OVERPRESSURIZATION OF

TURKEY POINT UNIT 4

REACTOR-COOLANT SYSTEM

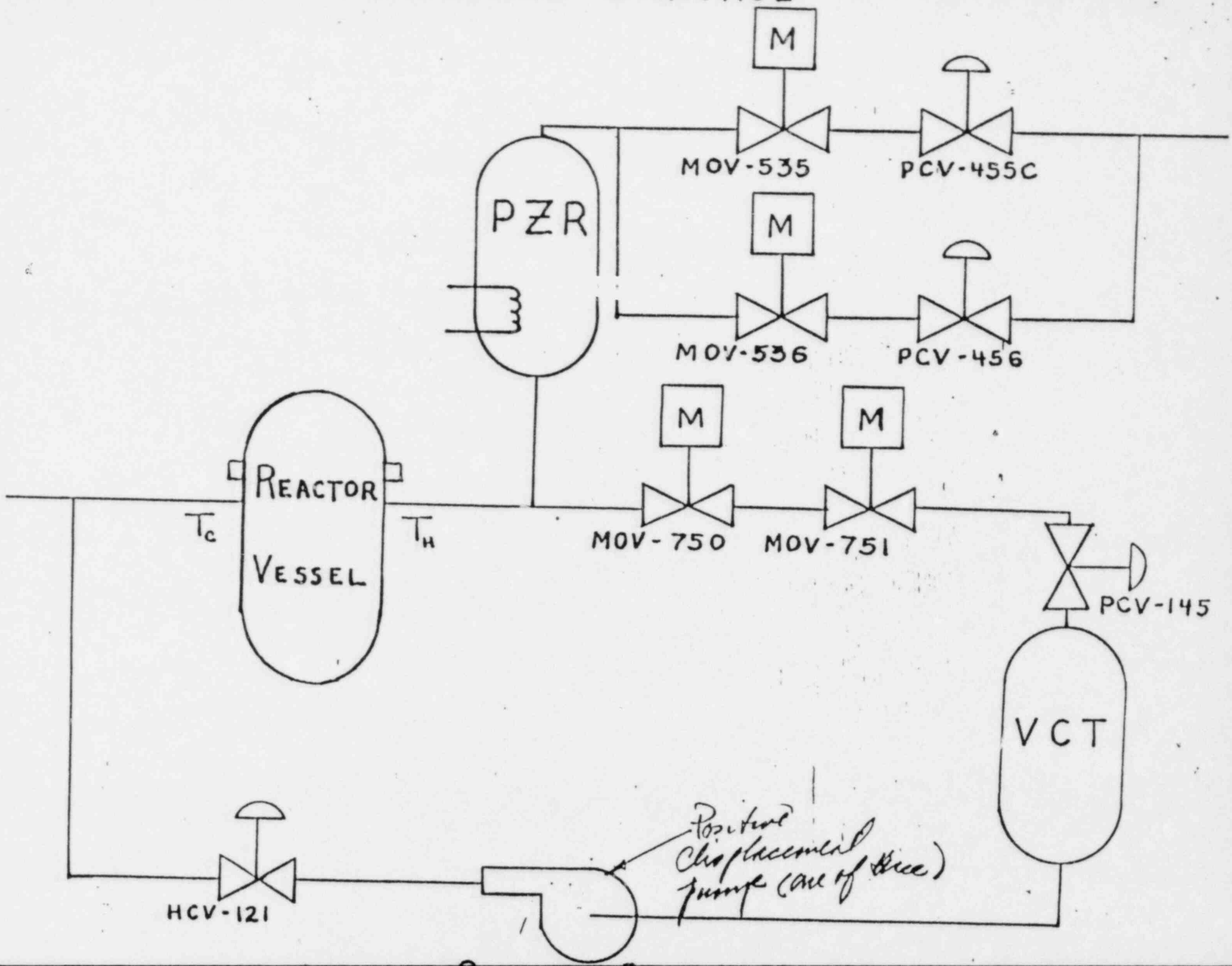
ON

NOVEMBER 28 and 29, 1981

Richard C. Lewis

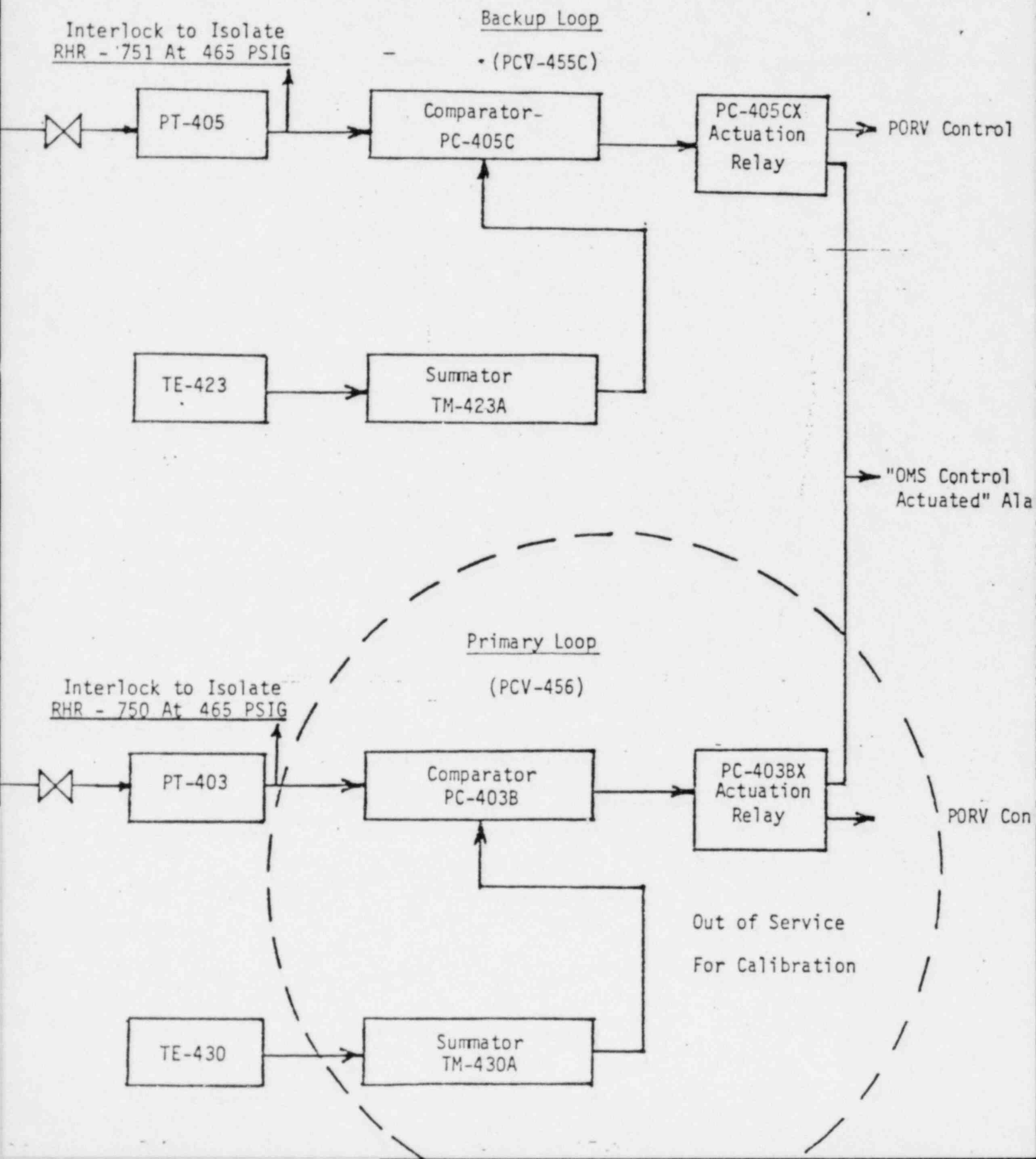
John Olshinski

SOLID PLANT PRESSURE CONTROL



OVERPRESSURE MITIGATING SYSTEM

UNITS 3 & 4



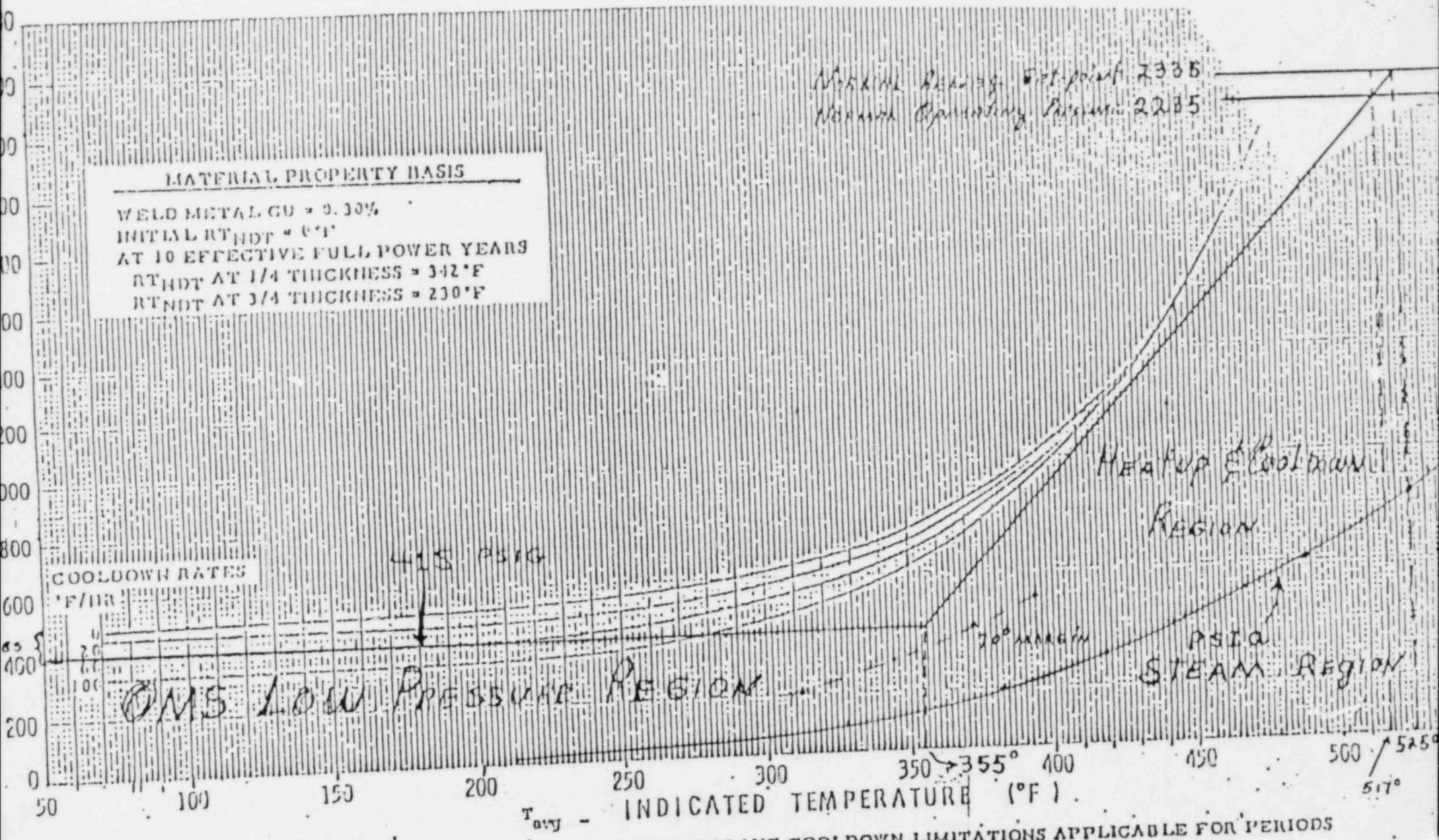


FIGURE 3.1-2d TURKEY POINT UNIT 4 REACTOR COOLANT COOLDOWN LIMITATIONS APPLICABLE FOR PERIODS FROM 5 TO 10 EFFECTIVE FULL POWER YEARS.

Amendment No. 56, Unit 3
Amendment No. 48, Unit 4

APPENDIX A

NOTICE OF VIOLATION

Florida Power & Light Company
Turkey Point 3 & 4

Docket Nos. 50-250 & 50-251
License Nos. DPR-31 & DPR-4

As a result of the inspection conducted on December 1 - 3, 1981 and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified.

A. Technical Specification 6.8.1 requires that written procedures be established and implemented that meet or exceed the requirements and recommendations of Section 5.1 and 5.3 of ANSI N18.7-1972. Section 5.3.6 of ANSI N18.7 requires measurements to keep safety parameters within operational and safety limits.

Contrary to the above, the Overpressure Mitigating System (OMS) functional test was inadequate in that the summator circuitry was not tested. This resulted in failure to discover the OMS was inoperable and contributed to the reactor coolant system overpressure events of November 28 and 29, 1981.

This is a Severity Level IV Violation (Supplement I.D.3).

B. Technical Specification 6.8.1 requires that written procedures be established that meet or exceed the requirements and recommendations of Section 5.1 and 5.3 of ANSI N18.7-1972. ANSI 18.7-1972 Section 5.3.4.1 requires instructions for starting up including the requirement that valves be properly aligned.

Contrary to the above, alignment of instrumentation root valves were not included in station procedures prior to reactor coolant system fill after refueling or plant startup.

This is a Severity Level V Violation (Supplement I.E.).

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation.

Date: FEB 0 2 1982

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken in the event of a REPORTABLE OCCURRENCE:

a. The REPORTABLE OCCURRENCE shall be reported to the Commission pursuant to the requirements of Section 6.9.

b. A Reportable Occurrence Report shall be prepared. The report shall be reviewed by the Plant Nuclear Safety Committee.

c. The Reportable Occurrence Report shall be submitted to the CNRB, the Vice President of Power Resources, and the Commission within the time allotted in Section 6.9.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The provisions of 10 CFR 50.36(c)(1)(i) shall be complied within immediately.

b. The Safety Limit violation shall be reported immediately to the Commission, the Vice President of Power Resources and to the CNRB.

c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PNSC. This report shall describe 1) applicable circumstances preceding the violation, 2) effects of the violation upon facility components, systems or structures, and 3) corrective action taken to prevent recurrence.

d. The Safety Limit Violation Report shall be submitted to the CNRB, the Vice President of Power Resources and the Commission within ten (10) days of the violation.

6.8 PROCEDURES

6.8.1 Written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Section 5.1 and 5.3 of ANSI N18.7-1972, Appendix "A" of USNRC Regulatory Guide 1.33, and the Facility Fire Protection Program except as provided in 6.8.2 and 6.8.3 below. This requirement shall be implemented within four (4) months from the effective date of this amendment.

6.8.2 Each procedure and administrative policy of 6.8.1 above, and changes thereto, shall be reviewed by the PNSC and approved by the Plant Manager - Nuclear prior to implementation and periodically as provided by procedure.

6.8.3. Temporary changes to procedures of 6.8.1 above may be made provided:

a. The intent of the original procedure is not altered.

b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operators License on the unit affected.

c. The change is documented, reviewed by the PNSC and approved by the Plant Manager - Nuclear within fourteen days of implementation

3.15 OVERPRESSURE MITIGATING SYSTEM

Applicability: Establishes operating limitations to assure that the limits of 10 CFR 50, Appendix G, are not exceeded.

Objectives: To minimize the possibility of an overpressure transient which could exceed the limits of 10 CFR 50, Appendix G.

Specification:

1. At RCS temperature less than or equal to 380°F, valves MOV-*-843 A, MOV-*-843 B, MOV-*-866 A, and MOV-*-866 B shall be closed.

2. If any of the valves in 3.15.1 are found to be open while RCS temperature is less than or equal to 380°F, perform at least one of the following within the next 8 hours: 1

   a. block the corresponding flow path to the reactor vessel,
   b. close the valve, or
   c. depressurize and vent the RCS through an opening with an area of at least 2.20 square inches, or
   d. verify at least one pressurizer power operated relief valve is maintained open.

3. At RCS temperature less than or equal to 275°F, two pressurizer power operated relief valves shall be operable at the low setpoint range.

   a. If one power operated relief valve is inoperable with RCS temperature less than or equal to 275°F, perform at least one of the following within 7 days:

      (1) restore operability of the power operated relief valve, or

      (2) depressurize and vent the RCS through an opening with an area of at least 2.20 square inches, or

      (3) verify at least one pressurizer power operated relief valve is maintained open.

   b. If both power operated relief valves are inoperable with RCS temperature less than or equal to 275°F, perform at least one of the following within the next 24 hours:

      (1) restore operability of at least one power operated relief valve, or

      (2) depressurize and vent the RCS through an opening with an area of at least 2.20 square inches, or

      (3) verify at least one pressurizer power operated relief valve is maintained open.

d. Presssurizer

The pressurizer shall be operable with a steam bubble, and with at least 125 KW of pressurizer heaters capable of being supplied by emergency power, when the reactor coolant is heated above 350F.

e. Relief Valves

1. A power operated relief valve (PORV) and its associated block valve shall be operable when the reactor coolant is heated above 350F.

2. If the average coolant temperature is greater than 350F and the conditions of 3.1.1.e.1 cannot be met because one or more PORV(s) is inoperable, within 1 hour either restore the PORV(s) to operable status or close the associated block valve(s) and remove power from the block valve(s), otherwise, be in a condition with Keff < 0.99 within the next 6 hours and in cold shutdown within the following 30 hours.

3. If the average coolant temperature is greater than 350F and the conditions of 3.1.1.e.1 cannot be met because one or more block valve(s) is inoperable, within 1 hour either restore the block valve(s) to operable status or close the block valve(s) and remove power from the block valve(s); otherwise, be in a condition with Keff < 0.99 within the next 6 hours and in cold shutdown within the following 30 hours.

2. PRESSURE-TEMPERATURE LIMITS

The Reactor Coolant System (except for the pressurizer) pressure and temperature shall be limited during heatup, cooldown, criticality (except for low power physics tests), and inservice leak and hydrostatic testing in accordance with the limit lines shown on Figures 3.1-1a through 3.1-1b. Allowable pressure-temperature combinations are BELOW AND TO THE RIGHT of the lines on the Figures. Heatup and cooldown rate limits are:

a. A maximum heatup rate of 100°F in any one hour.

b. A maximum cooldown rate of 100°F in any one hour.

c. A maximum temperature change of $\geq$ 5°F in any one hour during hydrostatic testing operation above system design pressure.

The pressurizer pressure and temperature shall be limited in accordance with the following:

d. The pressurizer shall be limited to a maximum heatup rate of 100 °F in any one hour, and a maximum cooldown rate of 200 °F in any one hour.

e. The pressurizer shall be limited to a maximum Reactor Coolant System spray water temperature differential of 320°F.

With any of the above limits exceeded, restore the temperature and/or pressure within the limits within 30 minutes, determine that the RCS or pressurizer remains acceptable for continued operations or, if at power, be in at least Hot Shutdown within the next 6 hours and Cold Shutdown within the following 30 hours.

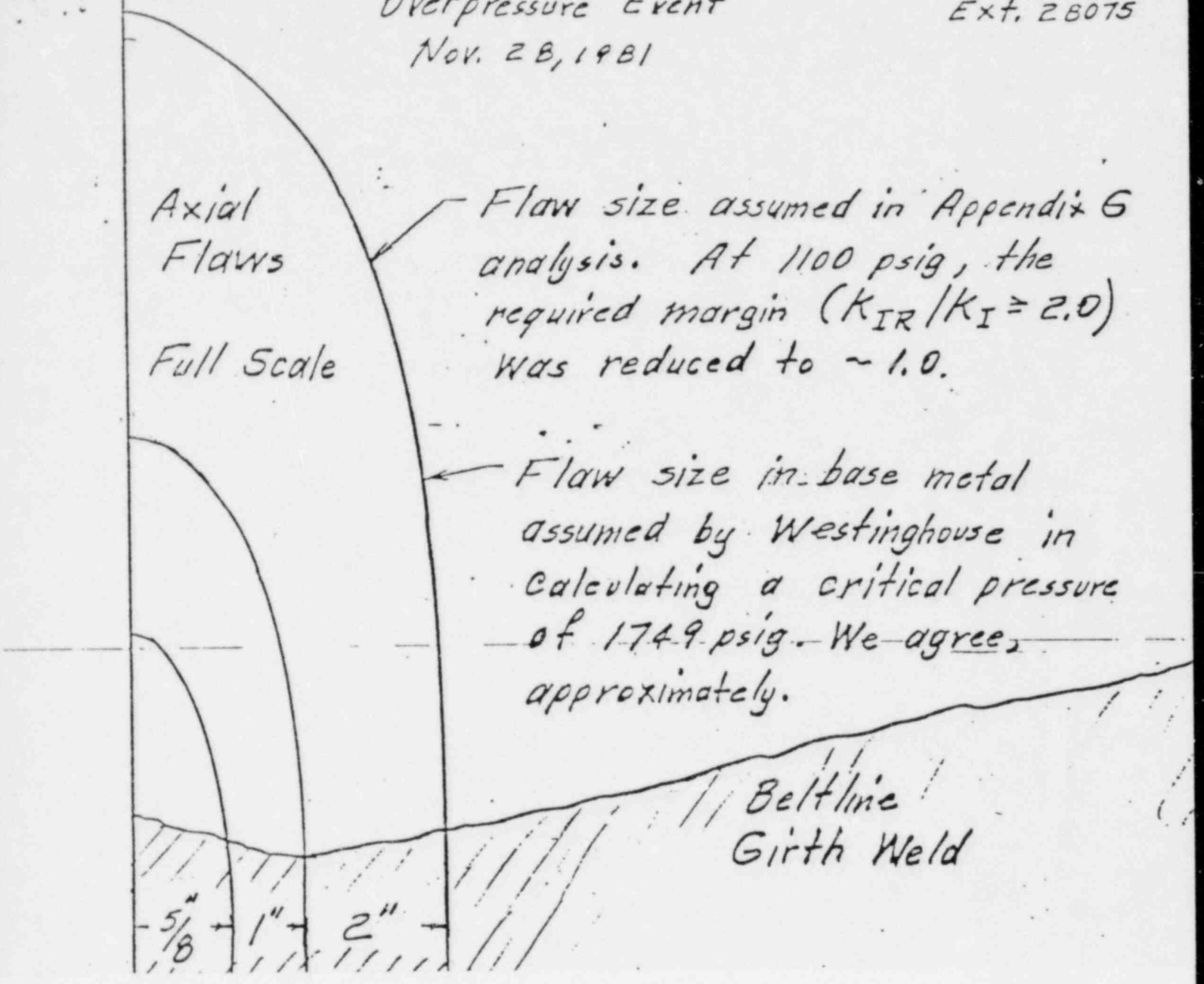
With reactor power less than 70 percent Rated Thermal Power, the moderator temperature coefficient* shall not be more positive than $+5 \times 10^{-5}$ $\Delta K/K/^{o}F$. When this condition is not met, the reactor shall be made subcritical by an amount equal to or greater than the potential reactivity insertion due to depressurization and cooldown.

With reactor power greater than or equal to 70 percent Rated Thermal Power, the moderator temperature coeffieicient shall not be more positive than 0 $\Delta K/K/^{o}F$. When this condition is not met, the reactor shall be made subcritical by an amount equal to or greater than the potential reactivity insertion due to depressurization and cooldown.

* These moderator temperature coefficient conditions do not apply to low power physics tests.

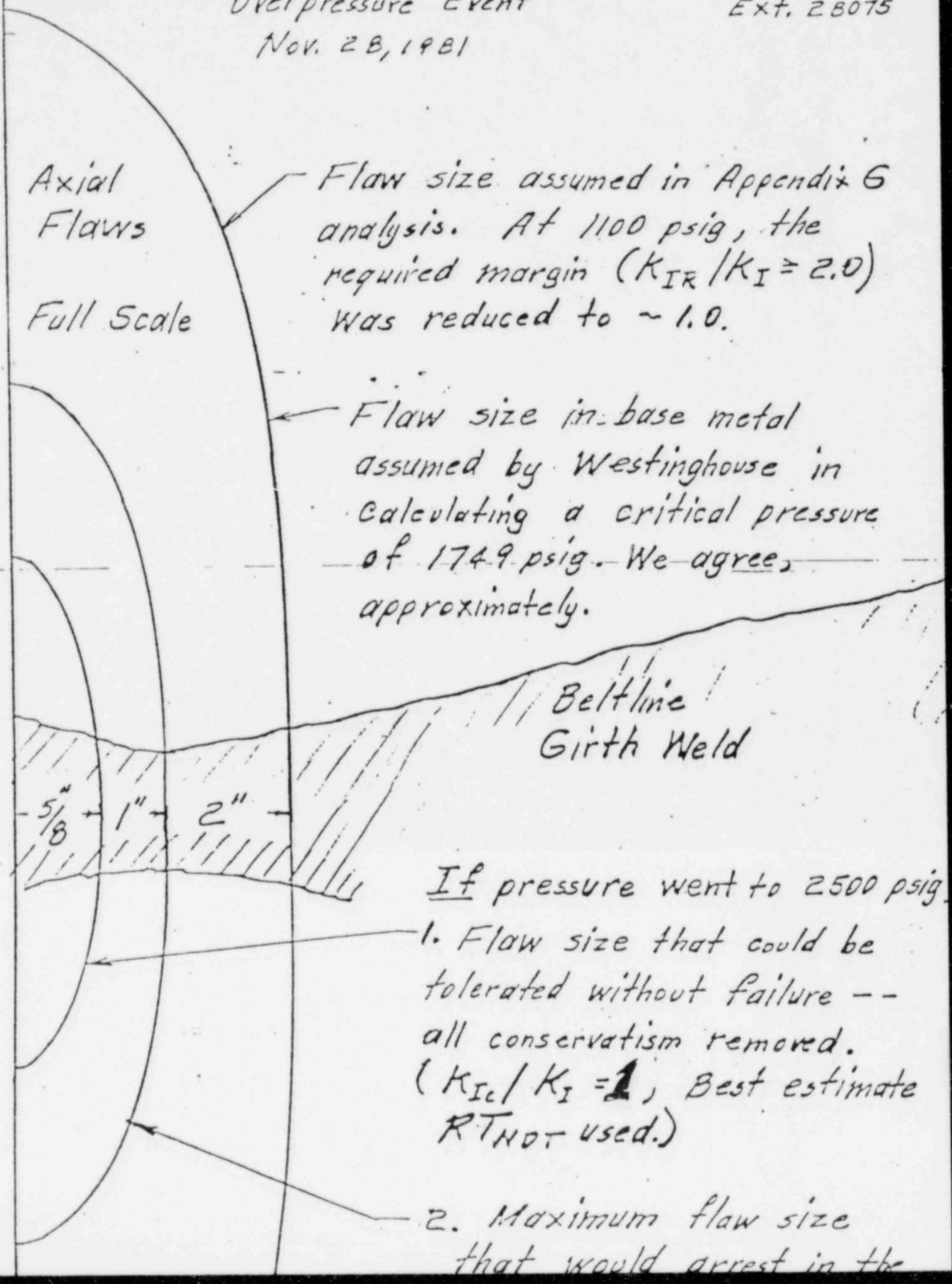
Turkey Point 4
Overpressure Event
Nov. 28, 1981

May 11, 1982
P.N. Randall
Ext. 28075



Turkey Point 4
Overpressure Event
Nov. 28, 1981

May 13, 1982
P.N. Randall
Ext. 28075



forgings, if a fast-running crack popped in from the weld. (using best estimate RT_{NDT}).