DUKE POWER COMPANY

OCONEE NUCLEAR STATION

Attachment 1

Proposed Technical Specifications

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TABLE 4.4-1
LIST OF PENETRATIONS WITH 10CFR50,
APPENDIX J TEST REQUIREMENTS

PENETRATION NUMBER	SYSTEM	TYPE A SYSTEM CONDITION	LOCAL LEAK TEST	REMARKS
36 37	RB emergency sump recirculation line	Not Vented	None required	Note 5
38	Quench tank cooler inlet line	Note 1	Type C	Note 2, 7d, 12
39	HP Nitrogen supply	Note 1	Type C	Note 3 (manual valves) 13
(Unit 2, 3 only)	CFT Vent line	Note 1	None required	Note 3 (manual valves)
40	RB emergency sump drain line	Note 1	None required	
41	Instrument air supply & ILRT verification line	Note 1	None required	Note 3 (manual valves)
42	RB H_2 Analyzer Train B	Note 1	Type C	Note 7c
43	OTSG A drain line	Note 1	None required	Note 7b
44	Component cooling to control rod drive inlet line	Note 1	Type C	Note 3, 7d
45	ILRT instrument line	Not Vented	Type C	Note 3, 7a
46	Reactor head-wash filtered water inlet	Note 1	Type C	Note 3, 6 (manual valves)

TABLE 4.4-1
LIST OF PENETRATIONS WITH 10CFR50,
APPENDIX J TEST REQUIREMENTS

PENETRATION NUMBER	SYSTEM	TYPE A TEST SYSTEM CONDITION	LOCAL LEAK TEST	REMARKS
47 (Unit 1 only)	Demineralized water supply to RC pump seal vents	Note 1	Type C	Note 3, 7d
48	Breathing air inlet	Note 1	None required	Note 3 (manual valves)
49 (Unit 1 only)	LP Nitrogen supply	Note 1	None required	Note 3 (manual valves)
50	OTSG A Emergency FDW line	Not Vented	None required	Note 5
51	ILRT Pressurization line	Note 1	None required	Note 6a, 7a
52	HP Injection to 'B' loop	Not Vented	None required	Note 5
53 (All)	HP Nitrogen supply to 'A' core flood tank	Note 1	Type C	Note 3 (manual valves), 13
(Unit 2, 3)	LP Nitrogen supply	Note 2	None required	Note 3 (manual valves)
54	Component cooling outlet line	Note 1	Type C	Note 3, 7b, 9(8)
55	Demineralized water supply	Note 1	Type C (Unit 1) (Unit 2,3)	Note 3, (manual valves), 12 Note 3, 9 (manual valves)
56	Spent fuel canal fill and drain	Note 1	None required	Note 3 (manual valve)
57 (Unit 1 only)	DHR return line	Not Vented	None required	Note 4

TABLE 4.4-1
NOTES (continued)

c. Isolation valves are required to operate intermittently under post accident conditions.

d. Check valves used for containment isolation.

NOTE 8 DELETED

NOTE 9 Reverse direction test of inside containment isolation valve authorized. Leakage results are conservative.

NOTE 10 System is submerged during post-accident conditions and performance of Type A test. System will be drained to the extent possible.

NOTE 11 Type B test performed on the blind flanges inside the Reactor Building. The tube drain valves and valves outside the containment are not tested.

NOTE 12 A one-time extension from the local leak test and corresponding exemption from Sections III.D.2 and III.D.3 of Appendix J to 10 CFR Part 50 is granted such that it be performed during the 1983 Unit 1 refueling outage, provided that such outage begins no later than July 16, 1983.

NOTE 13 The requirements to perform a Type A test in accordance with Notes 1 and 3 of Table 4.4-1, will commence during the end of cycle 12 refueling outage on Unit 1, and during the end of cycle 11 refueling outages on Units 2 and 3. For the Type C test, the initial test will be performed on Unit 1 during the end of cycle 12 refueling outage, on Unit 2 no later than January 15, 1990, and during the end of cycle 11 refueling outage on Unit 3. On Units 2 and 3, until Type C testing is performed, these penetrations may be utilized provided that compensatory measures described in W. H. Owen's September 29, 1989 letter and H. B. Tucker's October 4, 1989 letter are implemented.

DUKE POWER COMPANY

OCONEE NUCLEAR STATION

Attachment 2

Basis for Emergency Situation

Post Maintenance/Modification

Leak Rate Testing

Basis for Emergency Situation
Post Maintenance/Modification Leak Rate Testing

In accordance with 10CFR50.91(5), when a licensee asserts that an emergency situation exist requiring prompt action by the commission to process an amendment request, the licensee must explain why this emergency situation occurred and why it could not avoid this situation. The following is a brief discussion addressing these criteria:

Why the Emergency Situation Occurred

Technical Specification 4.4.1.3 and 10CFR50, Appendix J require either and integrated leak rate test or local leak rate test (as appropriate) following maintenance or modifications.

Figure 1 illustrates the current configuration of penetration 39. The following table identifies valves within penetration 39 on which maintenance was performed or modifications were implemented , but which were not leak rate tested prior to establishing containment integrity.

Unit 1	1N-131
	1CA-29
Unit 2	2CF-44
Unit 3	3N-131

Figure 2 illustrates the current configuration of penetration 53. Post maintenance or modification leak rate testing has not been performed on the following penetration 53 valves:

Unit 1	None
Unit 2	2CF-42
Unit 3	3CF-42

However, the basis for emergency situation for penetration 53 discussed in the September 29, 1989 amendment request remains valid.

The above missed leak rate tests were identified on October 2, 1989 during investigations following the discovery of an error in the Type A testing procedure (discussed the the September 29, 1989 amendment request). As a result the Oconee Units are not in compliance with Technical Specification 3.6. As part of the solution to resolve this issue, technical specifications must be revised to require that a Type C test be performed on penetration 39, and to redefine when Type A and C test requirements are to become effective.

Why the Emergency Situation Could Not be Avoided

The missed leak rate tests were not discovered until October 2, 1989 during investigations following the discovery of an error in the Type A testing procedure. Why this error was not discovered prior to this time is currently under investigation. A Licensee Event Report, pursuant to 10CFR50.73 will be submitted shortly and should identify the reason/cause or why the error was not discovered earlier.

Speculation on Duke's part within this submittal as to the reasons/causes for this oversight would be premature and would unduly prejudice the investigation process. When the error was identified, the situation was promptly brought to the NRC Staff attention.

DUKE POWER COMPANY

OCONEE NUCLEAR STATION

Attachment 3

No Significant Hazards Consideration Evaluation

No Significant Hazards Consideration Evaluation

Changes to Technical Specifications as a result of inappropriate Type A test procedures have been addressed within the September 29, 1989 amendment request. The proceeding evaluation is provided to address changes to Technical Specifications associated with penetration 39.

Duke Power Company (Duke) has made the determination that this amendment request involves a No Significant Hazards Consideration by applying the standards established by the Commission's regulation in 10CFR50.92. This ensures that operation of the facility in accordance with the proposed amendment would not:

(1) involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) involve a significant reduction in a margin of safety.

The Commission has provided guidelines pertaining to the application of the three standards by listing specific examples in 48FR14870. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications: for example a more stringent surveillance requirement.

In this case the change proposed by this request is similar to Example (ii) in that a Type C local leak rate test for penetration number 39 is now required; whereas, the current technical specification does not require a Type C test. The footnotes added provide clarification of when the Type A and Type C testing requirements become effective. As noted in the technical justification (Attachment 4), a modification is required in order to perform a Type C test. Footnote 13 specifies that a Type A test will commence at the next refueling outage for each Oconee Unit and that a Type C test will be performed no later than January 15,1990 for Unit 2 and during the end of cycle 11 refueling outage for Unit 3.

The following evaluation measures aspects of this proposal against the Part 50.92(c) requirements to demonstrate that all three standards are satisfied.

First Standard

(Amendment would not) involve a significant increase in the probability or consequences of an accident previously evaluated.

Each accident analysis addressed in the Oconee Final Safety Analysis Report (FSAR) has been examined with respect to the proposed requirement for Type C testing of penetration 39. The probability of any Design Basis Accident (DBA) is not affected by this change, nor are the consequences of a DBA affected by this change. This change will assure that penetration 39 will meet the local leak rate criteria of Appendix J. In this way during an Engineered Safeguards Actuation, containment isolation will be enhanced.

Footnote 13 concerns the timing in which Type A and C testing requirements become effective. The probability of any DBA is not affected by this change since this is not considered to be an initiator for any DBA. The consequences are not affected, since the timing of when these tests are performed does not contribute to the consequences of any DBA and because the single penetration affected by this change will now have a local leak rate test requirement.

Based on the above, the proposed technical specification change will not involve a significant increase in the probability or consequences of an accident that has been previously evaluated.

Second Standard

(Amendment would not) create the possibility of a new or different kind of accident from any kind of accident previously evaluated.

It has been determined that the possibility of a new or different kind of accident will not be possible due to this change. This change constitutes a more stringent requirement by requiring a Type C leak rate test, when no testing was required previously. This testing ensure that the penetration will meet the local leak rate criteria of Appendix J, thereby providing additional assurance of the integrity of the penetration in the event of an Engineered Safeguards actuation. The timing of when the testing requirements become effective does not require any hardware or procedural changes. As such, this change does not create the possibility of a new or different kind of accident from any kind of accident previously evaluated.

Third Standard

(Amendment would not) involve a significant reduction in a margin of safety.

This change constitutes a more stringent requirement by requiring Type C local leak rate testing for penetration 39. This ensures that penetration 39 will meet the local leak rate criteria of Appendix J during an Engineered Safeguards actuation requiring containment isolation. As such, the margin of safety offered by penetration 39 in precluding leakage of containment atmosphere is enhanced. Since the timing requirements of footnote 13 do not require any hardware or procedural changes, no safety margins for Oconee are impacted. Therefore, there will not be a reduction in a margin of safety.

Based on the above and the supporting technical justification, Duke has concluded that there is no significant hazard consideration involved in this amendment request.

DUKE POWER COMPANY

OCONEE NUCLEAR STATION

Attachment 4

Technical Justification

Post Maintenance/Modification

Leak Rate Testing

Technical Justification

Introduction:

On September 29, 1989 Duke provided a proposed amendment to the Oconee Technical Specifications to require Type C testing of Penetration 53. Technical Justification for this amendment request was included within the September 29, 1989 proposal and remains valid.

During subsequent investigations into the Oconee Appendix J program, Duke has determined that certain valves within penetrations 39 and 53 were not leak rate tested as required by Technical specification 4.4.1.3 and Appendix J following maintenance or modification. Details of this investigation will be provided within a forthcoming LER.

Figures 1 and 2 provide the current configuration of penetrations 39 and 53 respectively. Existing approved Technical Specifications do not require Type C testing for these penetrations, thus none was performed. During previous Type A tests, penetration 39 was challenged as required. As discussed in the September 29, 1989 amendment request, penetration 53 was not challenged by the Type A test as required. Further, certain valves within penetrations 39 and 53 were not tested as required following maintenance or modification. As a result, a conservative determination has been made by Duke Power Company that penetrations 39 and 53 are technically inoperable pursuant to Technical Specification 3.6.3.

Note, all lines from the auxiliary building to penetrations 39 and 53 are double-isolated. Specifically, for penetration 39 all lines leading from the auxiliary building to valves CA-29 and HP-156 are maintained normally isolated via closed manual valves. The vent line to CF-41 is maintained normally isolated through either a closed manual valve or installation of a pressure gage at the end of the line.

For penetration 53, all lines leading from the auxiliary building to valves HP-155 and CA-27 are maintained normally isolated through closed manual valves. the vent line to CF-47 is maintained normally isolated through either a closed manual valve or installation of a pressure gage at the end of the vent line.

Resolution:

To resolve the above concern, the configuration for penetrations 39 and 53 is being modified (figures 3 and 4). The modification will add a vent valve, a drain valve and a test isolation valve to the Nitrogen line that feeds the core flood tanks. The modification will allow Type C testing of CF-44 and simplify Type A testing of penetration 39. The modification will allow local leak testing of CF-42 and simplify Type A testing of

penetration 53. During future ILRT, the new vent line will be open to the containment atmosphere.

The modification effects the non-seismic portion of the Nitrogen System. The piping is non-QA and non-safety related. The new vent and drain lines and the new valves are designed for the connecting piping's design temperature and pressure. The vent and drain line will have pipe caps installed. The new valve installed in the main nitrogen line will be kept normally open. The stress analysis for the piping changes were reviewed and determined to require no support changes. These changes will not affect the safety related portion of the Nitrogen system. Technical Specification 3.3 requires the core flood tanks to have a pressure of 600 + 25 psig. This modification will not adversely affect this pressure requirement.

For Unit 1 outside isolation valves in penetration 39 have been leak rate tested and are considered to be operable without need for further compensatory actions. Unit 1 penetration 39 will be modified and Type C tested during the end of cycle 12 refueling outage. For Unit 2 penetration 39 will be modified and Type C tested no Later than January 15, 1990. For Unit 3 penetration 39 will be modified and Type C tested during the end of cycle 11 refueling outage.

Until a Type C test has been successfully performed for Unit 2 and 3, the following manual valves will be maintained closed when containment integrity is required:

Penetration 39
1) CF-41
2) HP-156
3) N-130
4) CA-29

Penetration 53
1) N-128
2) CA-27
3) HP-155
4) CF-47

In order to provide additional assurance of the integrity of the manual valves, a qualitive test will be performed. This test is similar to that described within the September 29, 1989 amendment request for penetration 53.

During normal operation the piping associated with penetration 39 and 53 is used to add demineralized water or boric acid from the chemical addition system to the core flood tanks. This is, however, rarely used. The penetrations are also used to add Nitrogen gas to the core flood tanks in order to maintain a 600 psi pressure in the tank. During normal operation, nitrogen is frequently added to the tank. The frequency varies from approximately once a shift to once a week. During the times when the above valves are opened to perform the above functions, and while containment integrity is required, compensatory action will be established to assure that these valves can be closed promptly after an Engineered Safeguards (ES) actuation has occurred.

These compensatory measures involve providing dedicated operators stationed near the valves. While the penetration is in use they will be in direct communication with the control room at all times. Once advised by appropriate personnel in the control room that an ES actuation has occurred, the dedicated operator will promptly close all manual valves that may be open at the time. Prior to assuming the duties of the dedicated operator, the individuals will be fully qualified to operate the valves in question.

Finally, the technical specifications will be revised. The proposed technical specification amendment request (as supplemented) will require that a Type C local leak rate test for penetration numbers 39 and 53 be performed. In addition, a footnote is also added to provide clarification of when Type A and Type C testing requirements for these penetration become effective. As noted above, a modification is required to perform a Type C test. This same modification will allow a Type A test which challenges penetration 53 to be easily performed.

Evaluation

During normal operation the piping associated with penetrations 39 and 53 is used to add demineralized water or boric acid from the chemical addition system to the core flood tanks. This is rarely used. The penetrations are also used to add Nitrogen gas to the core flood tanks in order to maintain a 600 psi pressure in the tank. During normal operation, nitrogen is frequently added to the tank. The frequency varies from approximately once a shift to once a week, hence the structural integrity of the piping is demonstrated frequently. The piping is 1 inch diameter stainless steel and is rated at 700 psi. During a postulated accident, the penetration is subjected to approximately 60 psi.

It should be noted that although post-maintenance or modification leak rate testing was not performed as required, these past ILRT have met their

acceptance criteria. Further, following a postulated accident, any leakage at these penetrations will be collected and processed by the penetration room ventilation system prior to being released to the environment.

In summary, it can be concluded that continued operation is acceptable based on the following:

- The piping between valves N-130 and CF-44 has been evaluated and determined that it will remain intact in a seismic event.

- If any leakage does occur at penetration 39, it will be collected and processed by the penetration room ventilation system.

- The structural integrity of the piping is verified during routine additions of nitrogen to the core flood tank with greater than 600 psi of nitrogen.

- For Unit 1 penetration 39, a local leak rate test has recently been performed and the test acceptance criteria was met.

- Compensatory measures ensure that when the penetrations are in use, prompt mitigative action will be available to provide containment integrity.

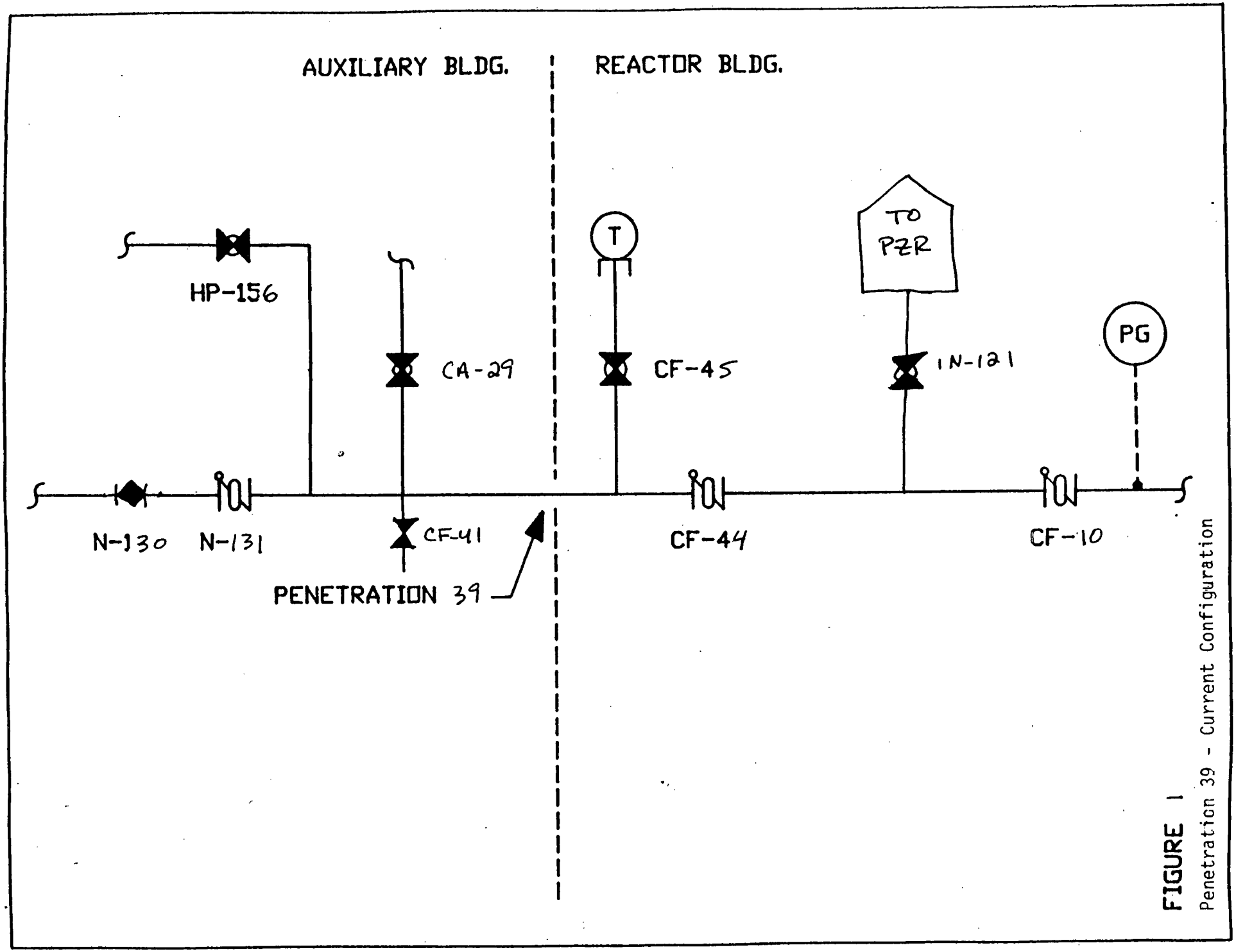

FIGURE 1
Penetration 39 - Current Configuration

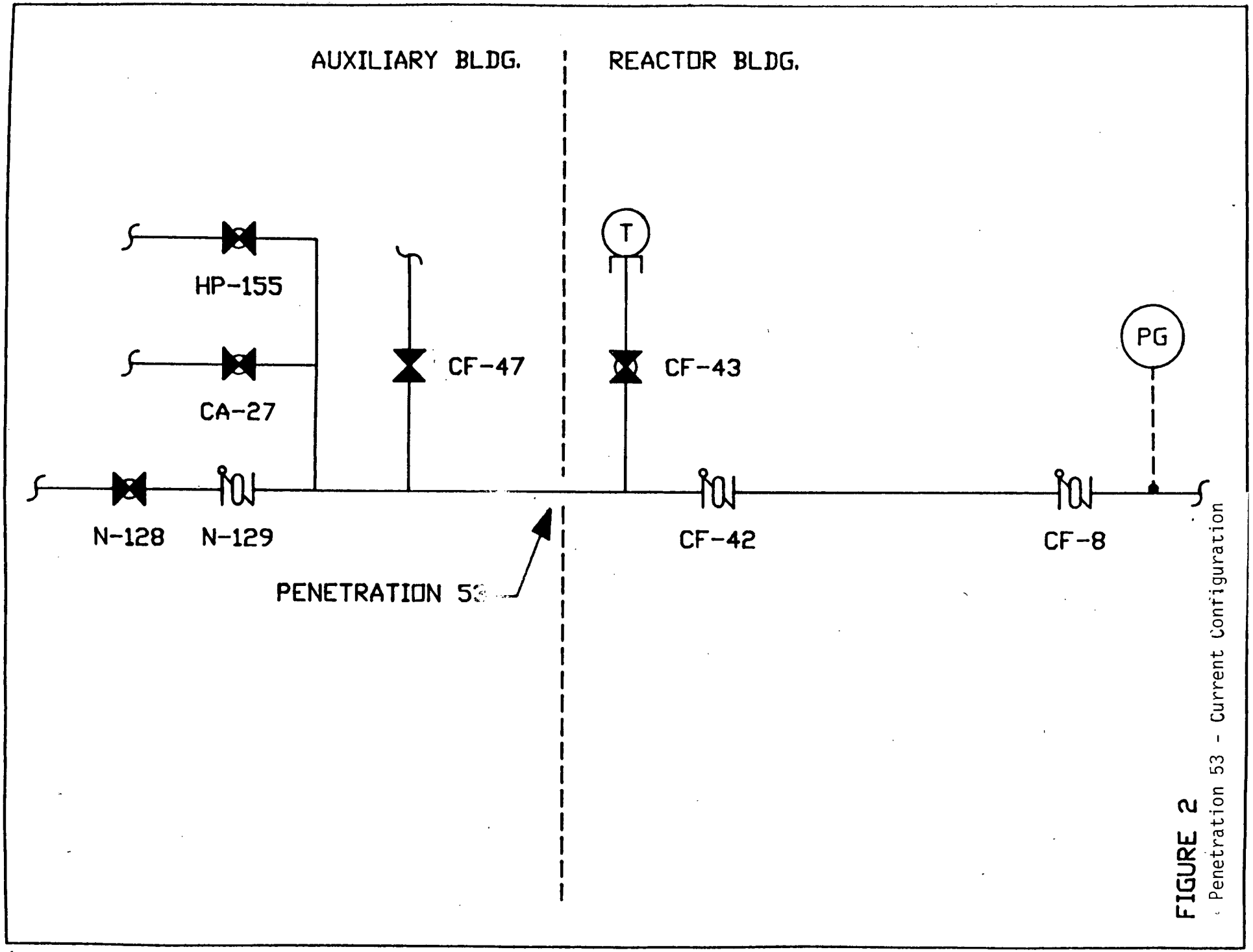

FIGURE 2
Penetration 53 - Current Configuration

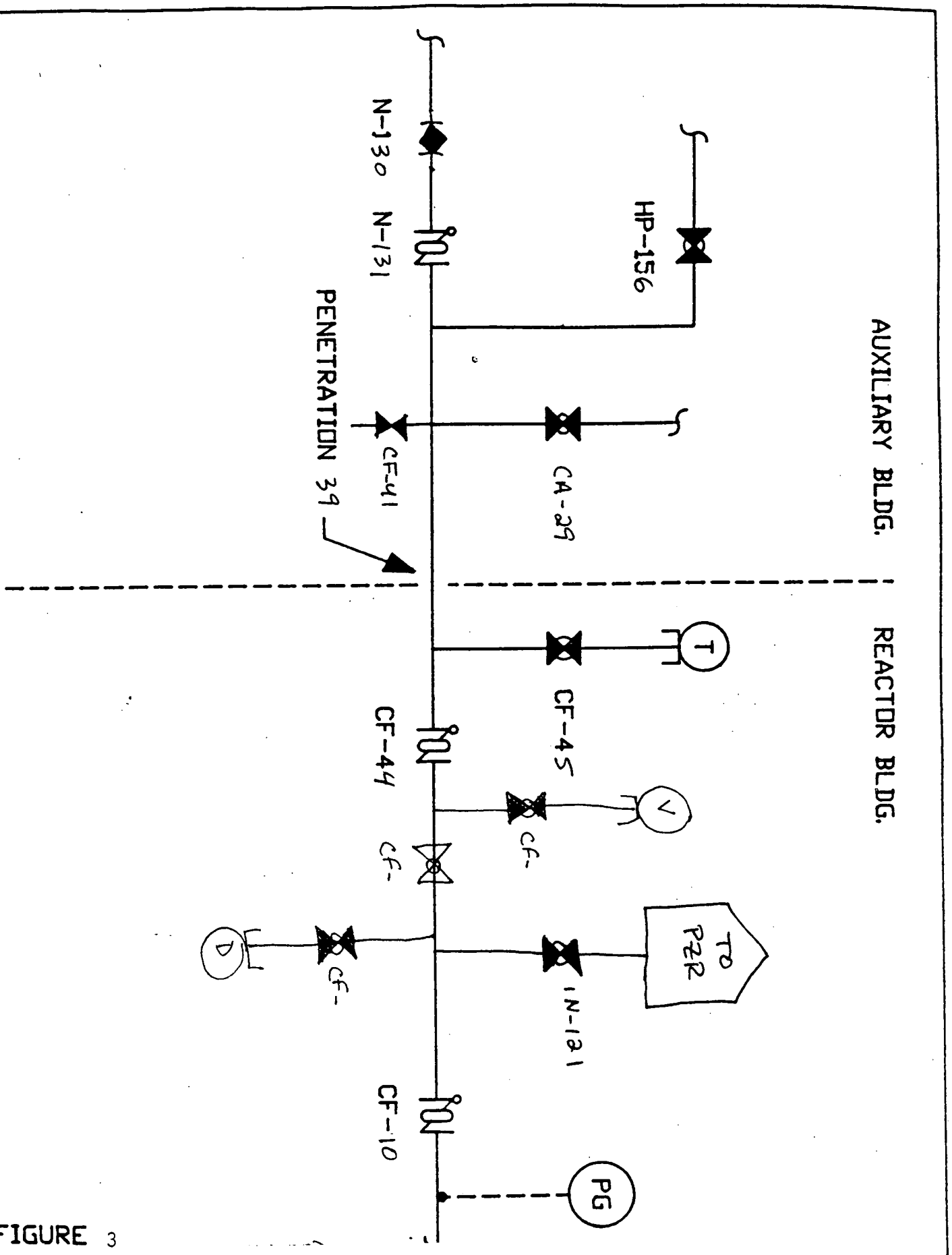

FIGURE 3

Penetration 39 - 1989 Modified Configuration

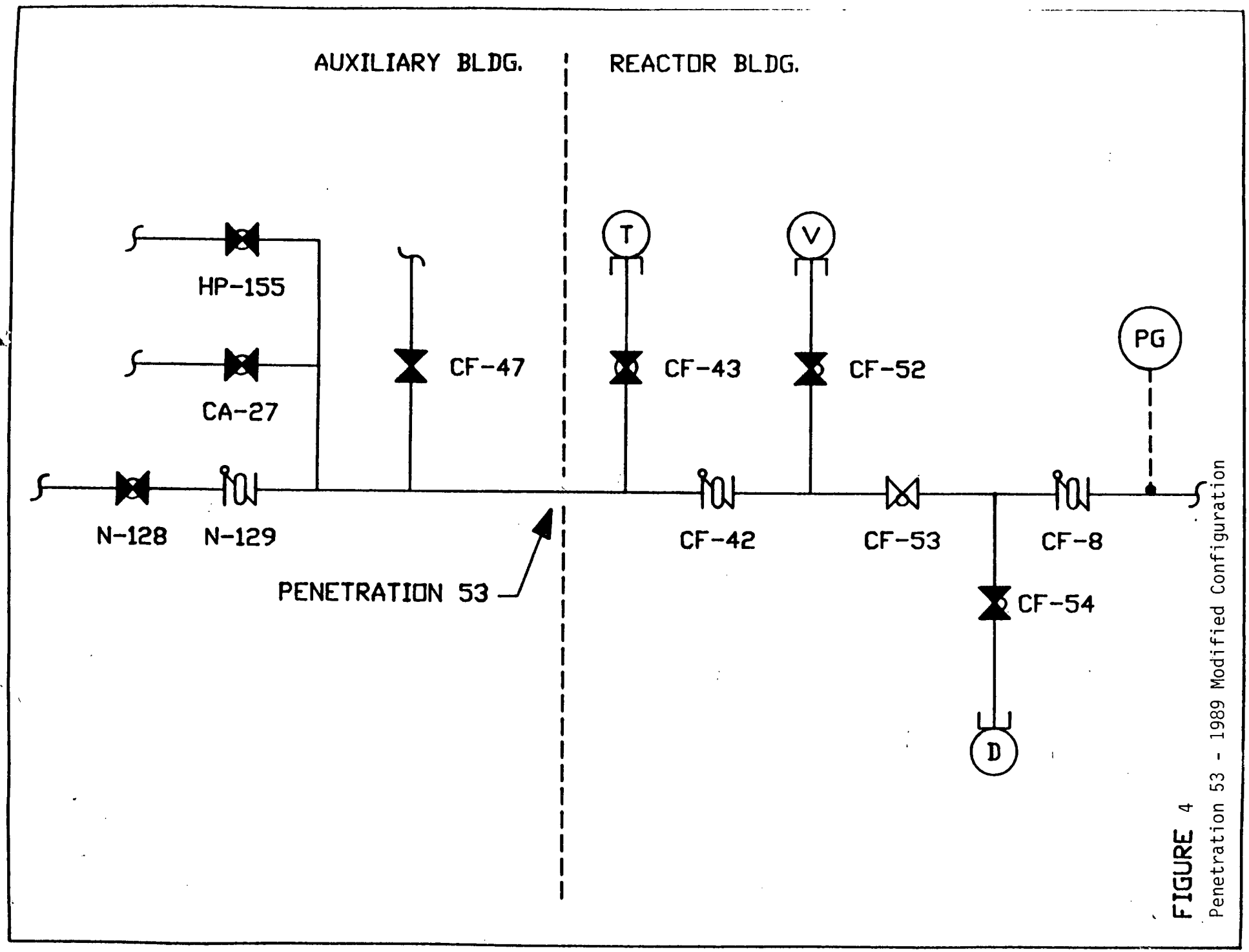

FIGURE 4
Penetration 53 - 1989 Modified Configuration