

CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT

UNIT 2

PROCEDURE TYPE: ALTERNATIVE SAFE SHUTDOWN PROCEDURE

NUMBER: ASSD-18

PROCEDURE TITLE: DIESEL GENERATOR BUILDING 23' ELEVATION
E6 SWITCHGEAR ROOM

R B.1

Rev. 0

4/4/88

FOR INFO ONLY
Not to be used to perform maintenance, tests, surveillance,
operate or manipulate plant systems, document activities, or
write or implement design changes.

Approved By:

S. J. Bishop
General Manager/Manager-Operations

Date:

4/11/88

LIST OF EFFECTIVE PAGES

ASSD-18

Page(s)

1-12

Revision

0

R.B.

A. TITLE

Diesel Generator Building 23' Elevation E6 Switchgear Room

B. REFERENCES

1. Per 10 CFR 50 Appendix "P" Sections III.G & L.
2. Per 10 CFR 50 Appendix "R" Section III.J.

C. ENTRY CONDITION

This procedure is entered from Alternative Safe Shutdown Index ASSD-01.

- _____ 1. A fire has occurred in an area containing Alternative Safe Shutdown Train B equipment,

AND

- _____ 2. The Shift Foreman has determined that the reactor is to be brought to Cold Shutdown using Alternative Safe Shutdown Train A.

The purpose of this procedure is to provide supplemental actions to be used concurrently with EOPs and other operations procedures to achieve and maintain Cold Shutdown coincident with or without a 72 hour loss of off-site power.

RB.1

D. OPERATOR ACTIONS

- _____ 1. IF while executing this procedure, the fire is extinguished AND The Shift Foreman determines that no action within this procedure is required, THEN EXIT this procedure.
- _____ 2. OBSERVE the following parameters on instruments indicated while performing actions to achieve and maintain cold shutdown.

<u>Instrument</u>	<u>Location</u>
2-CAC-TR-4426-1 Suppression Pool Temp. (Pt. 1)	Control Room Panel
2-CAC-LR-2602 Torus Level	Control Room Panel
2-C32-PI-R605 Reactor Pressure	Control Room Panel
2-C32-LI-R606A Reactor Water Level	Control Room Panel

- _____ 3. IF reactor building entry is required to restore OR monitor equipment, THEN

- _____ a. DISPATCH the following minimum manpower for performance of this procedure:

Reactor Building - 1 Auxiliary Operator

- _____ b. OBTAIN the following keys from the Shift Foreman's Key Locker
- _____ (1) ASSD Equipment Cabinet Key #148
 - _____ (1) ASSD Flashlight Tool Box Key #160
- _____ c. OBTAIN Security Access Keys from SAS Security Officer located in the Control Room

AND PROCURE the following equipment from the ASSD Equipment Cabinet:

For Reactor Building

- _____ (1) Sound powered phone
 - _____ (1) Flashlight
 - _____ (1) Copy of this procedure
 - _____ (3) Remote Shutdown Keys, Serial T112
 - _____ (1) Security Access Key
 - _____ (1) Twenty-five foot sound powered phone extension cord
- _____ d. USE appropriate figures in this procedure to provide access/egress routes, equipment and communication locations.

NOTE

Implementation of ASSD-18 for Unit 1 will require Diesel Generator No. 4 to be cross-tied to 4KV Bus E1 via 4KV Bus E2. When 4KV Bus E1 and Substation E5 are re-energized by Unit 1, Suppression Pool Cooling and Shutdown Cooling for Unit 2 can then be established using Train A safe shutdown equipment.

R B.1

- _____ 4. IF Nuclear Service Water to Vital Header Valve, 2-SW-V117 CANNOT be operated from the RTGB, THEN Manually OPERATE 2-SW-V117.
- _____ 5. IF Nuclear Service Water Supply Valve, 2-SW-V105 CANNOT be operated from the RTGB, THEN Manually OPERATE 2-SW-V105.
- _____ 6. IF Conventional-Nuclear Header Cross-tie Valve, 2-SW-V102 CANNOT be operated from the RTGB, THEN Manually OPERATE 2-SW-V102.
- _____ 7. IF operation of RHR Service Water System is required AND RHR Service Water Booster Pumps are NOT available, THEN REFER to OP-43.

8. IF operation of HPCI Steam Supply Inboard Isolation Valve, 2-E41-F002 is required AND power is NOT available from MCC 2XD, THEN
- a. PLACE the circuit breaker control switch in the OFF position for HPCI Steam Supply Inboard Isolation Valve, 2-E41-F002, at MCC 2XD compartment DW1.
 - b. PLACE the circuit breaker control switch in the ON position for HPCI Steam Supply Line Isolation Valve, 2-E41-F002, (ASSD FEED) at MCC 2XC compartment DS1.
 - c. IF 2-E41-F002 is required to be Open, THEN PLACE the ASSD Keylock Control Switch in the OPEN position, at MCC 2XC compartment DS1.
 - d. IF 2-E41-F002 is required to be Closed, THEN PLACE the ASSD Keylock Control Switch in the CLOSE position, at MCC 2XC compartment DS1.
9. IF operation of HPCI Turbine Exhaust Vacuum Breaker Valve, 2-E41-F079, is required AND power is NOT available from MCC 2XB, THEN
- a. PLACE the circuit breaker control switch in the OFF position for HPCI Turbine Exhaust Vacuum Breaker Valve, 2-E41-F079, at MCC 2XB compartment DQO.
 - b. PLACE the circuit breaker control switch in the ON position for HPCI Turbine Exhaust Vacuum Breaker Valve, 2-E41-F079, (ASSD FEED) at MCC 2XC compartment DT2.
 - c. IF 2-E41-F079 is required to be Open, THEN PLACE the ASSD Keylock Control Switch in the OPEN position, at MCC 2XC compartment DT2.
 - d. IF 2-E41-F079 is required to be Open, THEN PLACE the ASSD Keylock Control Switch in the CLOSE position, at MCC 2XC compartment DT2.
10. IF operation of Shutdown Cooling Outboard Suction Throttle Valve, 2-E11-F008 is required AND power is NOT available from MCC 2XDB, THEN
- a. VERIFY OFF OR PLACE the circuit breaker control switch in the OFF position for Shutdown Cooling Suction Throttle Valve, 2-E11-F008, at MCC 2XDB compartment B50.
 - b. PLACE the circuit breaker control switch in the ON position for RHR Suction Isolation Valve, 2-E11-F008, (ASSD FEED) at MCC 2XDA compartment C24.

R B.

- _____ c. IF 2-E11-F008 is required to be Open, THEN PLACE the Close/Off/Open Keylock Switch in the OPEN position, at MCC 2XDA compartment B26.
- _____ d. IF 2-E11-F008 is required to be Closed, THEN PLACE the Close/Off/Open Keylock Switch in the CLOSE position, at MCC 2XDA compartment B26.

_____ 11. WHEN Shift Foreman determines:

- _____ a. Power is available from MCC 2XD for operation of HPCI Steam Supply Inboard Isolation Valve, 2-E41-F002, THEN

- _____ (1) PLACE the circuit breaker control switch in the ON position for HPCI Steam Supply Inboard Isolation Valve, 2-E41-F002, at MCC 2XD compartment D41.

Ind/Ver

- _____ (2) PLACE the circuit breaker control switch in the OFF position for HPCI Steam Supply Line Inboard Isolation Valve, 2-E41-F002, (ASSD FEED) at MCC 2XC compartment D51.

Ind/Ver

- _____ (3) PLACE the ASSD Keylock Control Switch in the OFF position, for HPCI Steam Supply Line Isolation Valve, 2-E41-F002, at MCC 2XC compartment D51.

Ind/Ver

- _____ b. Power is available from MCC 2XB for operation of HPCI Turbine Exhaust Vacuum Breaker Valve, 2-E41-F079, THEN

- _____ (1) PLACE the circuit breaker control switch in the ON position for HPCI Turbine Exhaust Vacuum Breaker Valve, 2-E41-F079, at MCC 2 compartment DQ0.

Ind/Ver

R B

- ____ (2) PLACE the circuit breaker control switch in the OFF position for HPCI Turbine Vacuum Breaker Valve, 2-E41-F079, (ASSD FEED) at MCC 2XC compartment DT2.

____ /
Ind/Ver

- ____ (3) PLACE the ASSD Keylock Control Switch in the OFF position for HPCI Turbine Vacuum Breaker Valve, 2-E41-F079, at MCC 2XC compartment DT2.

____ /
Ind/Ver

- ____ c. Power is available from MCC 2XDB for operation of Shutdown Cooling Outboard Suction Throttle Valve, 2-E11-F008, THEN

- ____ (1) PLACE the circuit breaker control switch in the ON position for Shutdown Cooling Outboard Suction Throttle Valve, 2-E11-F008, at MCC 2XDB compartment B50.

____ /
Ind/Ver

- ____ (2) PLACE the circuit breaker control switch in the OFF position for RHR Suction Isolation Valve 2-E11-F008, (ASSD FEED) at MCC 2XDA compartment B26.

____ /
Ind/Ver

- ____ (3) PLACE the Close/Off/Open Keylock Switch in the OFF position for RHR Suction Isolation Valve, 2-E11-F008, at MCC 2XDA compartment B26.

____ /
Ind/Ver

R.B.1

____ 12. WHEN:

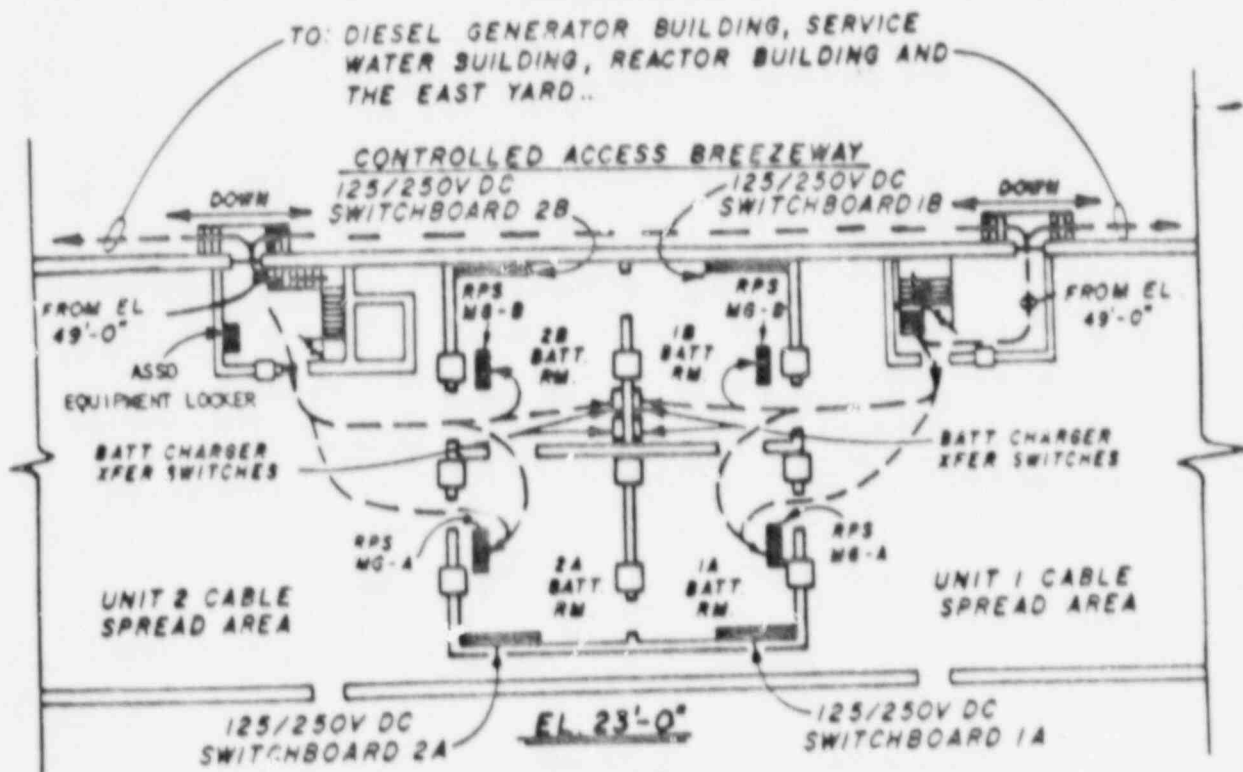
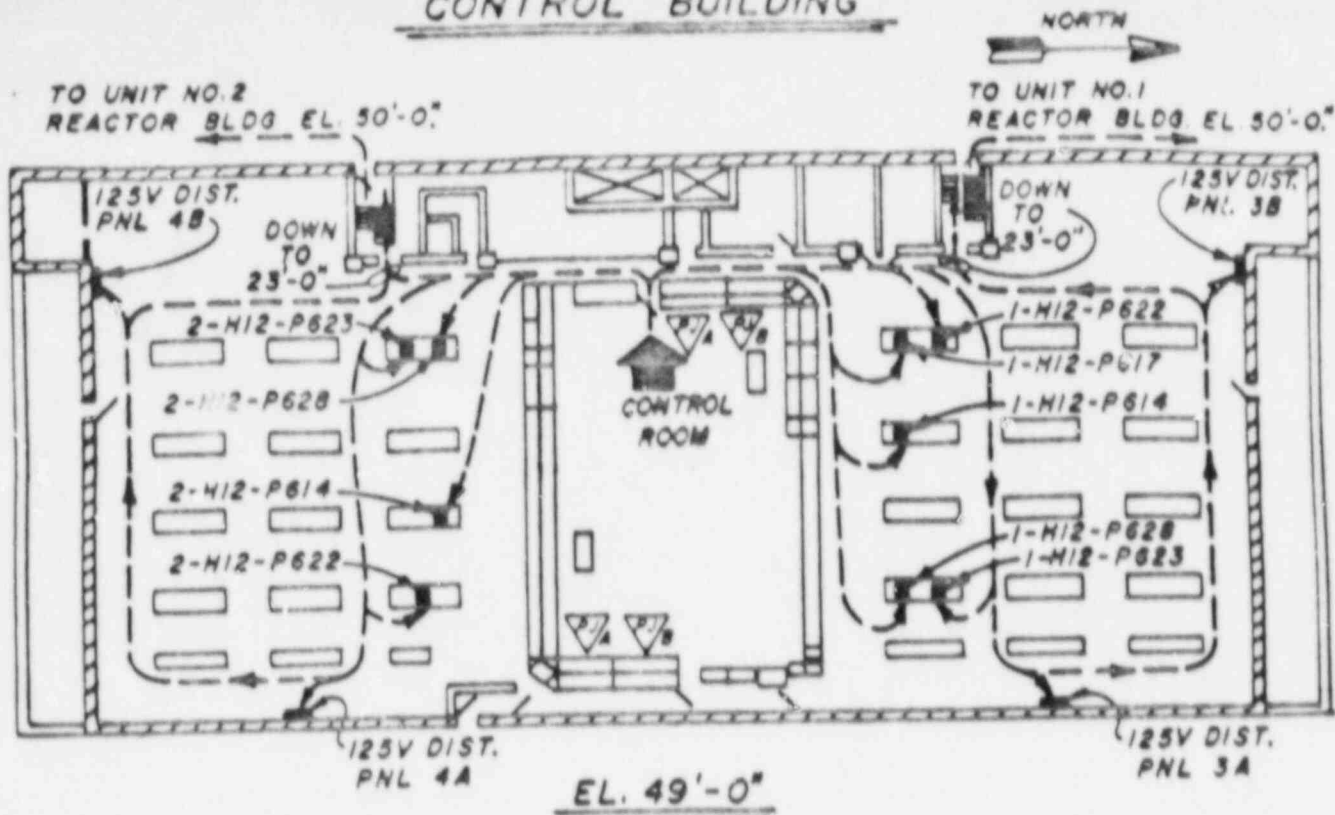
- ____ a. The fire has been extinguished AND
- ____ b. All breakers, AND/OR switches operated in this procedure are restored to their normal position AND
- ____ c. No actions within this procedure are required to achieve or maintain Cold Shutdown, THEN
- ____ d. EXIT this procedure.

Date/Time Completed _____
Performed By (Print) _____ Initials _____

Reviewed By: _____
Shift Foreman

R.B.1

CONTROL BUILDING



LEGEND

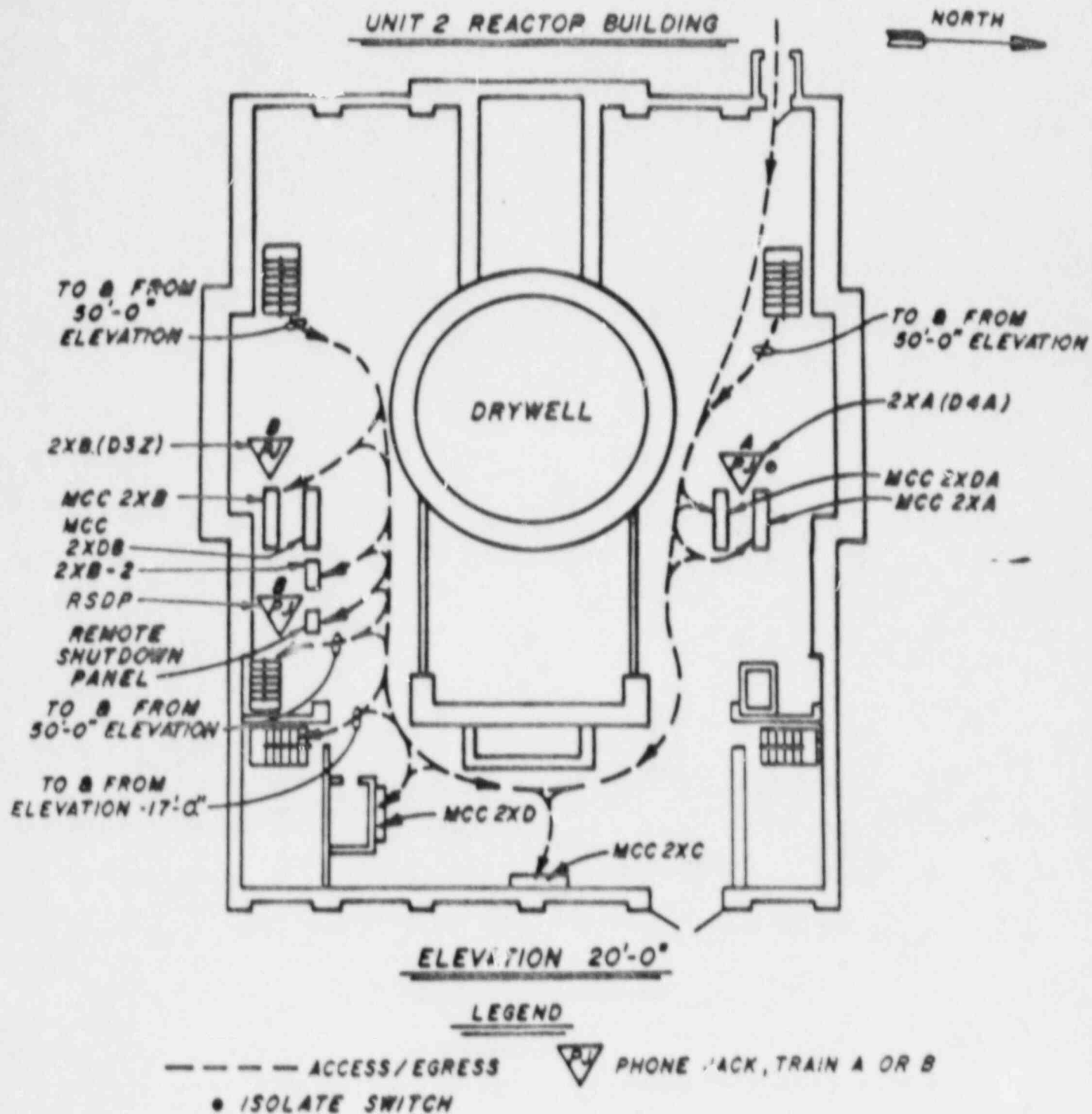
--- ACCESS/EGRESS



PHONE JACK, TRAIN A OR B

FIGURE 1

Control Building 23'0" and 49'0" Elevations Access/Egress
and
Sound Powered Phone Communications



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FIGURE 2

Unit 2 Reactor Building 20' -0" Elevation Access/Egress
and
Sound Powered Phone Communications

UNIT 2 REACTOR BUILDING

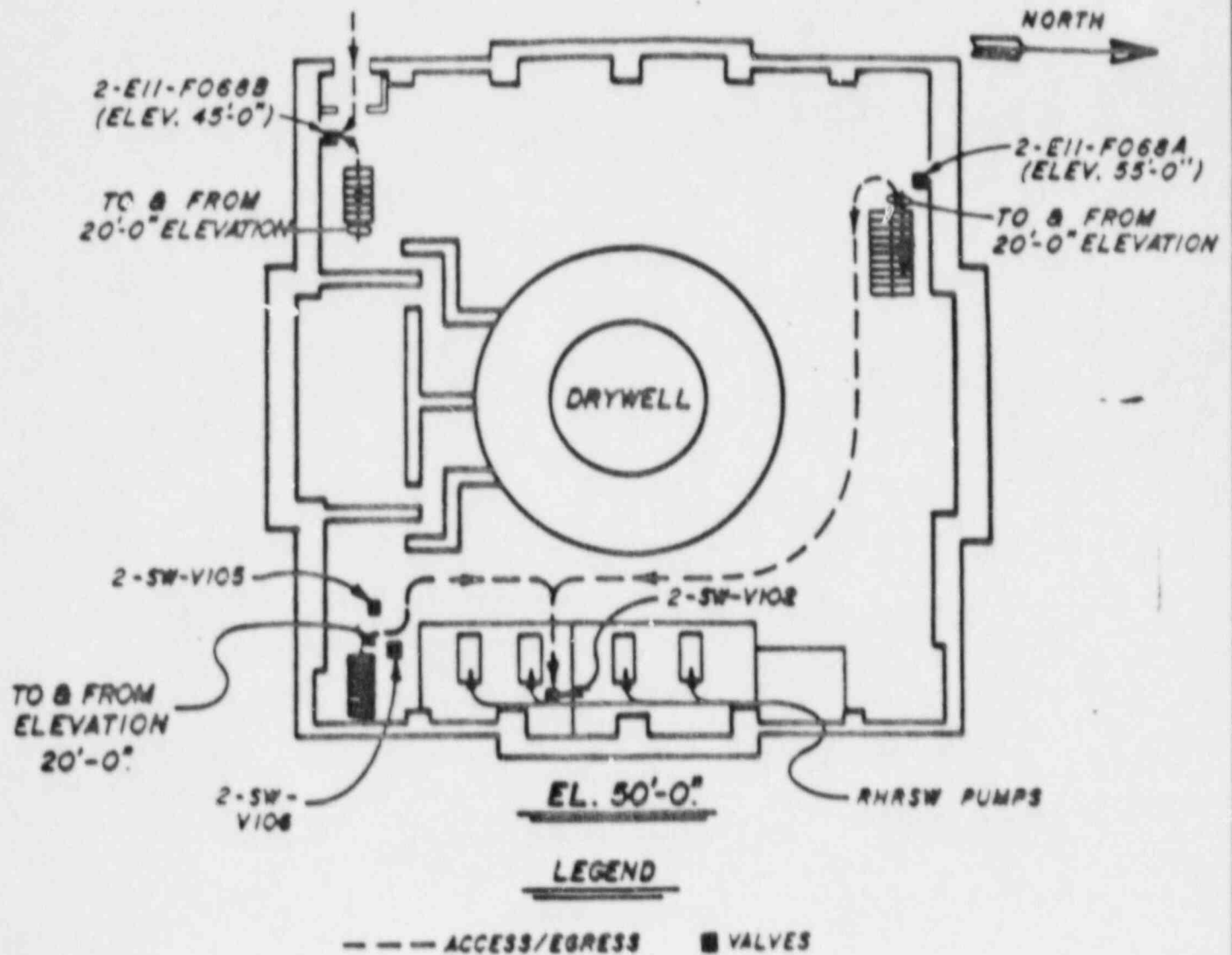


FIGURE 3

Unit 2 Reactor Building 50' -0" Elevation Access/Egress

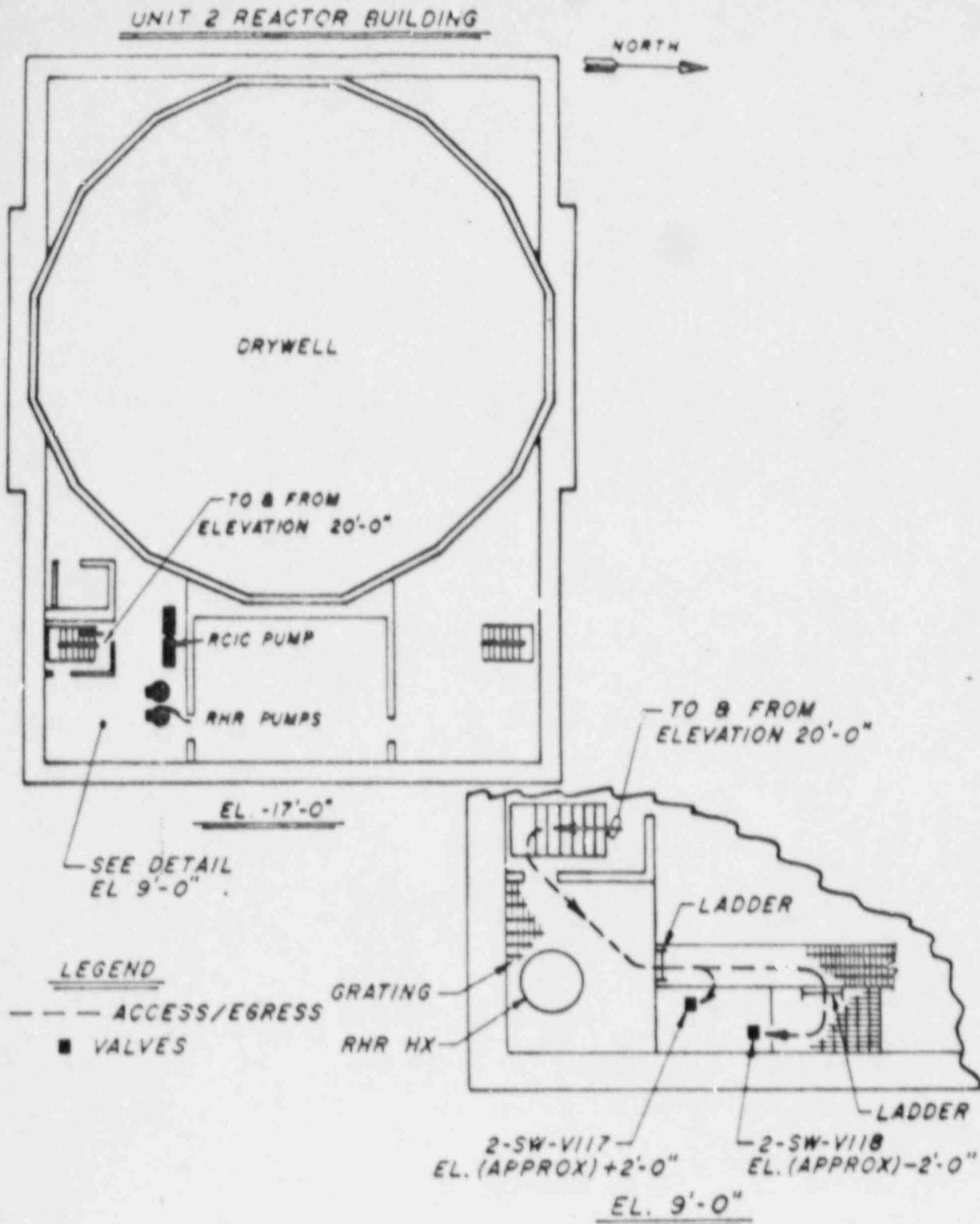


FIGURE 4

Unit 2 Reactor Building -17' -0" Elevation Access/Egress