assumptions