

FEB 2 2 1985

Docket Nos: 50-416  
and 50-417

LICENSEE: Mississippi Power and Light Company

FACILITY: Grand Gulf Nuclear Station (GGNS)

SUBJECT: JANUARY 28, 1985 SITE VISIT

The DL Project Manager for Grand Gulf and the Chief of Licensing Branch No. 4 visited the site to tour the facility and discuss licensing actions with the licensee. The NRC senior resident inspector participated in the discussion of licensing actions. Enclosure 1 is a list of attendees. Enclosure 2 is a copy of slides and handouts used in the meeting.

The tour and the briefing prior to the tour included the emergency operations facility (located adjacent to the site), the GGNS simulator, the Unit 1 control room, Unit 1 remote shutdown panel, key features of the Unit 2 Mark III containment, and the ultimate heat sink.

Unit 1 is undergoing startup testing in the range of 50-75 percent power. On January 27, 1985, testing at 70 per cent power was started. Unit 2 is about 35 per cent completed.

The Emergency Operations Facility (EOF) is located within the MP&L Energy Services Center about one-half mile from the reactor containments. A Corporate Emergency Center, located in MP&L offices in Jackson, Mississippi provides space for staging and briefing of corporate officers and has communication links to the EOF. An Emergency News Center is located in Port Gibson, Mississippi. An office for use during a general emergency by Louisiana State officials, with communication links to the EOF, is located in Tensas Parish, Louisiana.

The GGNS simulator is located in the Energy Services Center. The control panels duplicate as much as possible, the control room of Unit 1, including the layout of the panels. Remote shutdown panels are simulated. When the safety parameter display system (SPDS) is installed in the plant, it will also be simulated in the GGNS Simulator. There are five instructors who conduct two simulator classes per year with 6 to 14 students in each class. Requalification courses are conducted once every five weeks.

8503010111 850222  
PDR ADOCK 05000416  
P PDR

The control room was viewed from the observation deck. The reactor was in operation at the time of the visit. A temporary wall in the control room separates the Unit 1 control area from the Unit 2 control area which is still under construction.

The ultimate heat sink for Units 1 and 2 consists of two below-grade concrete basins which together contain enough water to cool a shutdown reactor for 30 days without makeup water. Mechanical draft cooling towers on top of the basins transfer heat from the service water to the atmosphere. An underground siphon line connects the two basins so that water in both basins is available for Unit 1.

The BWR Mark III containment has a larger drywell than earlier BWR models making access for surveillance and maintenance easier. On Unit 2, the containment dome is not yet installed. Most of the large piping is installed, including the main steam lines and main feedwater lines and the 20 main steam safety relief valves and associated discharge piping.

The tour included a walk in the drywell and in the part of the containment which will be the suppression pool. Very little work is being done on Unit 2 at this time.

Licensee described current licensing activities. A major task is preparation for the fire protection audit to be conducted by Region II. An updated Fire Hazards Analysis will be submitted in April 1985. Another fire protection task is the development and implementation of compensatory measures and procedures to shutdown the reactor in the event of a fire in the control room. Other recent activities and licensing activities are listed on sheets 36, 37 and 38 of Enclosure 2.

The NRC staff requested that licensee consider the preparation of an integrated schedule that will provide dates for licensing actions through the first refueling. This will permit NRC to plan and schedule resources more effectively. Staff provided a list of licensing actions - primarily resolution of license conditions - and requested dates when submittals would be made. Licensee said it is interested in the preparation of an integrated schedule and has been working on the scheduling of its effort for surveillance tests and modifications required to be completed prior to startup following the first refueling outage. MP&L currently estimates the start of the first refueling will occur in the 3rd calendar quarter of 1986.

In the review of specific licensing actions, licensee provided estimated dates for submittals which will be included in the staff's scheduling of licensing actions. A question arose regarding License Conditions 2C(9), concerning reactor internals tests, and 2C(25)(b), concerning MP&L response to TDI Owners Group recommendations on standby diesel generators. These license conditions require submittals for review and approval prior to certain dates. The question was whether the staff's review and approval should be completed prior to the stated date. Based on discussions with the appropriate technical review branches subsequent to this site trip, the staff finds that the report on reactor internals test results is intended to be submitted no later than 6 months after completion of the startup test program and that staff review and approval can be made after that date.

With respect to License Condition 2C(25)(b), staff intended that MP&L's actions in response to the TDI Owners Group recommendations for the standby diesel generators should be submitted in sufficient time to allow staff review and approval to be completed prior to startup following the first refueling outage. Another question arose regarding the date for staff's evaluation of MP&L's responses to License Conditions 2C(6) Soil Structure Interaction, and 2C(8) Masonry Walls, since the license conditions require modifications to be made if required by staff's review. Based on discussions with the Structural and Geotechnical Engineering Branch subsequent to the meeting, the staff has determined that the staff's evaluations are scheduled to be completed April 30, 1985 and a letter to licensee transmitting the evaluations is scheduled for May 15, 1985.

Licensee and staff agreed that monthly meetings to review licensing actions would be beneficial. Some meetings will be held in licensee's offices or the site and others in the NRC staff offices in Bethesda or Atlanta.

Les L. Kintner, Project Manager  
Licensing Branch No. 4  
Division of Licensing

DESIGNATED ORIGINAL  
Certified By Angela Hatton

*LKC*  
DL:LB #4  
LKintner/ah  
2/24/85

*G.*  
DL:LB #4  
EAdamsam  
2/24/85

GRAND GULF

Mr. J. B. Richard  
Senior Vice President, Nuclear  
Mississippi Power & Light Company  
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Jackson, Mississippi 39205

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P.O. Box 651  
Jackson, Mississippi 39205

The Honorable William J. Guste, Jr.  
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Department of Justice  
State of Louisiana  
Baton Rouge, Louisiana 70804

Nicholas S. Reynolds, Esquire  
Bishop, Liberman, Cook, Purcell  
and Reynolds  
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Washington, D. C. 20036

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Manager of Quality  
Middle South Energy, Inc.  
225 Baronne Street  
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New Orleans, Louisiana 70161

Mr. Larry Dale, Director  
Nuclear Licensing and Safety  
Mississippi Power & Light Company  
P.O. Box 23054  
Jackson, Mississippi 39205

Mr. R. W. Jackson, Project Engineer  
Grand Gulf Nuclear Station  
Bechtel Power Corporation  
Gaithersburg, Maryland 20760

Mr. Ross C. Butcher  
Senior Resident Inspector  
Route 2, Box 399  
Port Gibson, Mississippi 39150

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Region II  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323

Mr. J. E. Cross, General Manager  
Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, Mississippi 39150



ENCLOSURE 1

ATTENDEES

NRC

L. L. Kintner  
E. Adensam  
R. Butcher (part time)

MP&L

L. F. Dale  
J. G. Cesare  
P. B. Benedict  
J. R. Elms  
K. E. Beatty  
B. D. Stewart

# ENCLOSURE 2

NRR Site Visit

January 28, 1985

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Agenda

Organization Chart

Site Map

Briefing Slides

Note Paper

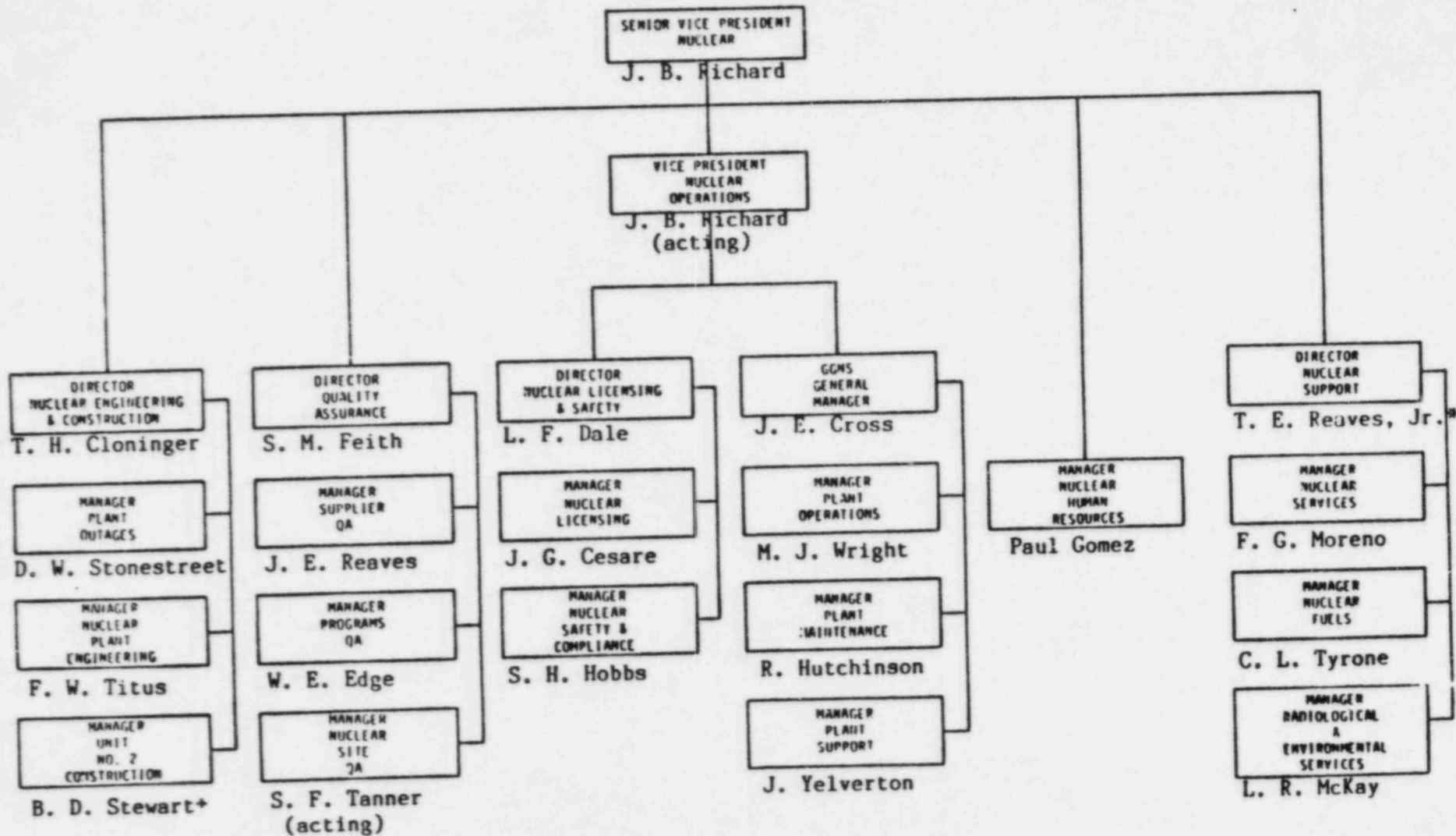
NRC Site Visit - January 28, 1985

AGENDA

- o Commence in Energy Services Center, Conference Room #1
  - 0800 Introduction L. F. Dale/  
J. E. Cross
  - 0805 Summary Briefings
    - 1. Emergency Operations Facility P. B. Benedict
    - 2. Control Room/Technical Support Center J. R. Elms
    - 3. Remote Shutdown Panel J. R. Elms
    - 4. Ultimate Heat Sink J. R. Elms
    - 5. GGNS Simulator K. E. Beatty
    - 6. Primary/Secondary Containment,  
Key design features of Mark III  
Containment B. D. Stewart
  
- o Commence Site Tours
  - 0915 EOF P. B. Benedict
  - 0945 GGNS Simulator K. E. Beatty
  - 1000 Containment/Auxiliary Building-GGNS Unit-2 B. D. Stewart
  - 1100 Ultimate Heat Sink J. R. Elms
  - 1115 Control Room/Technical Support Center J. R. Elms
  - 1145 Remote Shutdown Panel J. R. Elms
  - 1200 Lunch - Administration Building
  - 1245 Discussion of Licensing Actions L. F. Dale/  
J. G. Cesare
  - 0230 Exit

January 15, 1985

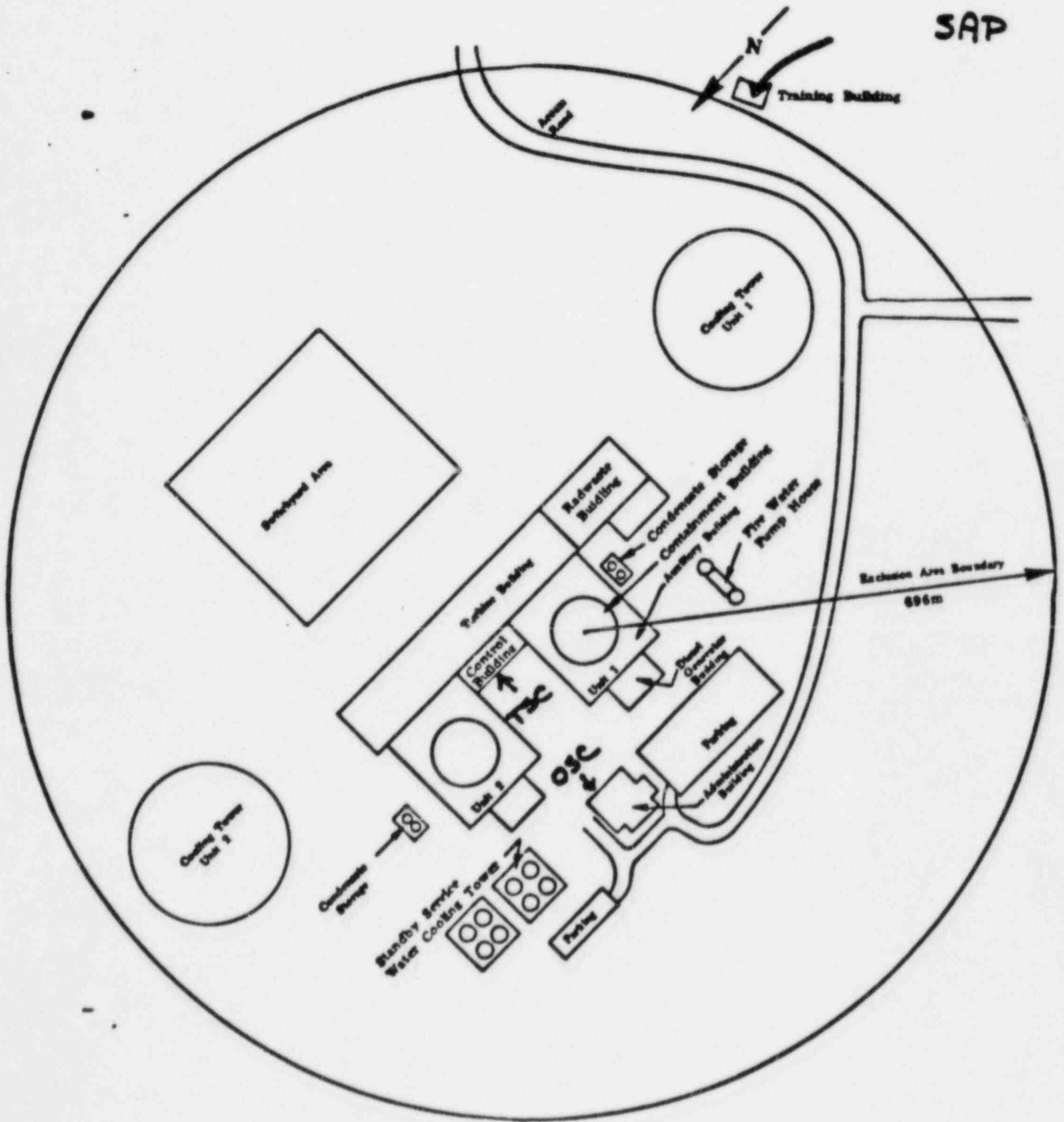
NUCLEAR PRODUCTION DEPARTMENT ORGANIZATION



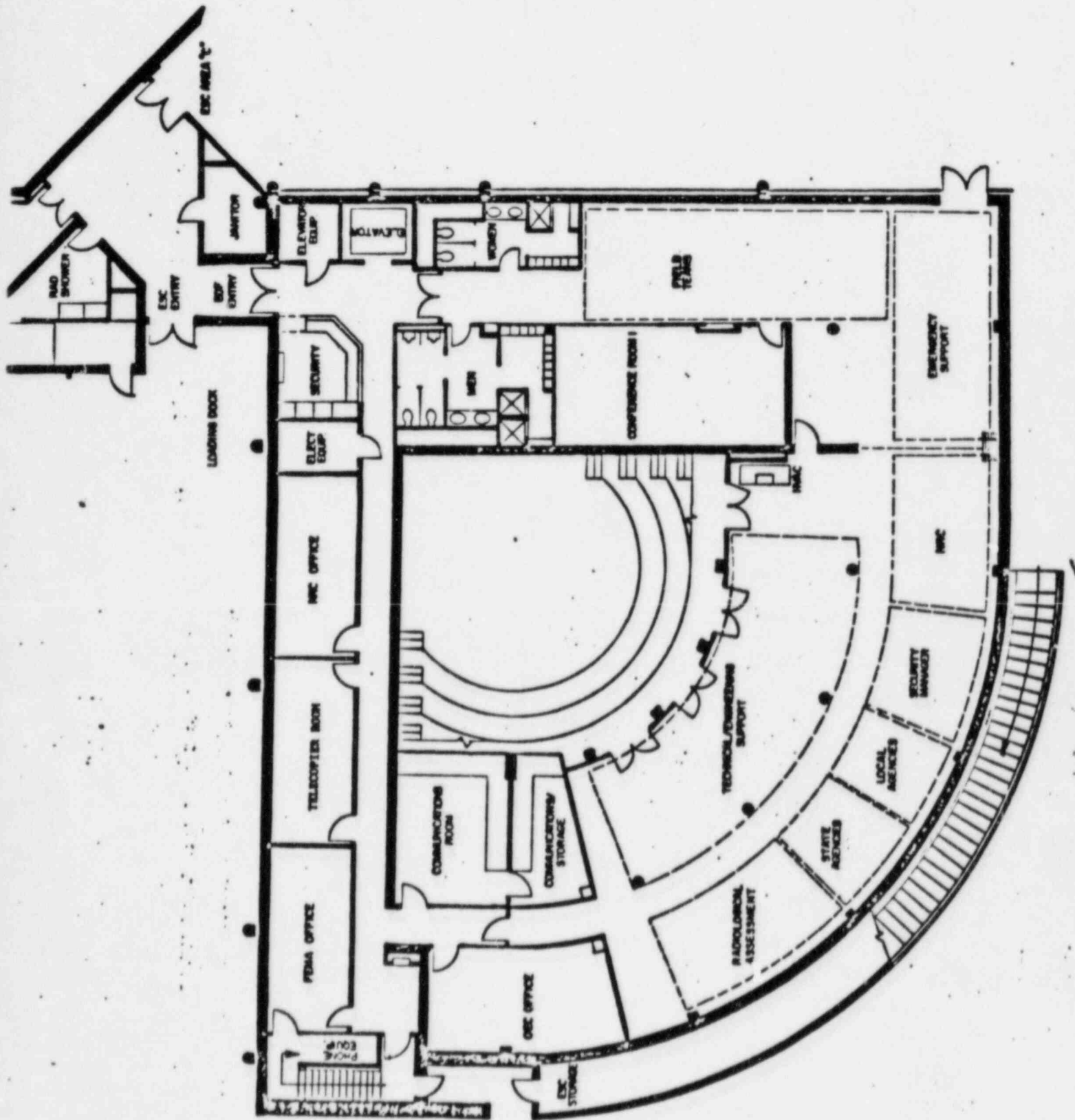
+ MSS Employee

\* Temporarily assigned as Associate Director of the GGNS Construction Audit.  
C. L. Tyrone acting in this capacity

SAP



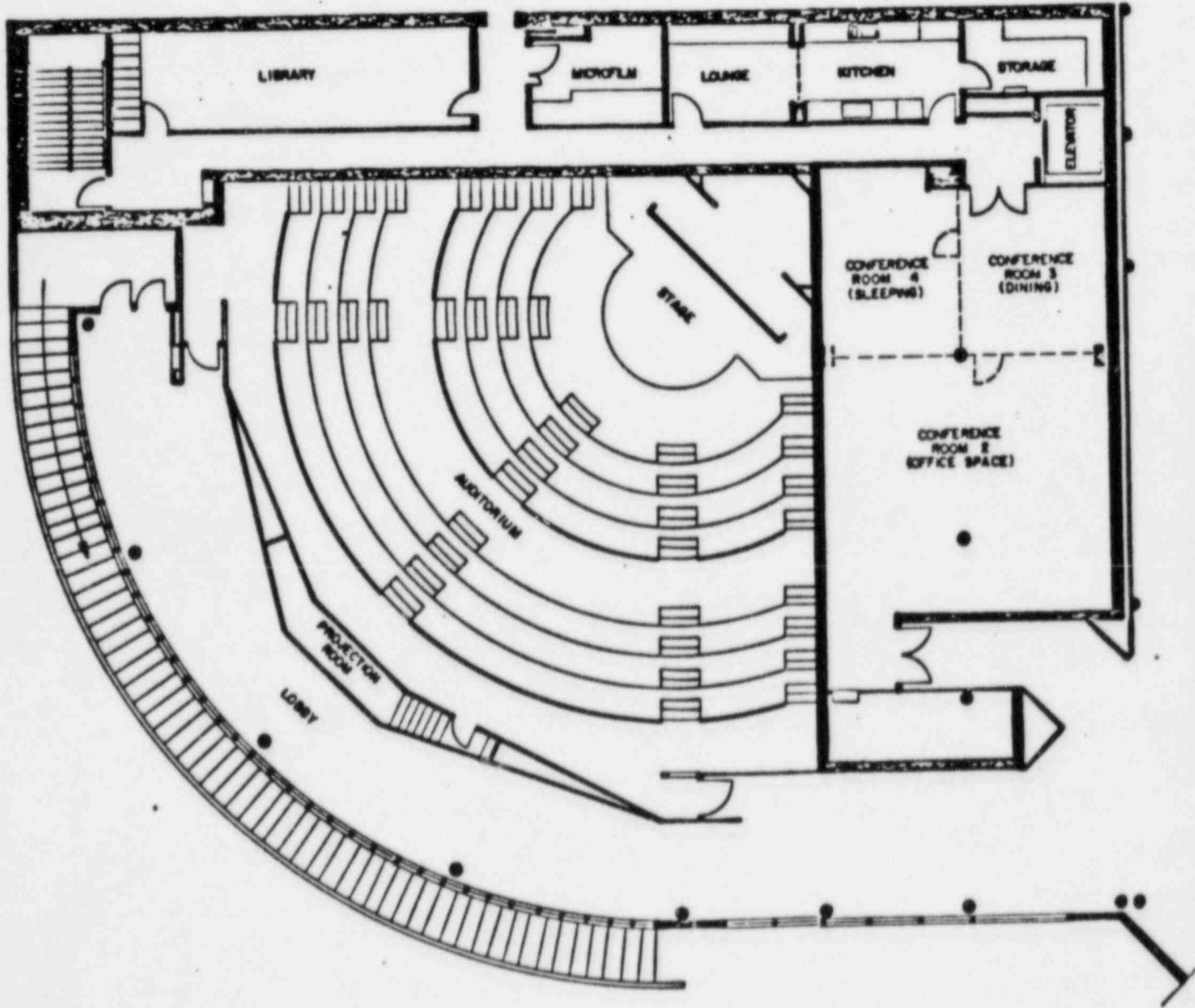
Site Layout



GGNS EMERGENCY OPERATIONS FACILITY (LEVEL I)



TRAINING



LEVEL 2

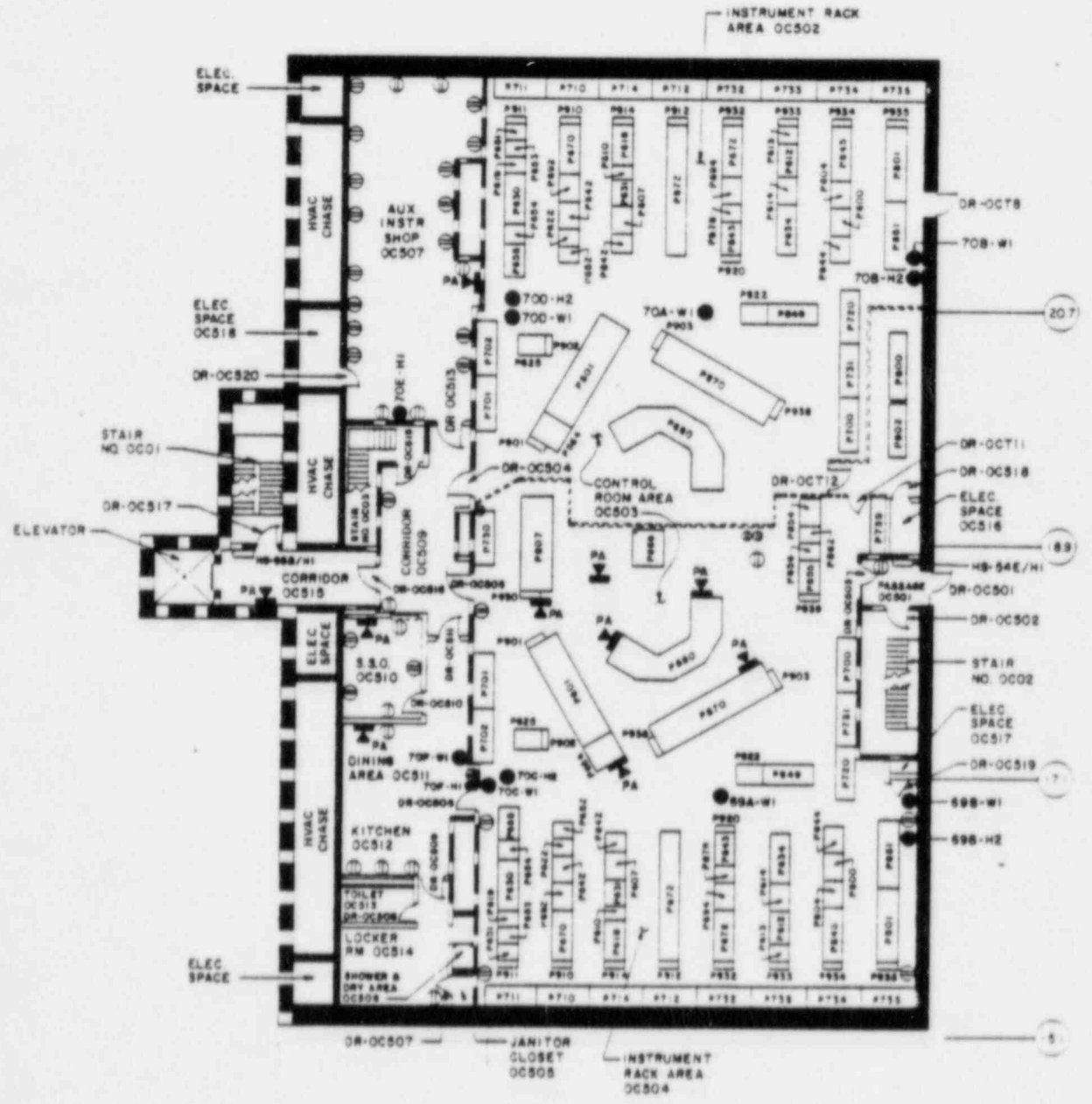
CONTROL ROOM

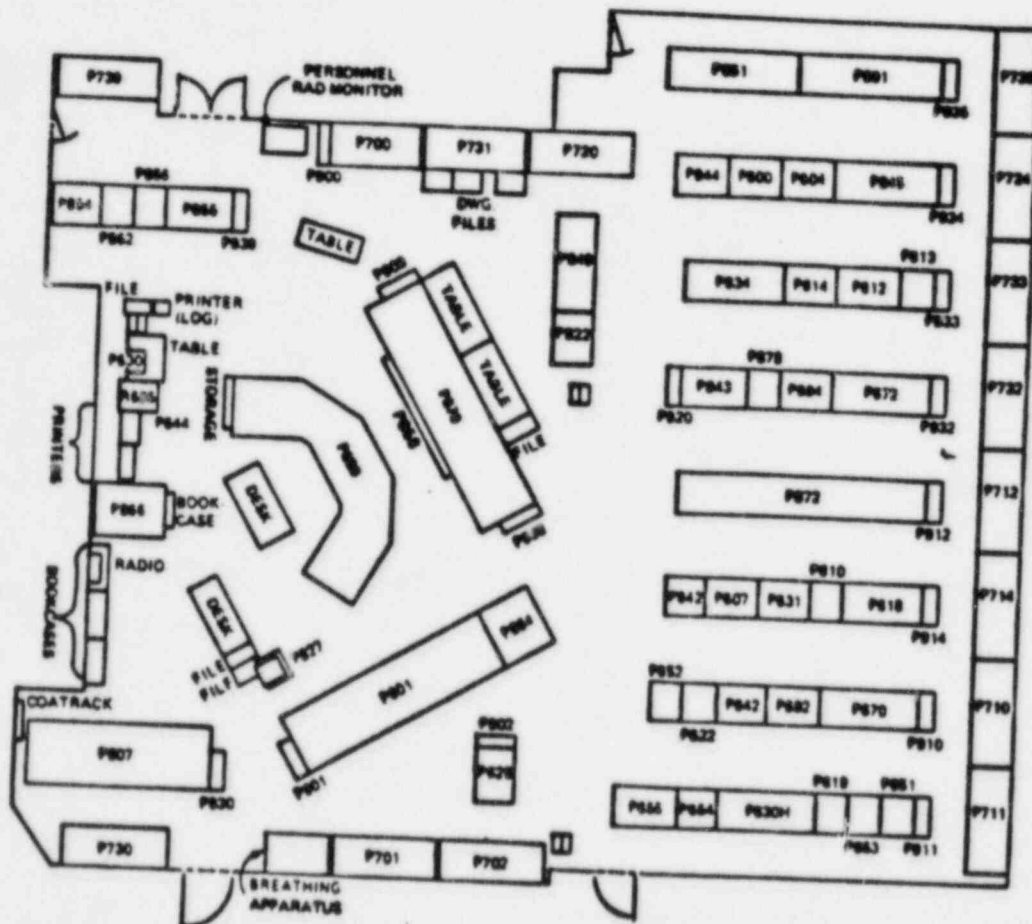


FIRE PRE-PLAN 0-13  
ATTACHMENT 2 OF 2, REV 0  
MAJOR EQUIPMENT  
ELEVATION: 166'-0"

NOTES

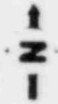
- 3-HOURS FIRE DELINEATION
- 2-HOURS FIRE DELINEATION
- PUBLIC ADDRESS (PA)
- 120 VAC OUTLET
- HOSE STATION
- DOOR
- FIRE EXTINGUISHER
- HALON
- WATER



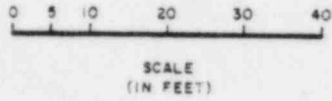


N13-P801	GENERATOR & TRANSFORMER PROTECTION VB	N13-P831	AUTO DEPRESS CHANNEL "B" RELAY VB
N13-P807	AUXILIARY ELECTRICAL CONTROL BB	N13-P834	RECIRC FLOW CONTROL
N13-P822	TURBINE SUPERVISORY RECORDER VB	N13-P842	DIV. 2 LEAK DETECTION VB
N13-P842	HVAC CONTROL VB	N13-P864	MSIV DIV. 2 VB
N13-P843	BOP PROCESS INSTRUMENT CABINET	N13-P855	MSIV DIV. 1 VB
N13-P844	AREA RADIATION MONITOR CABINET	N13-P870	NEUTRON & RADIATION MONITOR DIV. 3
N13-P845	OFF GAS SYSTEM (LOW TEMP) CONTROL VB	N13-P872	NEUTRON & RADIATION MONITOR DIV. 4
N13-P851	ANNUNCIATOR LOGIC CABINET	N13-P880	OPERATOR CONTROL CONSOLE
N13-P854	PLANT CONTROL VERTICAL BOARD	N13-P882	DIV. 2 RPS LOGIC VB
N13-P855	CONTROL ROOM VENT VERTICAL BOARD	N13-P884	DIV. 4 RPS LOGIC VB
N13-P856	SEISMIC INSTRUMENT CABINET	N13-P851	ROD ACTION CONTROL CAB DIV. I
N13-P862	FIRE PROTECTION VB	N13-P852	ROD ACTION CONTROL CAB DIV. II
N13-P864	DIESEL GENERATOR BB	N13-P853	ROD DRIVE CONTROL CAB
N13-P866	MONITORING CONSOLE	N13-P900	FIRE PROTECTION CABINET
N13-P870	AUXILIARY CONTROL BENCHBOARD	N13-P901	FIRE PROTECTION CABINET
N13-P872	DIV. II ESF LOGIC VB	N13-P902	FIRE PROTECTION CABINET
N13-P849	BOP LOGIC VB	N13-P903	FIRE PROTECTION CABINET
N13-P878	DIV. 4 ESF LOGIC VB	N13-P810	FIRE PROTECTION CABINET
N13-P7XX	TERMINATION CABINETS	N13-P811	FIRE PROTECTION CABINET
N13-P800	PROCESS RADIATION RECORDERS VB	N13-P812	FIRE PROTECTION CABINET
N13-P801	REACTOR CORE COOLING BB	N13-P814	FIRE PROTECTION CABINET
N13-P804	PROCESS RADIATION MONITORING INSTRUMENT PANEL	N13-P820	FIRE PROTECTION CABINET
N13-P807	TIP CONTROL & MONITORING INSTRUMENT PANEL	N13-P830	FIRE PROTECTION CABINET
N13-P810	CONTROL ROD TEST INSTRUMENT PANEL	N13-P832	FIRE PROTECTION CABINET
N13-P812	FEEDWATER & RECIRCULATION VB	N13-P833	FIRE PROTECTION CABINET
N13-P813	NSSS PROCESS INSTRUMENT CABINET	N13-P834	FIRE PROTECTION CABINET
N13-P814	NSSS TEMPERATURE RECORDER VB	N13-P835	FIRE PROTECTION CABINET
N13-P818	DIV. 2 RESIDUAL HEAT REMOVAL (RHR) B & C RELAY VB	N13-P838	FIRE PROTECTION CABINET
N13-P819	JET PUMP INSTRUMENTATION PANEL	N13-P839	FIRE PROTECTION CABINET
N13-P822	INBOARD VALVE RELAY VB	CB1-P808	NSSS CRT
N13-P825	HIGH PRESSURE CORE SPRAY RELAY VB	CB1-P844	NSSS PERIPHERAL TABLE
N13-P830	REMOTE ANN ELECTRONIC VB P830H	CB3-P827	BPDS CONSOLE
		N13-P858	ISOLATION VALVE STATUS PANEL

Figure 1. Main Control Room Layout

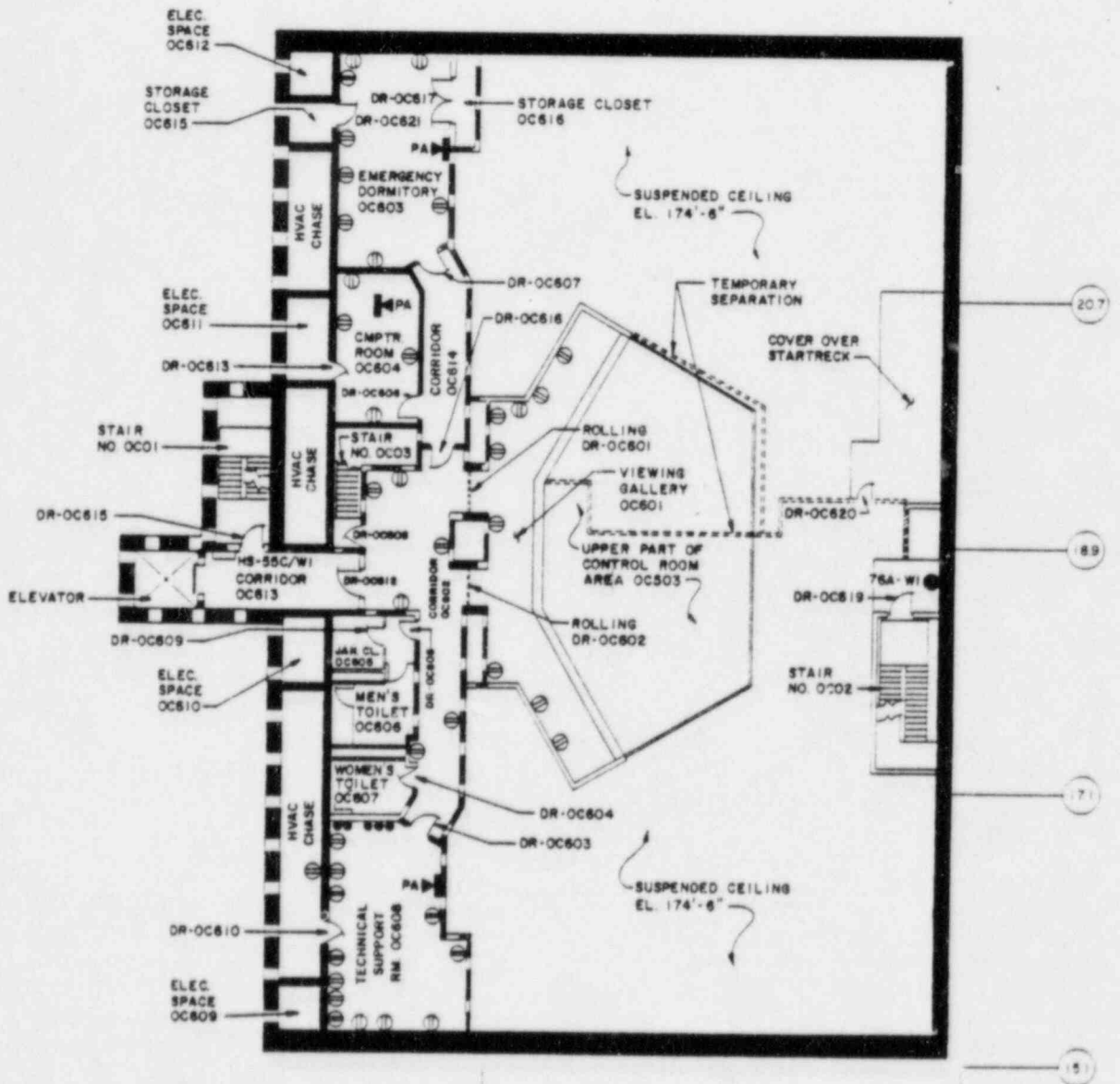


CONTROL BUILDING  
 ELEVATION 177'-0"



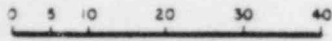
NOTES:

- 3-HOURS FIRE DELINEATION
- 2-HOURS FIRE DELINEATION
- PUBLIC ADDRESS (PA)
- 120VAC OUTLET
- HOSE STATION
- DOOR
- NORMAL ROUTE
- ALTERNATE ROUTE
- FIRE EXTINGUISHER
- WATER





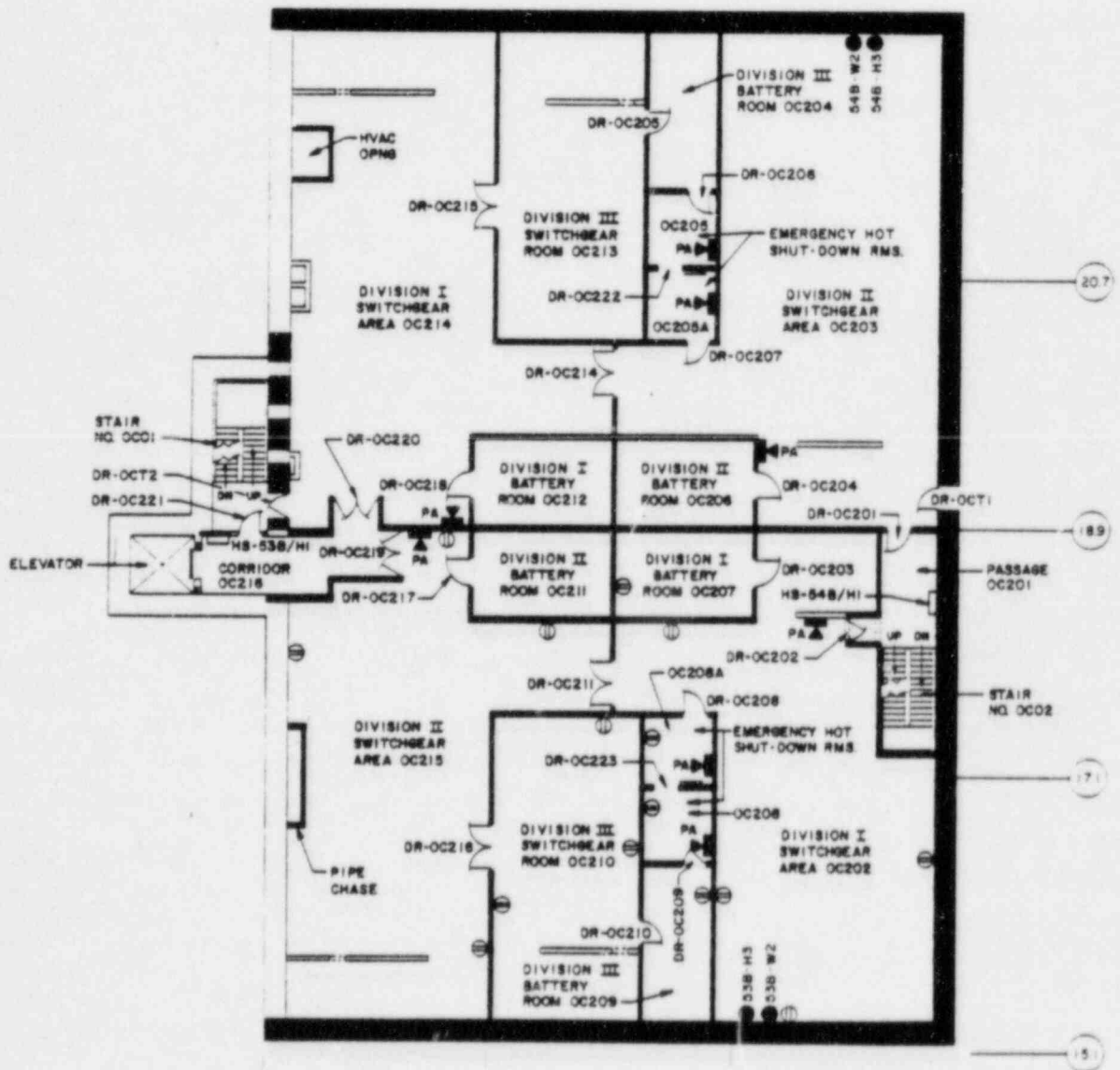
CONTROL BUILDING  
ELEVATION III'-0"



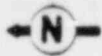
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NOTES:

- 3-HOURS FIRE DELINEATION
- 2-HOURS FIRE DELINEATION
- PUBLIC ADDRESS (PA)
- 120VAC OUTLET
- HOSE STATION
- DOOR
- NORMAL ROUTE
- ALTERNATE ROUTE
- FIRE EXTINGUISHER
- HALON
- WATER







AUXILIARY BLDG  
ELEVATION 208'-10"

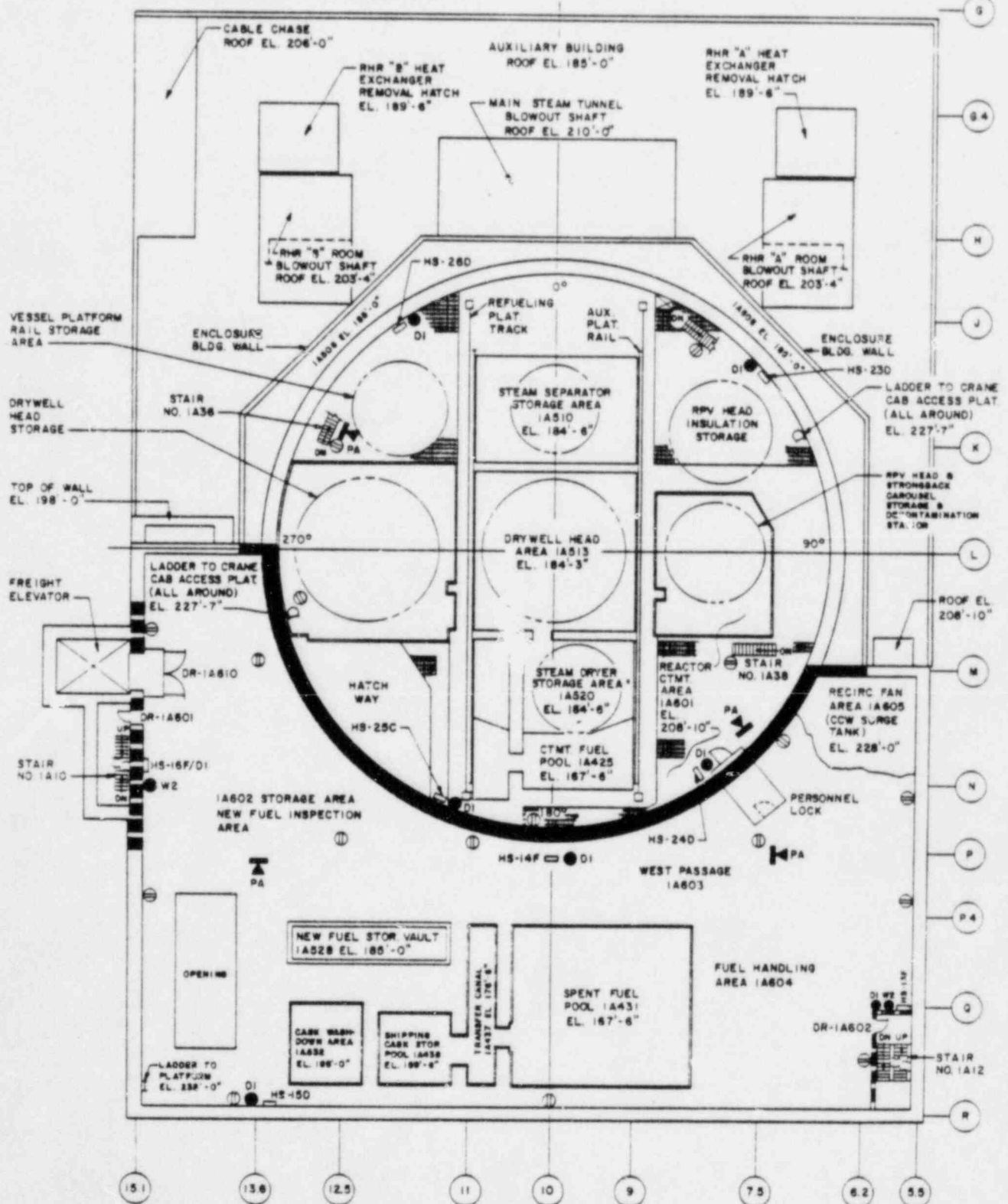
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SCALE  
(IN FEET)

NOTES:

- FIRE PRE-PLAN A-  
ATTACHMENT 1 OF 2, REV 0  
ACCESS DRAWING
- 3-HOURS FIRE DELINEATION
  - 2-HOURS FIRE DELINEATION
  - PUBLIC ADDRESS (PA)
  - 120VAC OUT-LET
  - HOSE STATION
  - DOOR
  - NORMAL ROUTE
  - ALTERNATE ROUTE
  - FIRE EXTINGUISHER
  - DRY CHEMICAL
  - WATER







COMMUNICATION BAY  
ROOF EL. 184'-9"

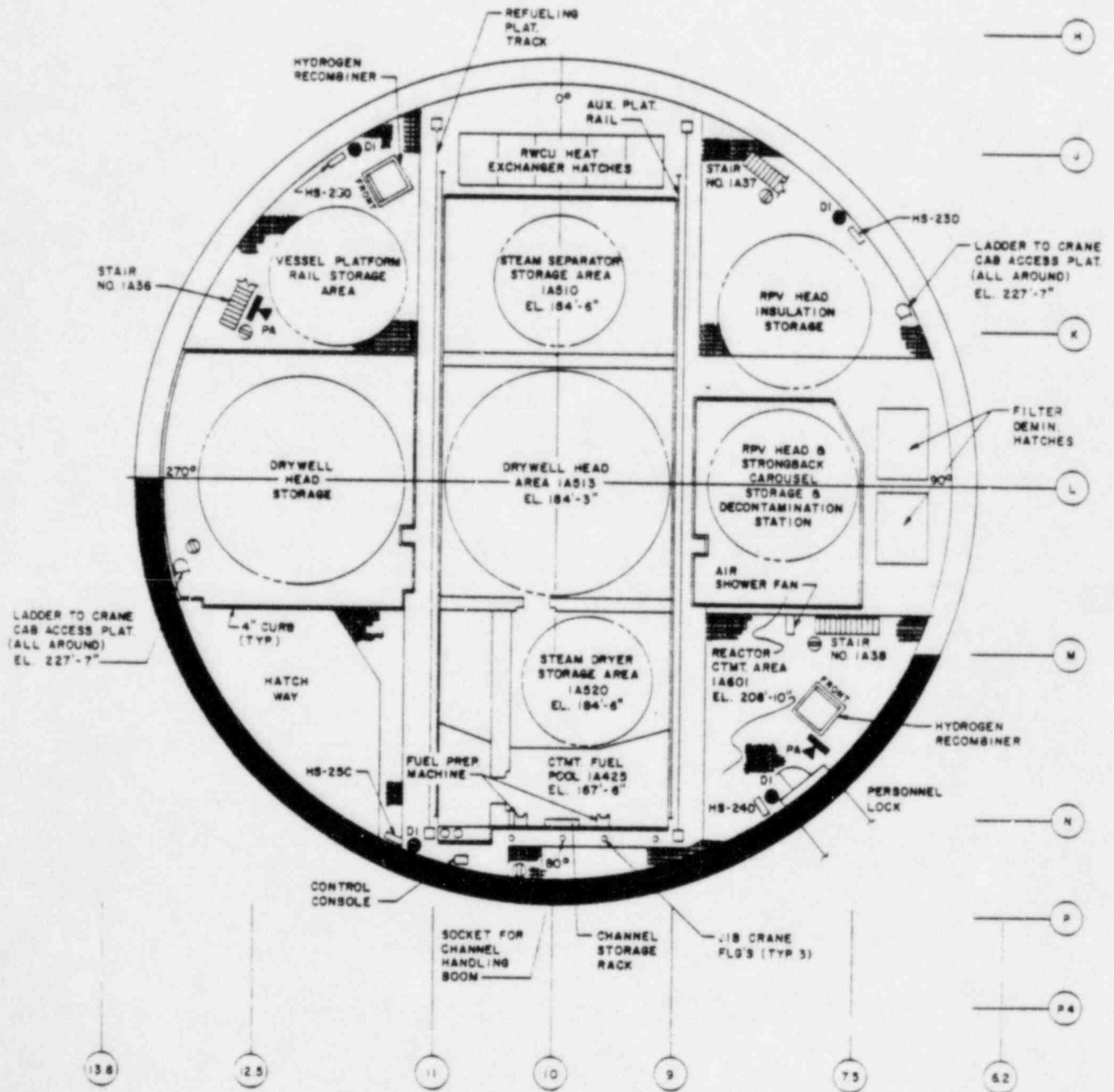


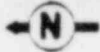


FIRE PRE-PLAN A-47  
 ATTACHMENT 2 OF 2, REV 0  
 MAJOR EQUIPMENT  
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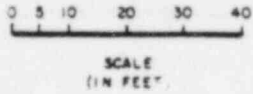
**NOTES**

-  3-HOURS FIRE DELINEATION
-  DRY CHEMICAL
-  FIRE EXTINGUISHER
-  HOSE STATION
-  PUBLIC ADDRESS (PA)
-  20VAC OUTLET





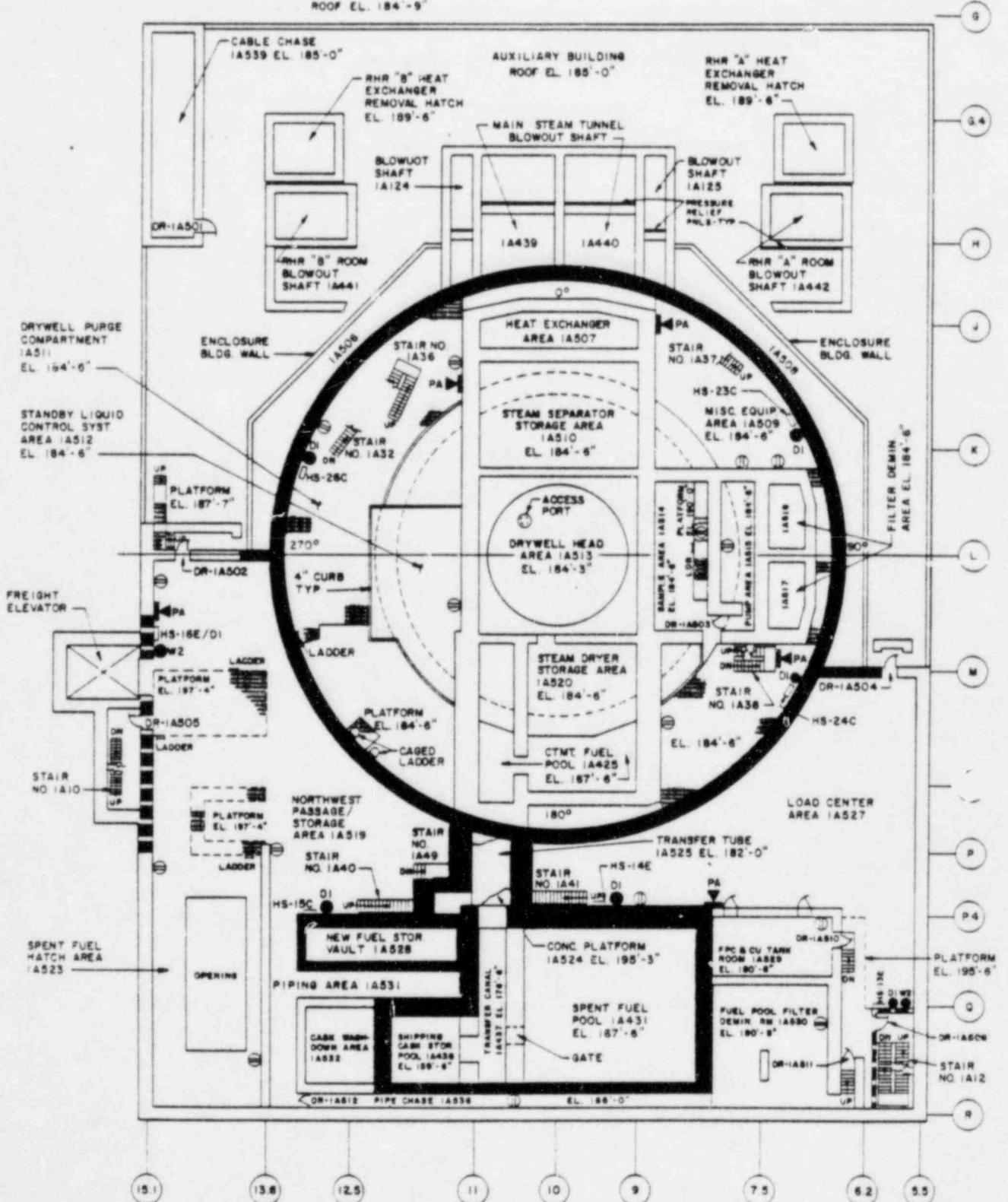
AUXILIARY BLDG  
ELEVATION 185'-0"



NOTES

- 3-HOURS FIRE DELINEATION
- 2-HOURS FIRE DELINEATION
- PUBLIC ADDRESS (PA)
- 120 VAC OUTLET
- HOSE STATION
- DOOR
- NORMAL ROUTE
- ALTERNATE ROUTE
- FIRE EXTINGUISHER
- DRY CHEMICAL
- WATER








COMMUNICATION BAY  
ROOF EL. 184'-9"

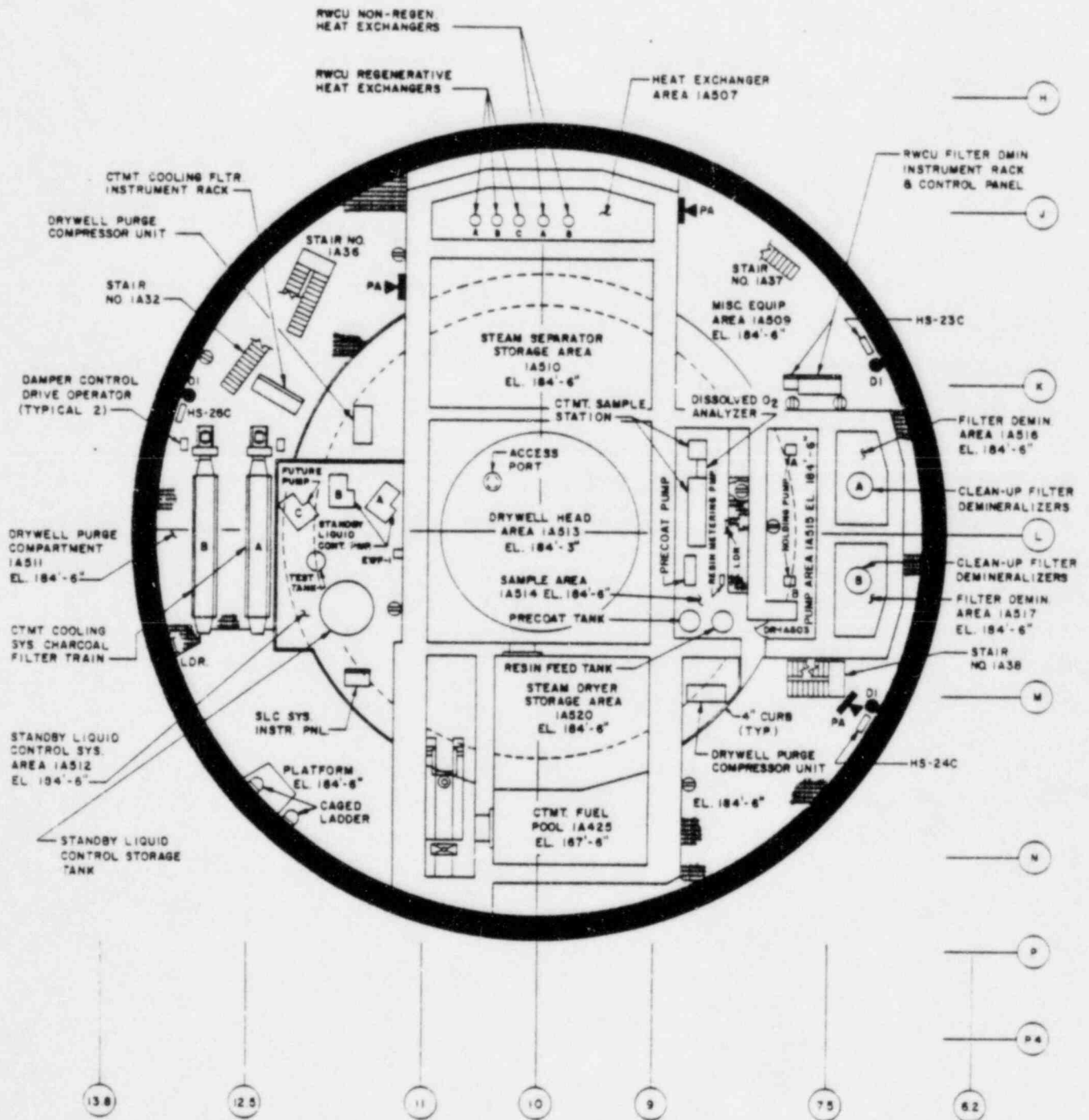
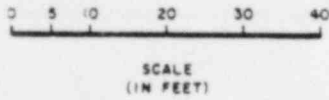




FIRE PRE-PLAN A-40  
ATTACHMENT 2 OF 2, REV 0  
MAJOR EQUIPMENT  
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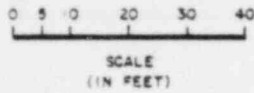
NOTES

-  3-HOURS FIRE DELINEATION
-  120VAC OUTLET
-  PUBLIC ADDRESS (PA)
-  HOSE STATION
-  FIRE EXTINGUISHER
-  DRY CHEMICAL
-  DOOR



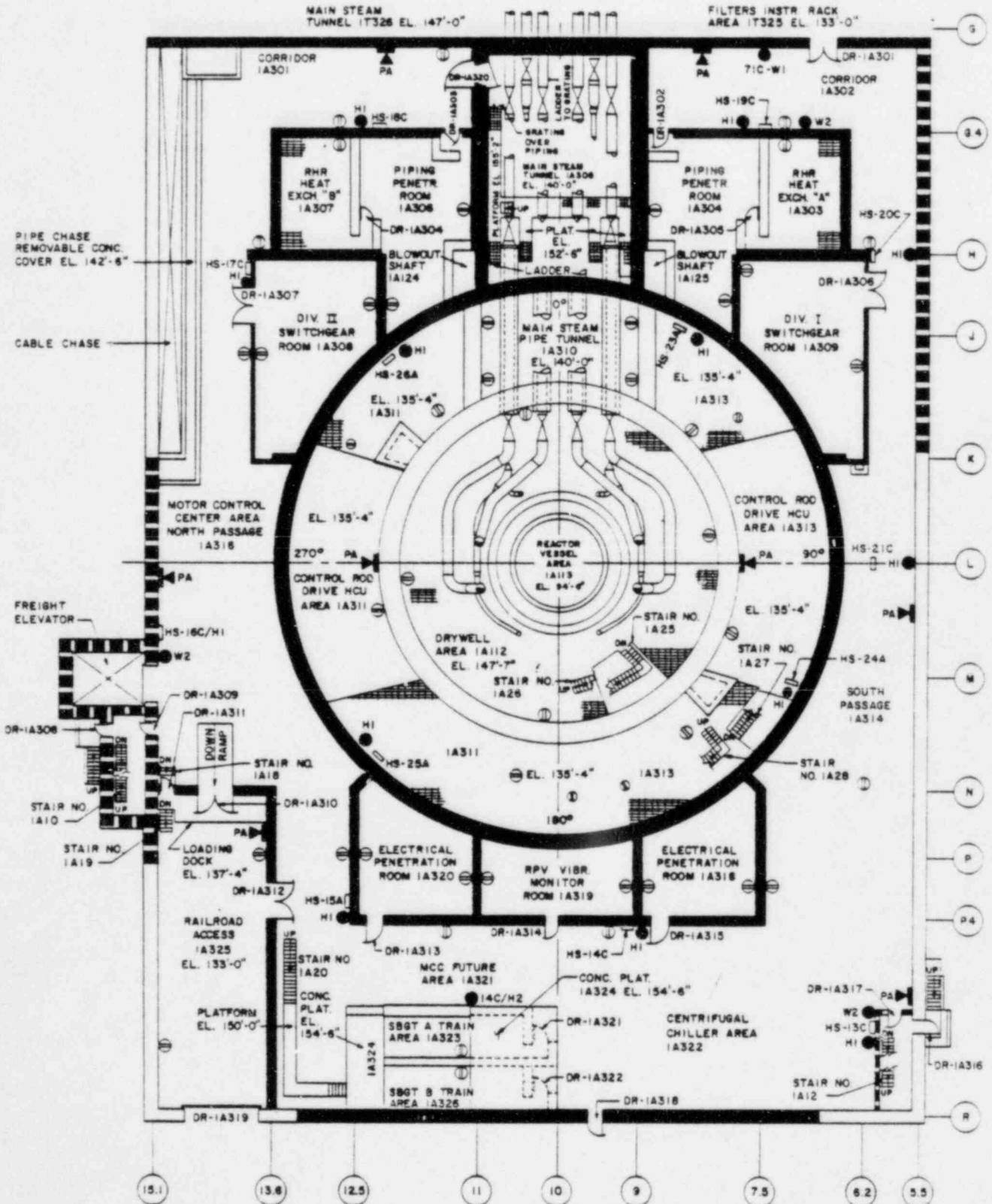


AUXILIARY BLDG.  
ELEVATION 139'-0"



NOTES







- 3-HOURS FIRE DELINEATION
- 2-HOURS FIRE DELINEATION
- PUBLIC ADDRESS (PA)
- 120 VAC OUTLET
- HOSE STATION
- DOOR
- NORMAL ROUTE
- ALTERNATE ROUTE
- FIRE EXTINGUISHER
- HALON
- WATER

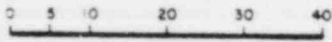




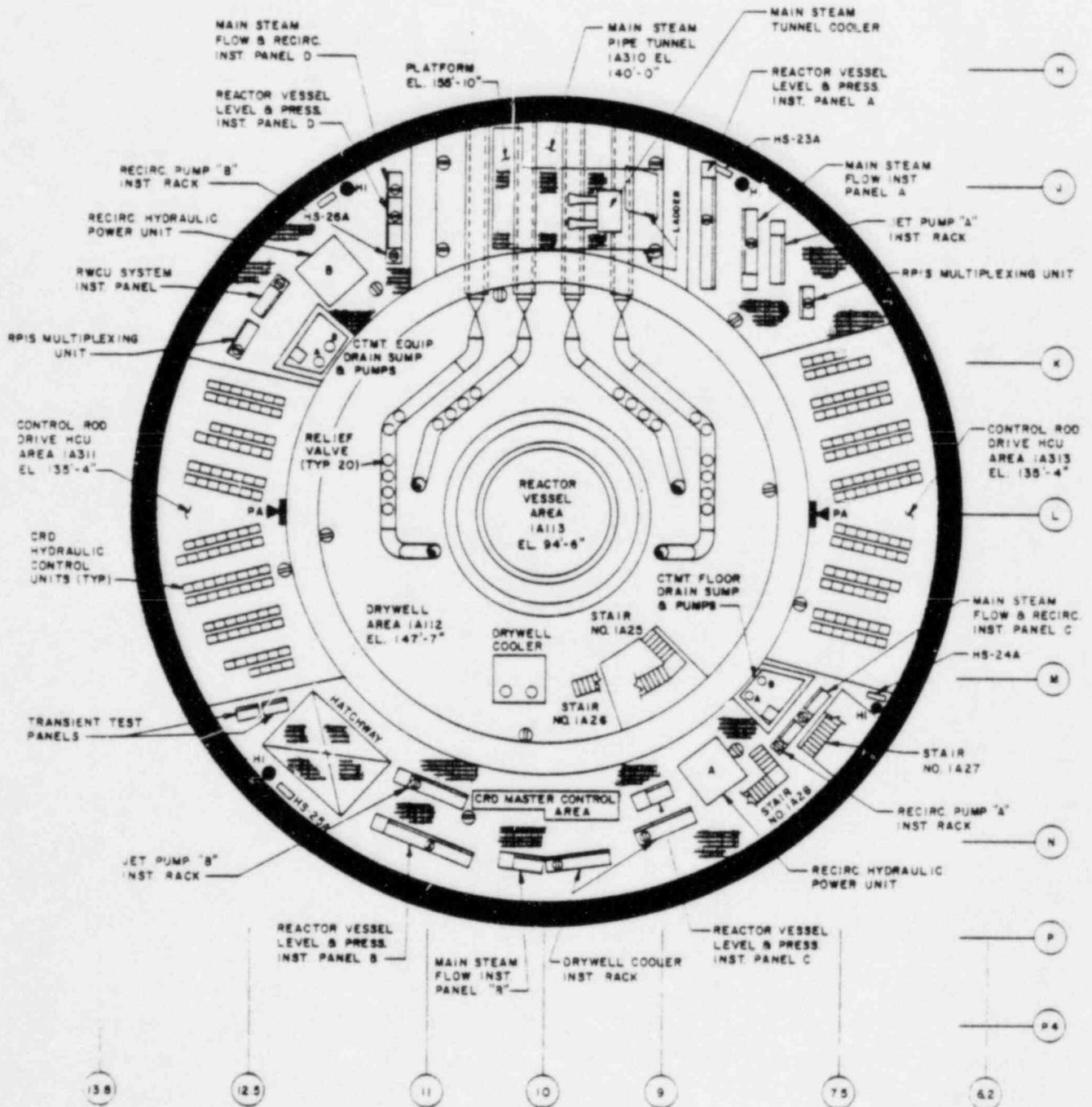


NOTES

-  3-HOURS FIRE DELINEATION
-  20VAC OUTLET
-  PUBLIC ADDRESS (PA)
-  HOSE STATION
-  FIRE EXTINGUISHER
-  HALON



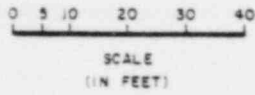
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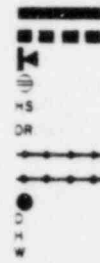




AUXILIARY BLDG.  
ELEVATION 119'-0"

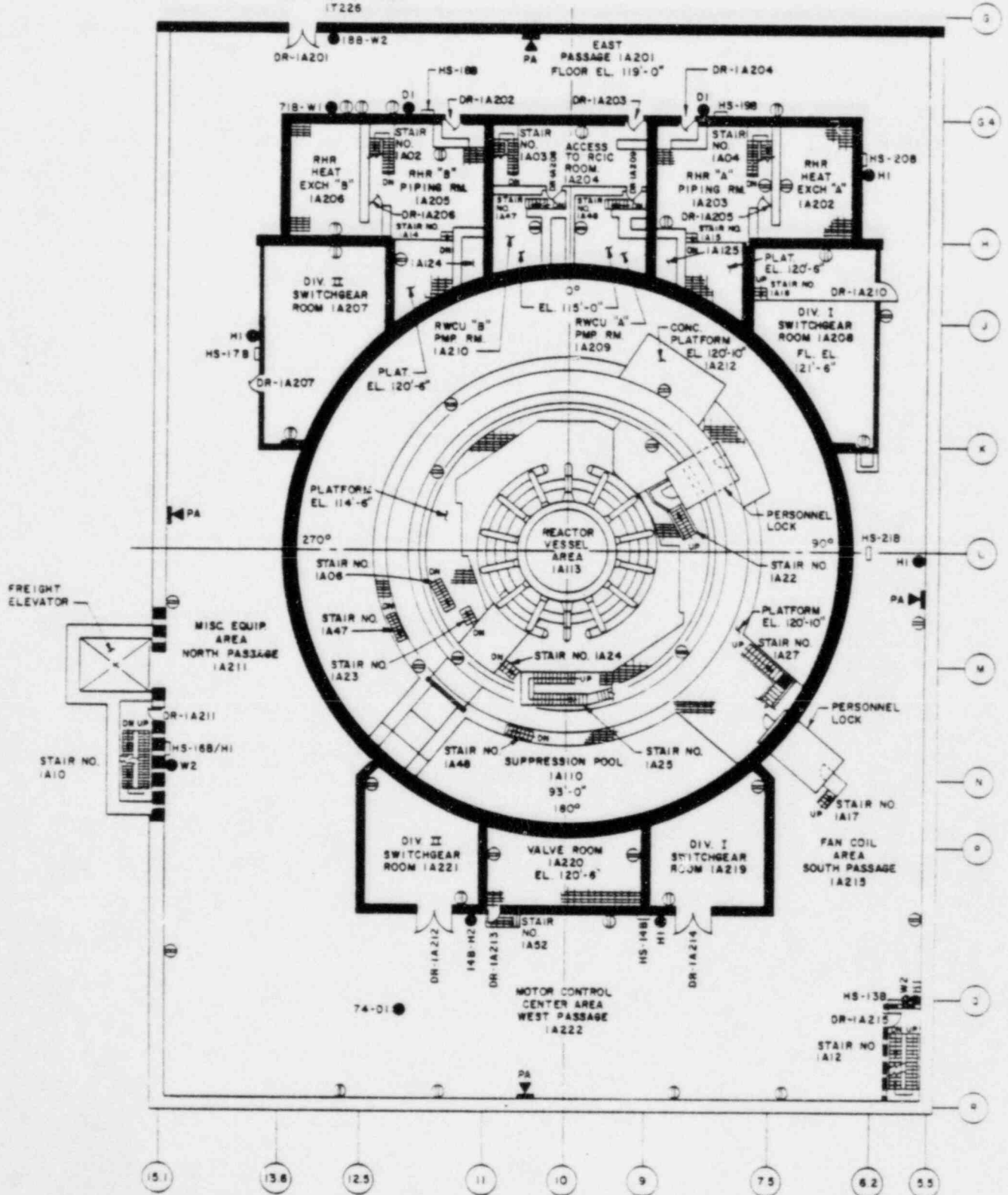


NOTES:



FIRE PRE PLAN 1-  
ATTACHMENT 1 OF 2, REV. 0  
ACCESS DRAWING

TURBINE BLDG.  
LOAD CENTER AREA  
17226



18

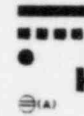


AUXILIARY BLDG  
ELEVATION 93'-0"/103'-0"

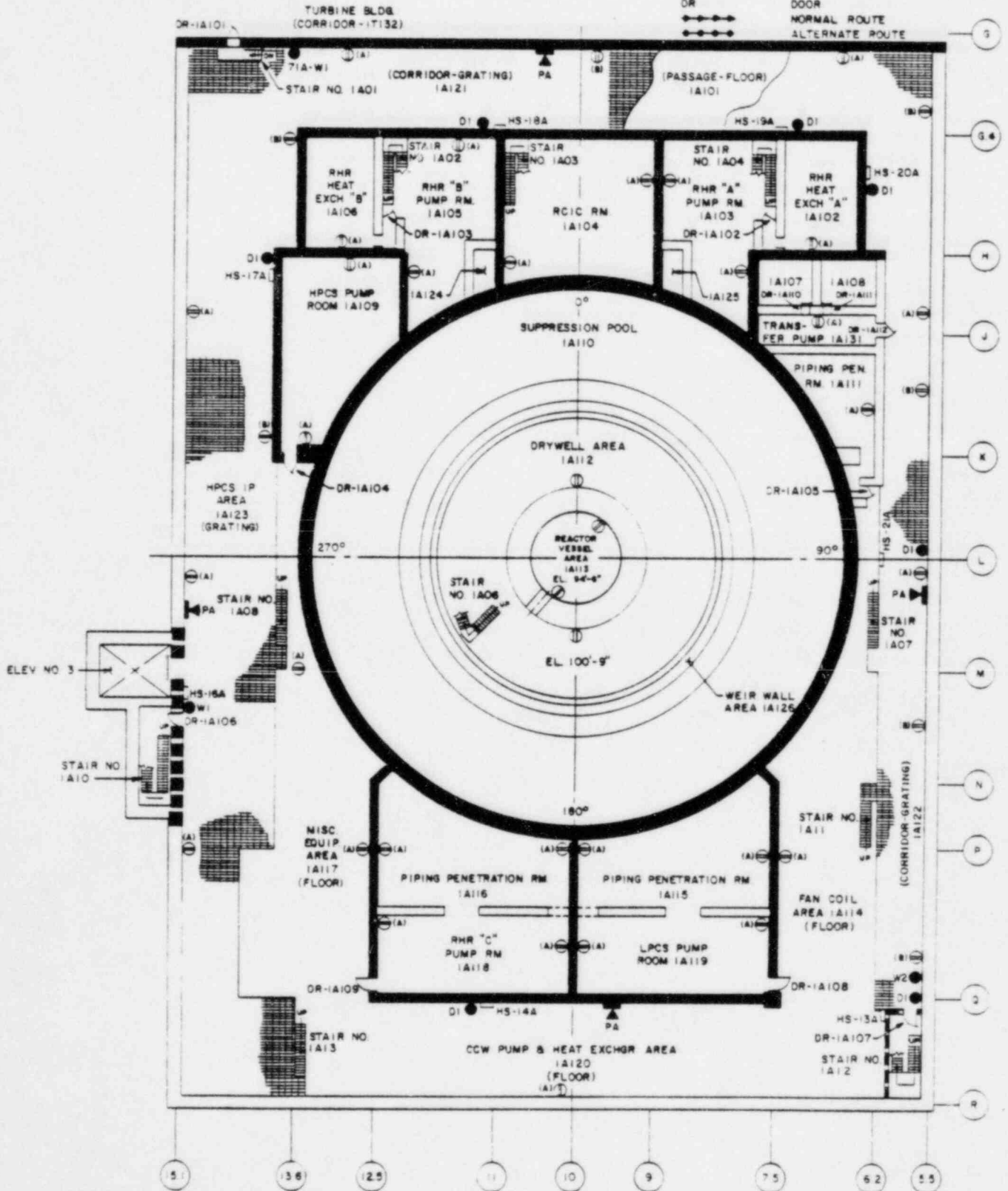


NOTES:

D DRY CHEMICAL  
H HALON  
W WATER



3-HOURS FIRE DELINEATION  
2-HOURS FIRE DELINEATION  
FIRE EXTINGUISHER  
PUBLIC ADDRESS (PA)  
120 VAC OUTLET  
93'-0" ELEVATION  
120 VAC OUTLET  
103'-0" ELEVATION  
93'-0" ELEVATION  
103'-0" ELEVATION  
FLOOR  
GRATING  
HS HOSE STATION  
DR DOOR  
NORMAL ROUTE  
ALTERNATE ROUTE



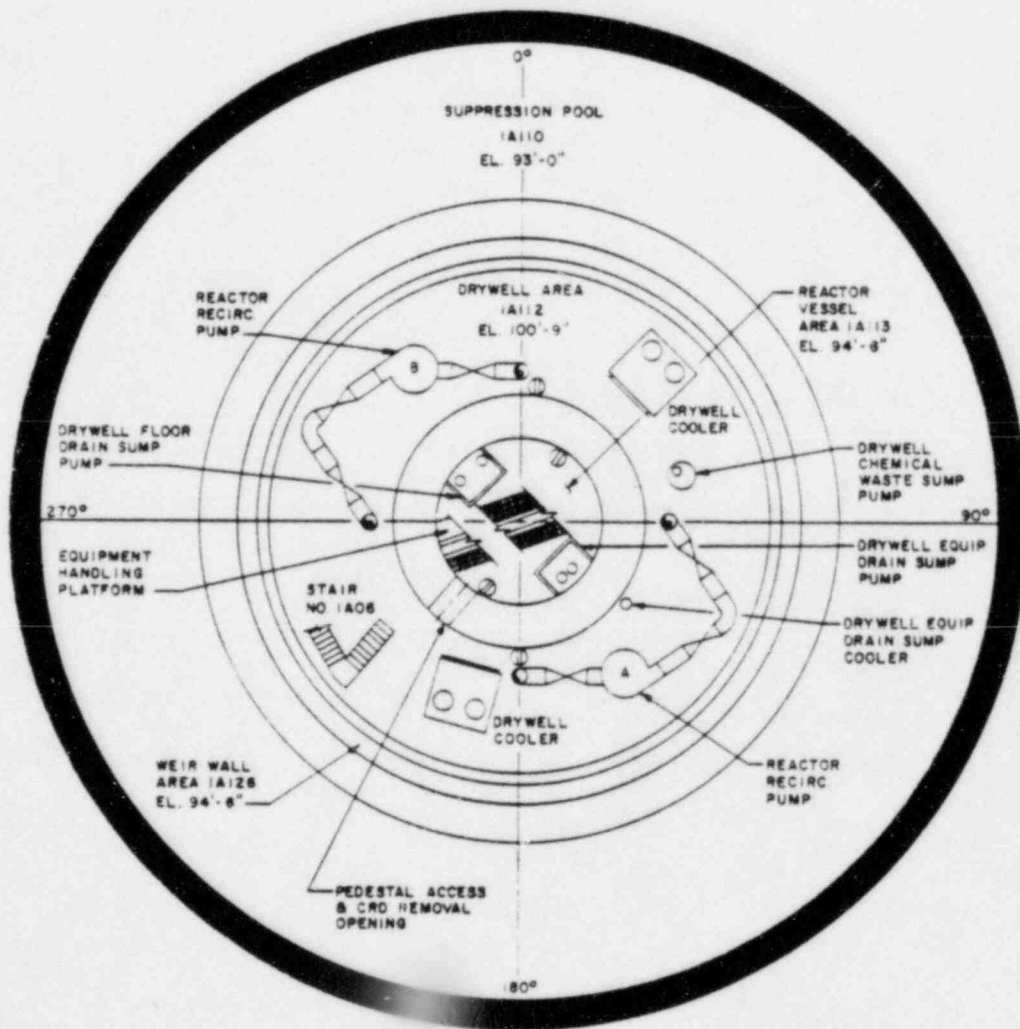
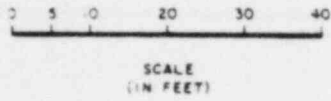


FIRE PRE-PLAN 4-07  
ATTACHMENT 2 OF 4, REV 0  
MAJOR EQUIPMENT  
ELEVATION 93'-0"

NOTES



3-HOURS FIRE DELINEATION  
120VAC OUTLET



138

125

11

10

9









75

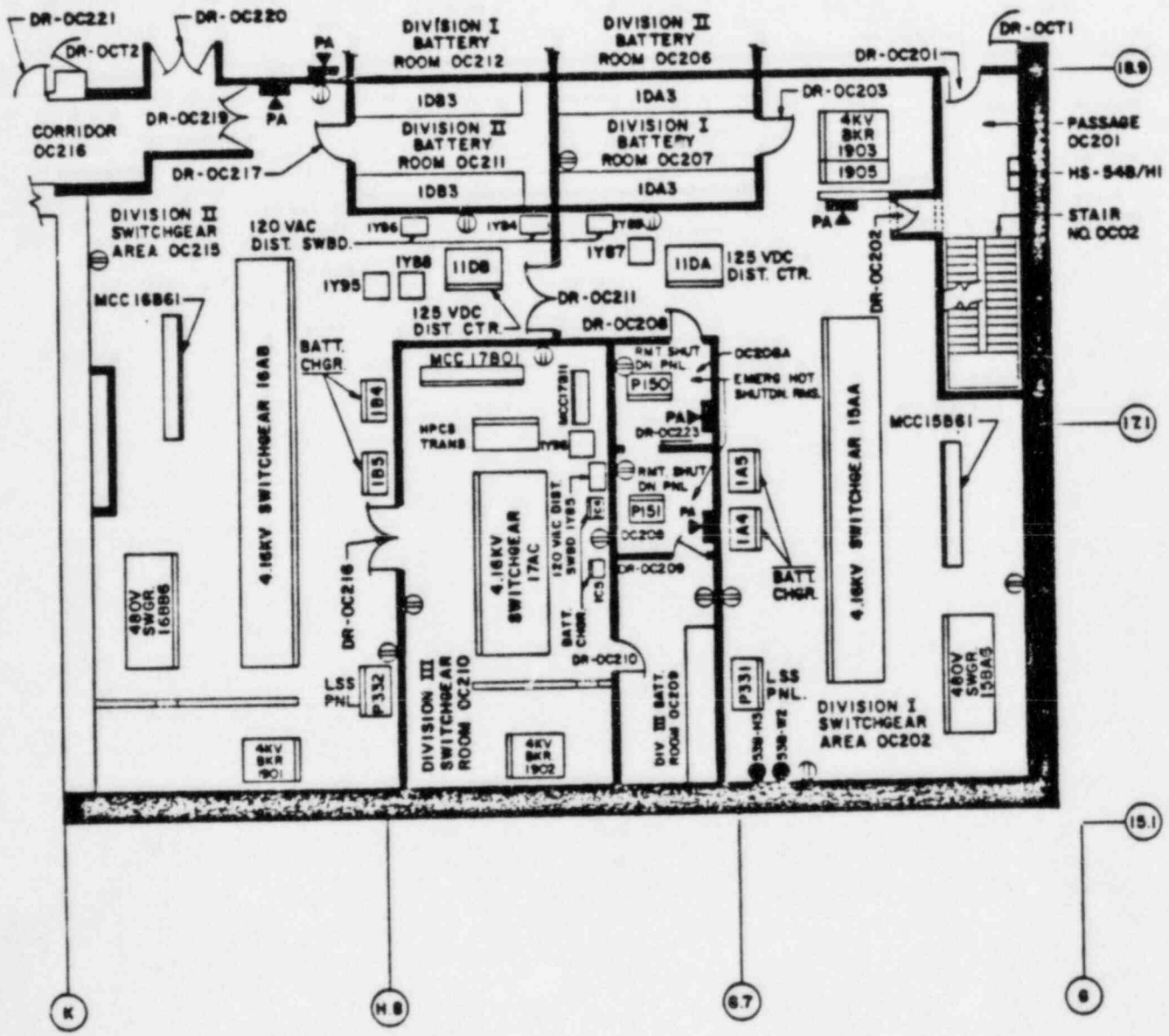
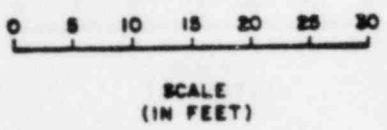
62

REMOTE SHUTDOWN PANEL



**NOTES:**

-  3-HOURS FIRE DELINEATION
-  PUBLIC ADDRESS (PA)
-  120 VAC OUTLET
-  HOSE STATION
-  DOOR
-  FIRE EXTINGUISHER
-  HALON
-  WATER



CG  
FSAR

TABLE 7.4-3

CONTROLS ON REMOTE SHUTDOWN PANEL

<u>Instrument Number</u>	<u>Panel</u>	<u>Equipment No.</u>	<u>Description</u>
1C61 HS M001A	1H22P150	Q1P41-C001A-A	STANDBY SERVICE WATER PUMP A
1C61 HS M001B	1H22P151	Q1P41-C001B-B	STANDBY SERVICE WATER PUMP B
1C61 HS M002A	1H22P150	Q1P41-F001A-A	SSW PUMP A DISCHARGE VALVE
1C61 HS M002B	1H22P151	Q1P41-F001B-B	SSW PUMP B DISCHARGE VALVE
1C61 HS M003A	1H22P150	Q1P41-F007A-A	SSW A BASIN TRANSFER VALVE
1C61 HS M003B	1H22P151	Q1P41-F007B-B	SSW B BASIN TRANSFER VALVE
1C61 HS M004A	1H22P150	Q1P41-F006A-A	SSW PUMP A RECIRC VALVE
1C61 HS M004B	1H22P151	Q1P41-F006B-B	SSW PUMP B RECIRC VALVE
1C61 HS M007A	1H22P150	Q1P41-F014A-A	RHR HX A INLET VALVE
1C61 HS M007B	1H22P151	Q1P41-F014B-B	RHR HX B INLET VALVE
1C61 HS M008A	1H22P150	Q1P41-F068A-A	RHR HX A OUTLET VALVE
1C61 HS M008B	1H22P151	Q1P41-F068B-B	RHR HX B OUTLET VALVE
1C61 HS M009A	1H22P150	Q1P41-F018A-A	DSL GEN 11 HT EXCH IN VLV
1C61 HS M009B	1H22P151	Q1P41-F018B-B	DSL GEN 12 HT EXCH IN VLV
1C61 HS M010A	1H22P150	Q1P41-F005A-A	SSW A RTN VLV TO CLG TOWER
1C61 HS M010B	1H22P151	Q1P41-F005B-B	SSW B RTN VLV TO CLG TOWER
1C61 HS M011A	1H22P150	Q1P41-C003A-A	SSW A CLG TWR FAN A
1C61 HS M011B	1H22P151	Q1P41-C003C-B	SSW B CLG TWR FAN C
1C61 HS M012A	1H22P150	Q1P41-C003B-A	SSW A CLG TWP FAN B
1C61 HS M012B	1H22P151	Q1P41-C003D-B	SSW B CLG TWR FAN D
1C61 HS M100	1H22P150	Q1E51-F031-A	SUCT FROM SUPPR POOL VALVE
1C61 HS M101	1H22P150	Q1E51-F013-A	RCIC INJECTION SHUTOFF VALVE
1C61 HS M104	1H22P150	Q1E51-F010-A	SUCT FROM CONDENSATE TANK
1C61 HS M106	1H22P150	Q1E51-F019-A	RCIRC MIN FLOW BYP VALVE
1C61 HS M107	1H22P150	Q1E51-F022-A	RCIC TEST FCV TO COND TANK
1C61 HS M108	1H22P150	Q1E51-F059-A	RCIC TEST RTN TO COND TANK
1C61 HS M111	1H22P150	Q1E51-F045-A	STEAM TO RCIC TURB VALVE
1C61 HS M112	1H22P150	Q1E51-C002	RCIC TURB TRIP & THROT VALVE
1C61 HS M117	1H22P150	Q1E51-F046A	RCIC TURBINE CLG WTR VALVE
1C61 HSS M121	1H22P150	Q1E51-C002	RCIC TURB LOCAL CONT SEL SW
1C61 HS M123	1H22P150	Q1E51-C002	RCIC GLAND SEAL CPRSR
1C61 HS M200A	1H22P150	Q1E12-C002A-A	RHR PUMP A
1C61 HS M200B	1H22P151	Q1E12-C002B-B	RHR PUMP B
1C61 HS M202A	1H22P150	Q1E12-F004A-A	RHR PUMP A SUCTION VALVE
1C61 HS M202B	1H22P151	Q1E12-F004B-B	RHR PUMP B SUCTION VALVE
1C61 HS M203	1H22P151	Q1E12-F009-A	SHUTDOWN CLG IB ISO VALVE
1C61 HS M204	1H22P150	Q1E12-F008-A	SHUTDOWN CLG DB ISO VALVE
1C61 HS M205A	1H22P150	Q1E12-F006A-A	SHUTDOWN CLG TO SYS A VALVE
1C61 HS M205B	1H22P151	Q1E12-F006B-B	SHUTDOWN CLG TO SYS B VALVE
1C61 HS M206A	1H22P150	Q1E12-F047A-A	RHR HT EXCH A INLET VALVE
1C61 HS M206B	1H22P151	Q1E12-F047B-B	RHR HT EXCH B INLET VALVE
1C61 HS M207A	1H22P150	Q1E12-F003A-A	RHR HT EXCH A OUTLET VALVE
1C61 HS M207B	1H22P151	Q1E12-F003B-B	RHR HT EXCH B OUTLET VALVE
1C61 HS M208A	1H22P150	Q1E12-F048A-A	RHR HT EXCH A BYPASS VALVE
1C61 HS M208B	1H22P151	Q1E12-F048B-B	RHR HT EXCH B BYPASS VALVE
1C61 HS M209A	1H22P150	Q1E12-F042A-A	RHR A INJECTION VALVE



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TABLE 7.4-3 (Cont.)

<u>Instrument Number</u>	<u>Panel</u>	<u>Equipment No.</u>	<u>Description</u>
1C61 HS M209B	1H22P151	Q1E12-F042B-B	RHR B INJECTION VALVE
1C61 HS M211A	1H22P150	Q1E13-F027A-A	RHR A INJECTION VALVE
1C61 HS M211B	1H22P151	Q1E12-F027B-B	RHR B INJECTION VALVE
1C61 HS M215A	1H22P150	Q1E12-F053A-A	SHUTDOWN CLG INJECTION VALVE
1C61 HS M215B	1H22P151	Q1E12-F053B-B	SHUTDOWN CLG INJECTION VALVE
1C61 HS M222A	1H22P150	Q1E12-F024A-A	RHR A TEST LINE VALVE
1C61 HS M222B	1H22P151	Q1E12-F024B-B	RHR B TEST LINE VALVE
1C61 HS M226A	1H22P150	Q1E12-F026A-A	RHR HT EXCH A COND TO RCIC
1C61 HS M226B	1H22P151	Q1E12-F026B-B	RHR HT EXCH B COND TO RCIC
1C61 HS M227A	1H22P150	Q1E12-F052A-A	RCIC STM TO RHR HX A
1C61 HS M227B	1H22P151	Q1E12-F052B-B	RCIC STM TO RHR HX B
1C61 HS M228A	1H22P150	Q1E12-F087A-A	RCIC STM TO RHR HX A
1C61 HS M228B	1H22P151	Q1E12-F087B-B	RCIC STM TO RHR HX B
1C61 HS M231A	1H22P150	Q1E12-F011A-A	RHR HX A FLOW TO SUPPR POOL
1C61 HS M231B	1H22P151	Q1E12-F011B-B	RHR HX B FLOW TO SUPPR POOL
1C61 HS M232	1H22P151	Q1E12-F023-A	RHR TO RCIC HEAD SPRAY LINE
1C61 HS M235	1H22P151	Q1E12-F049-B	RHR DISCHARGE TO RADWASTE
1C61 HS M236	1H22P150	Q1E12-F040-A	RHR DISCHARGE TO RADWASTE
1C61 HS M240	1H22P151	Q1E12-F094-B	SERVICE WATER BYPASS VALVE
1C61 HS M241	1H22P151	Q1E12-F096-B	SERVICE WATER BYPASS VALVE
1C61 HSS M252A	1H22P150	Q1E12-F004A-A	RHR PUMP A SUCT VALVE XFR SW
1C61 HSS M252B	1H22P151	Q1F12-F004B-B	RHR PUMP B SUCT VALVE XFR SW
1C61 HSS M255A	1H22P150	Q1E12-F006A-A	SHUTDOWN CLG VLV TRANSFER SW
1C61 HSS M255B	1H22P151	Q1E12-F006B-B	SHUTDOWN CLG VLV TRANSFER SW
1C61 HSS M256A	1H22P150	Q1E12-F047A-A	RHR HX A IN VLV XFR SW
1C61 HSS M256B	1H22P151	Q1E12-F047B-B	RHR HX B IN VLV XFR SW
1C61 HSS M290	1H22P151	Q1P41-F094-B	SERV WTR BYP VALVE XFR SW
1C61 HSS M291	1H22P151	Q1P41-F096-B	SERV WTR BYP VALVE XFR SW
1C61 HS M301A	1H22P150	N1C11-C001A-A	CRD PUMP A
1C61 HS M301B	1H22P151	N1C11-C001B-B	CRD PUMP B
1C61 HS M400B	1H22P150	Q1B21-F051A	SAFETY/RELIEF VALVE F051A
1C61 HS M400C	1H22P150	Q1B21-F051B	SAFETY/RELIEF VALVE F051B
1C61 HS M400D	1H22P150	Q1B21-F051D	SAFETY/RELIEF VALVE F051D
1C61 HS M401B	1H22P151	Q1B21-F051A	SAFETY/RELIEF VALVE F051A
1C61 HS M401C	1H22P151	Q1B21-F051B	SAFETY/RELIEF VALVE F051B
1C61 HS M401D	1H22P151	Q1B21-F051D	SAFETY/RELIEF VALVE F051D
1C61 FK R100	1H22P150	Q1E51-C002	RCIC TURB FLOW CONTROLLER
1C61 HS M400E	1H22P150	Q1B21-F047D	SAFETY/RELIEF VALVE F047D
1C61 HS M400F	1H22P150	Q1B21-F047G	SAFETY/RELIEF VALVE F047G
1C61 HS M400G	1H22P150	Q1B21-F051G	SAFETY/RELIEF VALVE F051G
1C61 HS M401E	1H22P151	Q1B21-F047D	SAFETY/RELIEF VALVE F047D
1C61 HS M401F	1H22P151	Q1B21-F047G	SAFETY/RELIEF VALVE F047G
1C61 HS M401G	1H22P151	Q1B21-F051G	SAFETY/RELIEF VALVE F051G
1C61 HS M302A	1H22P150	N1C11-C001A-A	CRD AUX LUBE OIL PUMP A
1C61 HS M302B	1H22P151	N1C11-C001B-B	CRD AUX LUBE OIL PUMP B

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TABLE 7.4-5  
AUXILIARY SUPPORTING  
SYSTEMS REQUIREMENTS

AUXILIARY SUPPORTING SYSTEMS		Heating, Ventilating, and Air Conditioning Systems								
		Standby Service Water System	Standby Power Systems	Diesel Generator Systems	Standby Service Water Pumphouse	Safeguard Switchgear and Battery Rooms				
Systems Required for Safe Shutdown	Standby liquid control system	X	X	X	X	X	X	X	X	X
	RHRS - Reactor shutdown cooling system	X	X	X	X	X	X	X	X	X
	Remote shutdown system	X	X	X	X	X	X	X	X	X
	Reactor core isolation cooling system		DC							
	Standby service water system									
	Standby power systems									
	Diesel generator systems									
Referenced subsection for description of auxiliary supporting systems		7.3.1.1.7	8.3.1.1 8.3.2.1	9.5.4 9.5.5 9.5.6 9.5.7 9.5.8	9.4.5	9.4.5	9.4.5	9.4.5	9.4.5	9.4.5

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TABLE 7.4-4

REMOTE SHUTDOWN PANEL DISPLAY INSTRUMENTATION

<u>Parameter Measured</u>	<u># of Channels</u>	<u>Range</u>	<u>System Accuracy</u>	<u>Type</u>	<u>Panel No</u>	<u>Instrument No</u>
SSW SYSTEM A FLOW	1	0-15000 GPM	+ 5%	Meter	1H22P150	1C61 FI R001A
SSW SYSTEM B FLOW	1	0-15000 GPM	± 5%	Meter	1H22P151	1C61 FI R001B
RCIC TURB SPEED	1	0-6000 RPM	± 3%	Meter	1H22P150	1C61 SI R101
CONDENSATE STOR TANK LEVEL	1	0-25 FT	± 5%	Meter	1H22P150	1C61 LI R102
RCIC TURB TRIPPED	1	-	-	Light	1H22P150	1C61 ZL R103
TURB HP BRG OIL TEMP HIGH	1	-	-	Light	1H22P150	1C61 TL R104
TURB LP BRG OIL TEMP HIGH	1	-	-	Light	1H22P150	1C61 TL R105
TURB BRG OIL PRESS LOW	1	-	-	Light	1H22P150	1C61 PL R106
TURB LUBE OIL TEMP HIGH	1	-	-	Light	1H22P150	1C61 TL R107
RHR SYSTEM A FLOW	1	0-1000 GPM	+ 5%	Meter	1H22P150	1C61 FI R200A
RHR SYSTEM B FLOW	1	0-1000 GPM	± 5%	Meter	1H22P151	1C61 FI R200B
SHUTDOWN CLG MANUAL SUCT VLV (E12-P010)	1	-	-	Light	1H22P151	1C61 ZL R201
REACTOR VESSEL LEVEL	2	-150/0/+60IN	+ 5%	Meter	1H22P150 1H22P151	1C61 LI R400A 1C61 LI R400B
REACTOR VESSEL PRESS	2	-150/0/+60IN	+ 5%	Meter	1H22P150 1H22P151	1C61 PI R401A 1C61 PI R401B
SUPPRESSION POOL LEVEL	2	14-26 FT	+ 5%	Meter	1H22P150 1H22P151	1C61 LI R402A 1C61 LI R402B
SUPPRESSION POOL TEMP	2	50-200 F	+ 3%	Meter	1H22P150 1H22P151	1C61 TI R403A 1C61 TI R403B

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ULTIMATE HEAT SINK

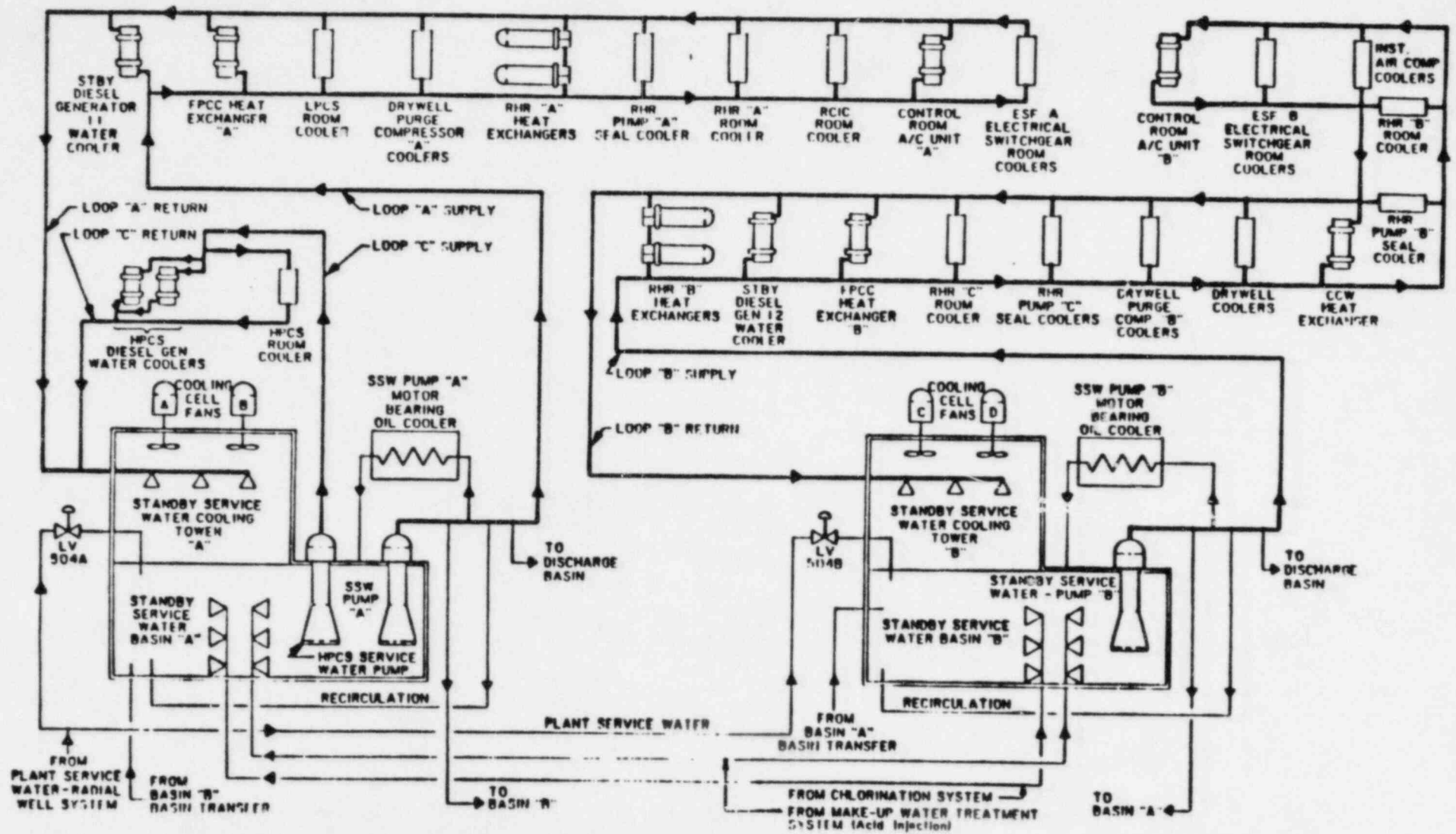
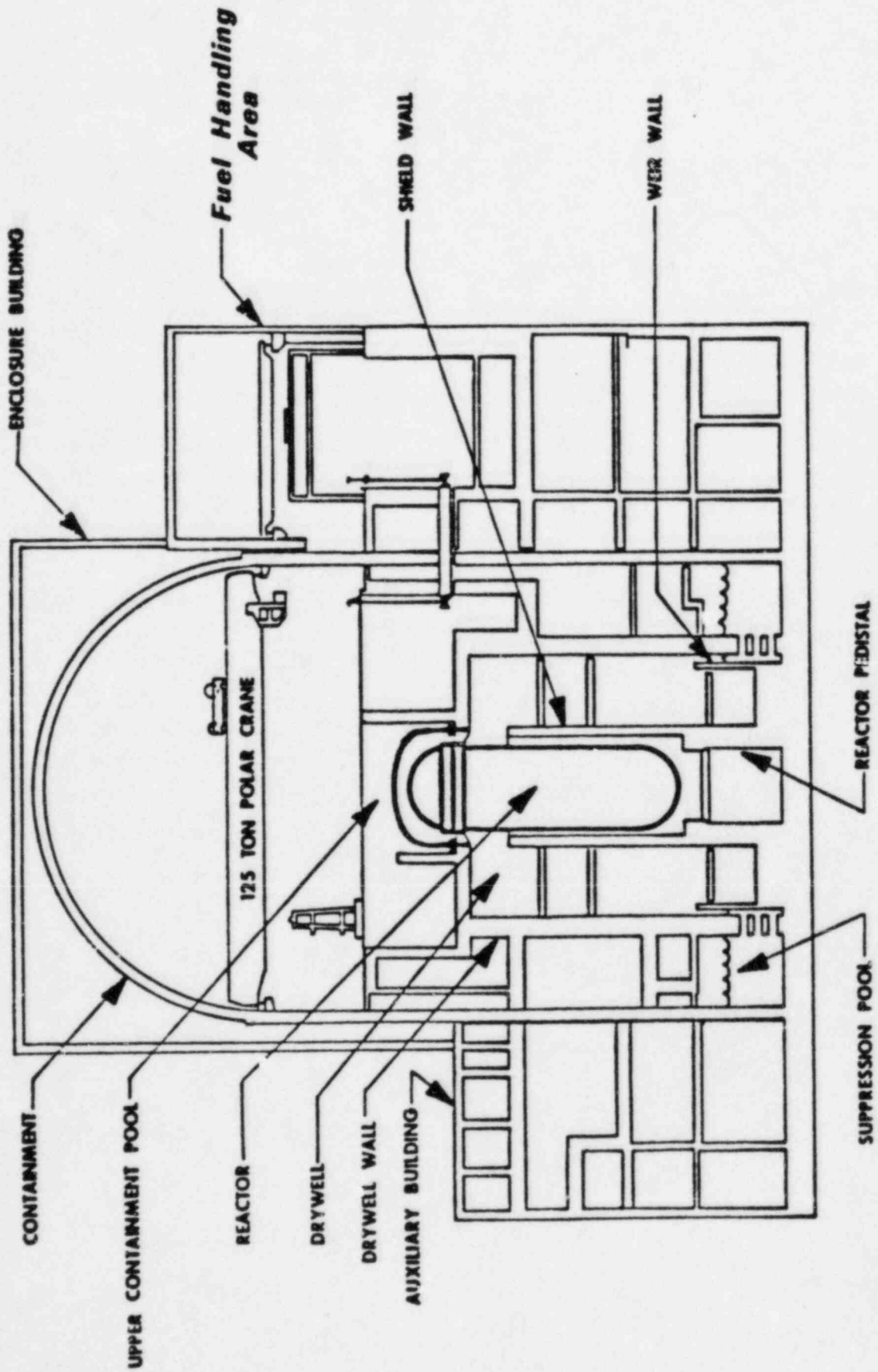


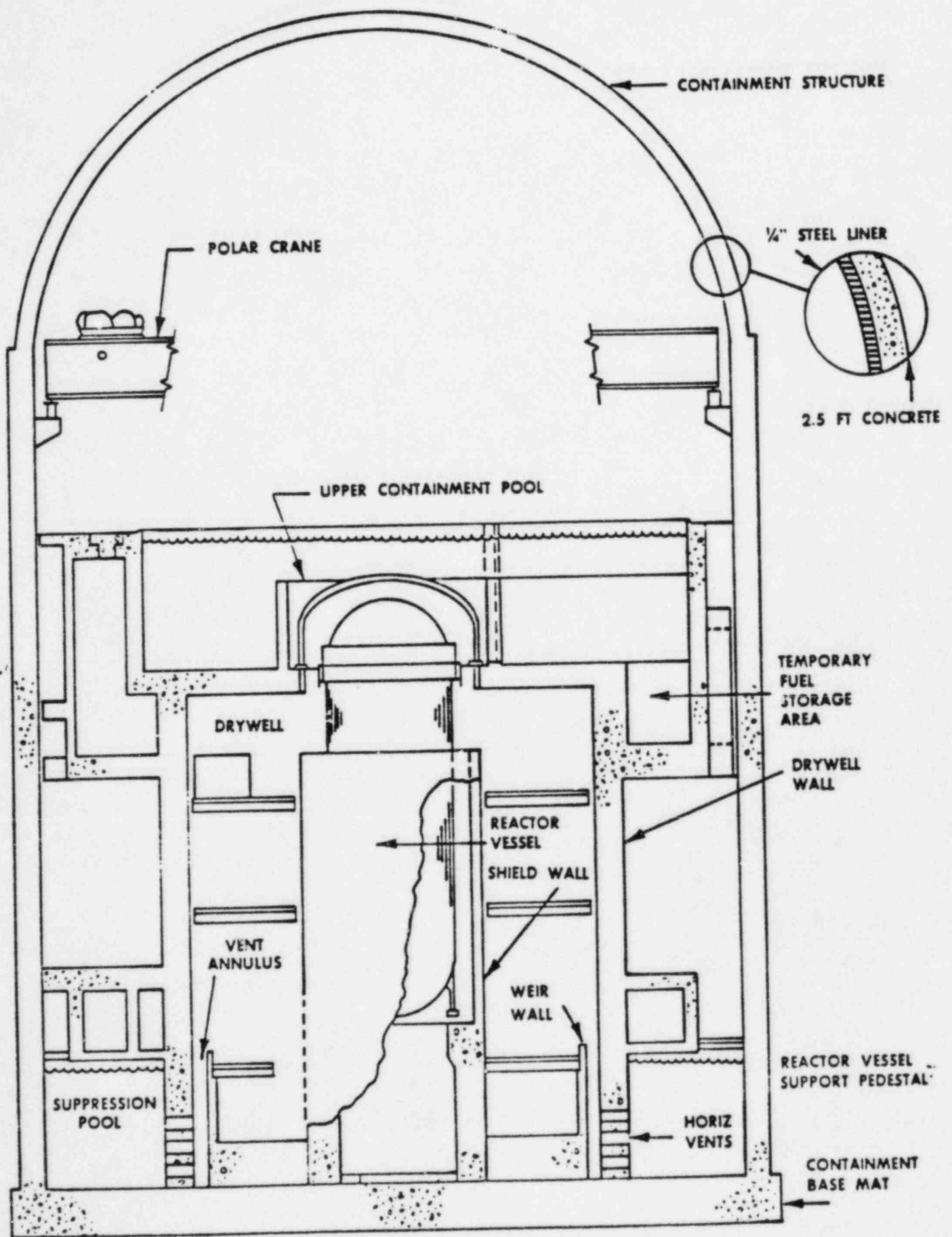
Figure 1. Standby Service Water System

MARK III CONTAINMENT



**Figure 1. Mark III Pressure Suppression Containment Concept**





**Figure 2. Section View of Containment Structure and Intervals**

LICENSING ACTIONS

FIRE PROTECTION - APPENDIX R

RECENT ACTIVITIES

NEAR TERM MP&L LICENSING ACTIONS

STATUS OF LICENSING ACTIONS

AREAS FOR IMPROVEMENT IN INTERFACE

CLOSING REMARKS

# FIRE PROTECTION

## MAJOR TASKS

- \*SAFE SHUTDOWN EQUIPMENT LIST
  - SAFE SHUTDOWN LOGIC DIAGRAMS
  - SAFE SHUTDOWN P&ID'S
  - MICROCOMPUTER DATABASE OF CABLES AND DEVICES
  
- \*SAFE SHUTDOWN RACEWAY DRAWINGS
  
- \*FIRE BARRIER QUALIFICATION
  
- \*SEPARATION ANALYSIS
  
- \*ALTERNATIVE SHUTDOWN ANALYSIS
  
- \*EMERGENCY LIGHTING REVIEW
  
- \*UPDATE FSAR/FHA

## SCHEDULE

- \*ALL REVIEW/DOCUMENTATION ACTIVITIES TO BE COMPLETED PRIOR TO NRC AUDIT, CURRENTLY SCHEDULED FOR APRIL 15-19.
- \*FULL COMPLIANCE WITH APPENDIX R, BASED ON CURRENT GUIDELINES, TO BE ACHIEVED BY END OF FIRST FUELING OUTAGE.
- \*UPDATED FIRE HAZARD ANALYSIS TO BE SUBMITTED BY APRIL 15.

## CONTROL ROOM INTERIM ANALYSIS

- \*PURPOSE - TO DEMONSTRATE THAT SAFE SHUTDOWN CAN BE ACHIEVED GIVEN A LIMITED FIRE IN THE CONTROL ROOM AND PROVIDE COMPENSATORY MEASURES, AS NECESSARY, FOR THE INTERIM PERIOD PRIOR TO FIRST REFUELING.
- \*STATUS - ALL SAFE SHUTDOWN CIRCUITS/DEVICES IN THE CONTROL ROOM HAVE BEEN IDENTIFIED AND A FAILURE MODES ANALYSIS PERFORMED. AN EVALUATION OF THE EFFECTS OF A LIMITED FIRE ON REDUNDANT CIRCUIT CIRCUITS IS IN PROGRESS. A SHUTDOWN PROCEDURE IS IN DEVELOPMENT.

### COMPENSATORY MEASURES UNDER REVIEW:

- ADMINISTRATIVE LIMIT ON FLAMMABLE LIQUIDS
- END-OF-SHIFT CHECK FOR COMBUSTIBLES
- PROVIDE METAL FURNITURE AND ENCLOSED PRINT RACKS
- PROVIDE SELF-EXTINGUISHING TRASH CANS AND ASH TRAYS
- IMPLEMENT "NO SMOKING" IN BACK PANEL AREAS
- FIRE WATCH WHEN PANELS ARE OPEN FOR HOT WORK

- \*SCHEDULE- THE LIMITED CONTROL ROOM FIRE ANALYSIS AND SAFE SHUTDOWN PROCEDURE WILL BE COMPLETE BY 2/2. OPERATOR TRAINING WILL BE SCHEDULED THEREAFTER.

## RECENT ACTIVITIES

12/5/84 1985 EMERGENCY PREPAREDNESS EXERCISE; ACTIONS TO BE TESTED. AECM-84/0499

12/6/84 SUMMARY STARTUP TEST REPORT 7. AECM-84/0500

12/6/84 RESPONSE TO GENERIC LETTER 84-23 ON RPV WATER LEVEL INSTRUMENTATION; O.L. CONDITION 2.C.(33)(E). AECM-84/0521

12/6/84 EMERGENCY PLAN PROCEDURE REVISION. AECM-84/0524

12/14/84 RESPONSE TO GENERIC LETTER 83-28, ITEM 3.1. AECM-84/0533

12/14/84 MONTHLY OPERATING REPORT. AECM-84/0534

12/17/84 INDEMNITY AGREEMENT AMENDMENT 2. AECM-84/0528

12/18/84 OVERCURRENT PROTECTION OF CONTAINMENT PENETRATIONS. AECM-84/0530

12/18/84 ANTICIPATED TRANSIENTS WITHOUT SCRAM. AECM-84/0532

12/19/84 SUBMITTAL OF GGNS DETAILED CONTROL ROOM DESIGN REVIEW PLAN. AECM-84/0537

12/21/84 REQUEST FOR EXTENSION TO 10CFR50.49(G) FOR ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT. AECM-84/0531

12/21/84 OPERATIONAL READINESS REVIEW FOR 50% POWER. AECM-84/0541

12/31/84           RESPONSES TO NRC REQUEST FOR ADDITIONAL  
                    INFORMATION ON THE CLASIX-3 CODE.   AECM-84/0544

12/31/84           FSAR UPDATE - REVISED EXEMPTION REQUEST.  
                    AECM-84/0352

1/5/85             OVERCURRENT PROTECTION OF CONTAINMENT  
                    PENETRATIONS: SUPPLEMENTAL INFORMATION.  
                    AECM-85/0007

1/10/85            EMERGENCY PLAN PROCEDURE REVISION.  
                    AECM-85/0002

1/10/85            EMERGENCY PREPAREDNESS EXERCISE SCENARIO.  
                    AECM-85/0009

1/15/85            MONTHLY OPERATING REPORT.   AECM-85/0007

1/16/85            SUPPLEMENTARY RESPONSE TO GENERIC LETTER 83-28,  
                    ITEM 3.1.3.   AECM-85/0004

1/17/85            REMOTE SHUTDOWN PANEL - REQUEST FOR ADDITIONAL  
                    INFORMATION.   AECM-85/0027

1/18/85            SMALL BORE PIPING VIBRATION DATA ANALYSIS.  
                    AECM-85/0017

1/21/85            EMERGENCY PLAN PROCEDURE REVISION.  
                    AECM-85/0031

1/24/85            HUMPHREY CONTAINMENT CONCERNS.   AECM-85/0018

1/25/85            AMENDMENT NO. 59 TO THE FSAR.   AECM-85/0015



NEAR TERM MP&L LICENSING ACTIONS

<u>ISSUE</u>	<u>SUBMITTAL DATE</u>
AUTOMATIC DEPRESSURIZATION SYSTEM	1/29/85
SOIL STRUCTURE INTERACTION	1/29/85
ISI CHECK VALVE PROGRAM	1/30/85
EQUIPMENT QUALIFICATION STATUS CERTIFICATION; GL-84-24	2/8/85
REG. GUIDE 1.97 POSITION REPORT	2/28/85
REPORT ON NUREG-0737 SUPPLEMENT 1 COMPLIANCE	2/28/85
HYDROGEN CONTROL PROGRAM QUARTERLY REPORT	3/1/85

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-416/417

NRC PDR

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