### ENVIRONMENTAL QUALIFICATION DOCUMENT

Remove and replace existing pages, including the front and back covers and the spine, with the new material provided.

With this amendment, The Environmental Qualification Document is no longer part of the FSAR and is considered a separate document.

# RIVER BEND STATION ENVIRONMENTAL QUALIFICATION DOCUMENT



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### SECTION 1

### INTRODUCTION

The purpose of this document is to establish the methodologies and summarize the results of the environmental qualification program for River Bend Station. The information supports Section 3.11 of the Final Safety Analysis Report (FSAR) and is provided in accordance with 10CFR50.49 and the guidance of Appendix E, NUREG 0588, Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment, December 1979.

### SECTION 2

### ENVIRONMENTAL CONDITIONS

The Environmental Design Criteria (EDC)<sup>(1)</sup> document specifies the indoor environmental design conditions for River Bend Station for normal, abnormal, and accident conditions.

The scope of the EDC is limited to establishing the environmental conditions of temperature, pressure, humidity, and radiation (beta, gamma, and neutron). Seismic and hydrodynamic loading conditions are not within the scope of the EDC.

The data of this document summarize the environmental conditions which have been used to establish the design basis for the plant. The data do not contain margin.

Tables 2-1, 2-2, and 2-3 list and describe the harsh and mild environmental zones. Illustrations of the physical zones are provided in the environmental zone maps, Figures 2-1 through 2-4.

The environmental data for temperature, pressure, humidity, and radiation are defined in the EDC for each building zone. Data are listed for normal operating conditions, abnormal operating conditions, and for the accident event that impacts the zone ambient environment. Normal conditions list maximum, minimum, and applicable average conditions. The duration column is applicable to the abnormal and accident conditions. Frequency is indicated for the abnormal condition only.

# TABLE 2-1

# STANDARDIZED HARSH ENVIRONMENTAL ZONE DESCRIPTIONS

Zone	Description
Drywell	
DW-1	Outside RPV Shield Wall, Outside DW-2 (El 81'-3/4" to 162'-3")
DW-2	Outside RPV Shield Wall, to a radius of 17'-0" from RPV centerline (El 110'-0" to 122'-0")
DW-3	Under RPV (El 73'-1/4" to 102'-0")
DW-4	Drywell Dome (El 162'-3" to 175'-3 3/4")
DW-5	Outside RPV Skirt (El 100'-8" to 108'-6")
DW-6	Between RPV Insulation and Primary (Biological) Shield Wall (El 108'-6" to 147'-6")
Containment	
CT-1	Upper Containment Dome (El 235'-0" to 256'-3")
CT-2	Immediately Above Suppression Pool
	(E1 90'-0" to 114'-0")
CT-3	HCU Floor (El 114'-0" to 141'-0")
CT-4	SLCS Areas (El 141'-0" to 162'-3")
CT-5	WCS Area - Backwash Receiving Tank and Pump
	Cubicles (El 141'-0" and 162'-3")
CT-5A	Walkway Adjacent to Zone CT-5
CT-6	Drywell Personnel Hatch Area (El 130'-7")
CT-7	WCS Heat Exchanger Cubicle (El 141'-0" to
162'-3", AZ-327° to 33°)	
CT-7A	Walkway Adjacent to Zone CT-7
CT-8	Fuel Transfer Tube, Isolation Valve Room (El 128'-1 3/4")
CT-9	Inside Main Steam Tunnel (El 114'-0")
CT-10	SFC Pipe and Valve Room (El 130'-7" and El 162'-3")
CT-11	WCS - Filter Cubicles (El 162'-3")
CT-SP	Suppression Pool (El 70'-0" to 90'-0")
CT-G*	General Area (El 114'-0", 141'-0", 162'-3", and 186'-3")
Annulus	
AN-1	All Areas El 114'-0" and Above
AN-2	All Areas Immediately Below El 114'-0"
AN-3	Vicinity of SFC Piping (El 114'-0" to
	141'-0", AZ-155° to 185°)

### Zone

### Description

### Auxiliary Building

Elevation: 70'-0"

AB-070-1	CSL Area
AB-070-2	RHS-PlA Pump Room
AB-070-3*	ICS Pump Room
AB-070-4	RHS-P1C Pump Room
AB-070-5	RHS-P1B Pump Room
AB-070-6	HPCS Pump Room

AB-070-7 Elevator Area
AB-070-8 RPCCW Area
AB-070-G General Area

Elevation: 95'-9"

AB-095-1	CSI.	Hatch	Area

AB-095-2 RHS Heat Exchanger Area (West)

AB-095-3\* WCS Area AB-095-4 Hoist Area

AB-095-5 RHS Heat Exchanger Area (East)

AB-095-5

AB-095-6

AB-095-7

AB-095-8

AB-095-8

AB-095-9

AB-095-9

AB-095-10\*

AB-095-G

CRD Work Area

Main Steam Tunnel

AB-095-G

General Area

Elevation: 114'-0"

AB-114-1 MCC Area (West)

AB-114-2\* Main Steam Tunnel (North)

AB-114-3 MCC Area (East)

AB-114-4 Post Accident Sampling Station

AB-114-5 Elevator Room AB-114-6 RPCCW Area

AB-114-7\* Main Steam Tunnel (Loops)

AB-114-8 RHS Equipment Removal Cubicle

AB-114-G General Area

Elevation: 141'-0"

AB-141-1 Equipment Area (West) AB-141-2 Equipment Area (East)

AB-141-3 Elevator Area

# TABLE 2-1 (Cont)

Zone	Description			
AB-141-4 AB-141-5 AB-141-6 AB-141-G	RPCCW Area Standby Gas Treatment Filter (West) Standby Gas Treatment Area (East) General Area			
Elevation: 170'-0"				
AB-170-1 AB-170-3	Annulus Mixing System Fan Area Elevator Machine Room			
Fuel Buildi	ng			
Elevation:	70'-0"			
FB-070-1 FB-070-2 FB-070-3 FB-070-4	Fuel Pool Cooling Pumps and Heat Exchanger SFT Drain Tank Area Backwash Receiving Room Fuel Pool Purification			
Elevation:	95'-0"			
FB-095-1 FB-095-2 FB-095-G	Fuel Pool Demineralizer Filter and Tank Rooms SFC Heat Exchanger Cubicles General Area			
Elevation:	113'-0"			
FB-113-1 FB-113-3 FB-113-4 FB-113-G	Cask Loading and Shipping Area Pipe Chase Fuel Transfer Tube Mid-Support Room General Area			
Elevation:	148'-0"			
FB-148-1 FB-148-G	Charcoal Filter Rooms General Area			
Radwaste Building				
Elevation:	65'-0"			
RW-065-1 RW-065-2 RW-065-G	Tank Rooms Valve and Pump Rooms General Area			

### TABLE 2-1 (Cont)

Description Zone

Elevation: 90'-0"

Tank Area

RW-090-1 RW-090-2 Valve and Pump Rooms

Elevation: 106'-0"

Cask Fill and Storage Area RW-106-4

RW-106-5 Valve and Pump Area RW-106-6 Waste Sludge Tank Area

Elevation: 117'-0", 120'-0", and 128'-6"

RW-117-1 Valve and Pump Area

RW-117-2 Filter and Demineralizer Cubicles

Valve and Pump Room RW-120-1 RW-128-1 Clean Cask Storage

Elevation: 136'-0"

Bridge Crane Area

RW-136-1 RW-136-2 Evaporator and Reboiler Areas RW-136-4 Flat Bed Filter and Pump Area

Elevation: 166'-0"

RW-166-1 HVW Filter Room RW-166-2 Evaporator Area

Turbine Building Including Off-Gas Area

Elevation: 67'-6"

TB-067-1 Heater Bay Cubicles

Turbine and Condenser Area TB-067-3

Elevation: 95'-0"

Heater Bay Cubicles TB-095-1

Moisture Separator and Reheat Area Turbine and Condenser Area TB-095-2

TB-095-3

Air Ejector Cubicle TB-095-4 TB-095-5 TB-095-6 Decontamination Area

Steam Packing Exhauster Area

# TABLE 2-1 (Cont)

Zone	Description
Elevation:	123'-6" and 180'-0"
TB-123-1 TB-123-2 TB-123-3 TB-123-4 TB-123-5 TB-123-C TB-180-G	Moisture Separator and Reheat Area Turbine Shield Wall Well Area Steam Seal Evaporator Cubicle Radwaste Reboiler Cubicle HVT Filter Room General Area Area Immediately Below Turbine Building Roof
Elevation:	67'-6"
OG-067-1	Condensate Demineralizer Regeneration Area
Elevation:	95'-0"
OG-095-1	Condensate Demineralizer Area
Elevation:	123'-6"
OG-123-1 OG-123-2 OG-123-3	Sample Rooms Off-Gas Equipment Areas Charcoal Adsorber Cubicle
Elevation:	148'-6"
OG-148-1 OG-148-2 OG-148-3	Charcoal Adsorbers Holdup Pipe Room Filter Area
Piping Tunn	els
PT-2 PT-3	Tunnel Bordered by AB, RB, and RW Buildings AB Tunnel

PT-7

Tunnel Bordered by RW and AC Buildings

<sup>\*</sup>Contains high-energy piping; failure is postulated.

### TABLE 2-2

### STANDARDIZED MILD ENVIRONMENTAL ZONE DESCRIPTIONS

Zone

Description

Auxiliary Building

AB-170-2 Continuous Filter Room

AB-170-G

General Area

Fuel Building

Elevation: 70'-0"

FB-070-G General Area

Elevation: 113'-0"

FB-113-2 Fuel Handling - Operating Floor

Elevation: 148'-0"

FB-148-2 Equipment Area

Control Building

Elevation: 70'-0"

CB-070-1 Cable Vault Area

CB-070-2

HVAC Rooms

CB-070-G

General Area

Elevation: 98'-0"

CB-098-1

Switchgear Area

CB-098-2 Mechanical Equipment Room

CB-098-G

General Area

Elevation: 115'-0"

CB-115-1 HVAC Rooms

CB-115-G General Area

Elevation: 116'-0"

CB-116-1

Battery Room

CB-116-2

Cable Vent and Switchgear, Inverter Rooms

CB-116-G

General Area

Description Zone

Elevation: 136'-0"

CB-136-1 Control Room CB-136-G General Area

Radwaste Building

Elevation: 90'-0"

RW-090-G General Area

Elevation: 106'-0"

RW-106-1 Solid Waste Treatment Area RW-106-2 Solid Waste Compacting and RW-106-2 Solid Waste Compacting and Storage Area RW-106-3 Sample Room

RW-106-G General Area

Elevation: 117'-0"

RW-117-G General Area

Elevation: 136'-0"

RW-136-3 Laundry Room RW-136-G General Area

Elevation: 166'-0"

RW-166-G General Area

Turbine Building Including Off-Gas Area

Elevation: 67'-6"

TB-067-2 Sample Room
TB-067-4 Reactor Feed Pump Area

TB-067-G General Area

Elevation: 95'-0"

TB-095-G General Area

Zone Description

Elevation: 123'-6"

TB-123-6 Passageway

Elevation: 67'-6"

OG-067-G General Area

Elevation: 95'-0"

OG-095-G General Area

Elevation: 123'-6"

OG-123-G General Area

Elevation: 148'-6"

OG-148-G General Area

Diesel Generator Building

Elevation: 98'-0"

DG-098-1 Diesel Operating Area

DG-098-2 Diesel Generator Control Rooms

DG-098-G General Area

Normal Switchgear Building

Elevation: 67'-6", 98'-0", and 123'-6"

NS-067-1 Cable Tray Room

NS-098-1 Normal Switchgear and Load Center NS-098-2 Passageway - Normal Switchgear

NS-123-1 Battery Rooms NS-123-2 Computer Rooms

NS-123-3 Mechanical Equipment and Switchgear Rooms

NS-123-4 Passageway - Normal Switchgear

Zone Description

### Auxiliary Boiler Building

Elevation: 95'-0" and 123'-6"

BA-095-1 Auxiliary Boiler Area BA-095-2 Switchgear Area

BA-095-2 Switchgear Area BA-123-1 Deaerator Area

### Auxiliary Control Building

Elevation: 95'-0"

AC-095-1 Hot Machine Shop

AC-095-2 Passageway

AC-095-3 Decontamination Room

AC-095-4 I & C Electrical Hot Shop

Elevation: 123'-6"

AC-123-1 Mechanical Equipment

AC-123-2 Passageway

AC-123-3 Auxiliary Control Room

### Standby Service Water Pumphouse

SW-1 Standby Service Water Pump Rooms

SW-2 Transformer Rooms

SW-3 Remote Air Intake Room

### Administration Complex

AD-1 Office Building

AD-2 Warehouse

AD-3 Cafeteria/Lockers/Offices

AD-4 Lab/Health Physics/Decontamination Areas

AD-5 Mechanical Room AD-6 Machine Shops

AD-7 Electrical Load Center AD-8 Primary Access Point AD-9 Auxiliary Access Point

AD-10 Technical Support Center (TSC)

### Fire Pumphouse Building

FP-1 Fire Pumphouse

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### TABLE 2-2 (Cont)

Zone Description

Makeup Water Intake Structure

MK-1 Battery Rooms

MK-2 Pump Room

MK-3 Switchgear Room

Circulating Water Pumphouse

CW-1 Circulating Water Pumphouse

MG Set Building

MG-1 MG Set

Water Treatment Building

WT-1 Water Treatment

Transformer Yard 2A

TY-1 Fire Protection Sprinkler Building

Hypochlorite Area

HA-1 Switchgear House

Blowdown Area

BP-1 Blowdown Pit

Cooling Tower

CL-1 Switchgear House (1A)
CL-2 Switchgear House (1B)
CL-3 Switchgear House (1C)
CL-4 Switchgear House (1D)

Clarifier Area

CA-1 Switchgear House

CA-2 Tank Room

Demineralized Water Building

DI-1 Demineralized Water Pumphouse

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# Zone Description

# Piping Tunnels

PT-1	Standby Service	Water Tower Tunnel
PT-4		by AB, CB, and DG Buildings
PT-5		by NS and CB Buildings
PT-6	Tunnel Bordered	by TB and NS Buildings
PT-8	Tunnel Bordered	by FB Building
PT-9	Tunnel Bordered	by FB and RB Buildings

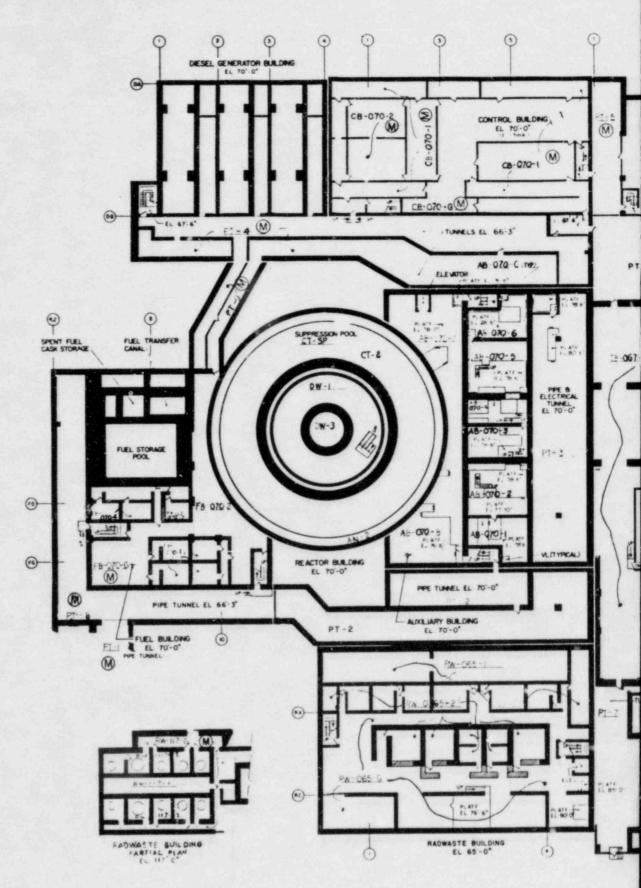
### TABLE 2-3

### PLANT ZONES

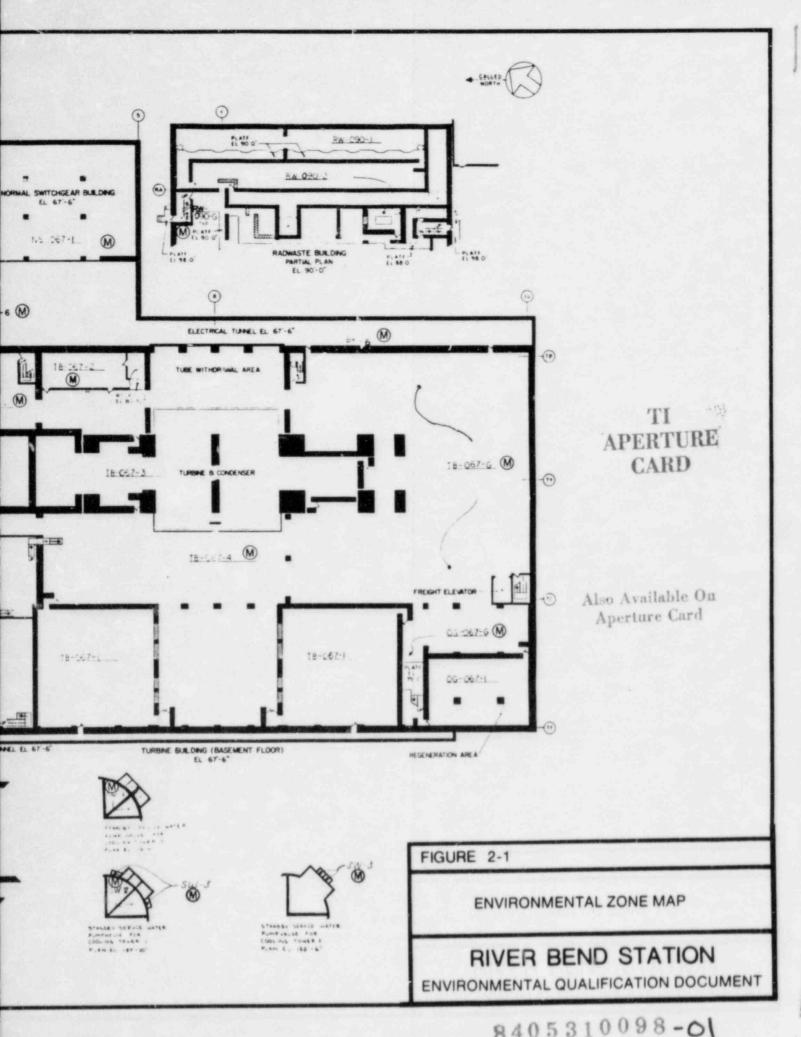
The following plant zones are mild environment plant zones served by the special control room charcoal air filters:

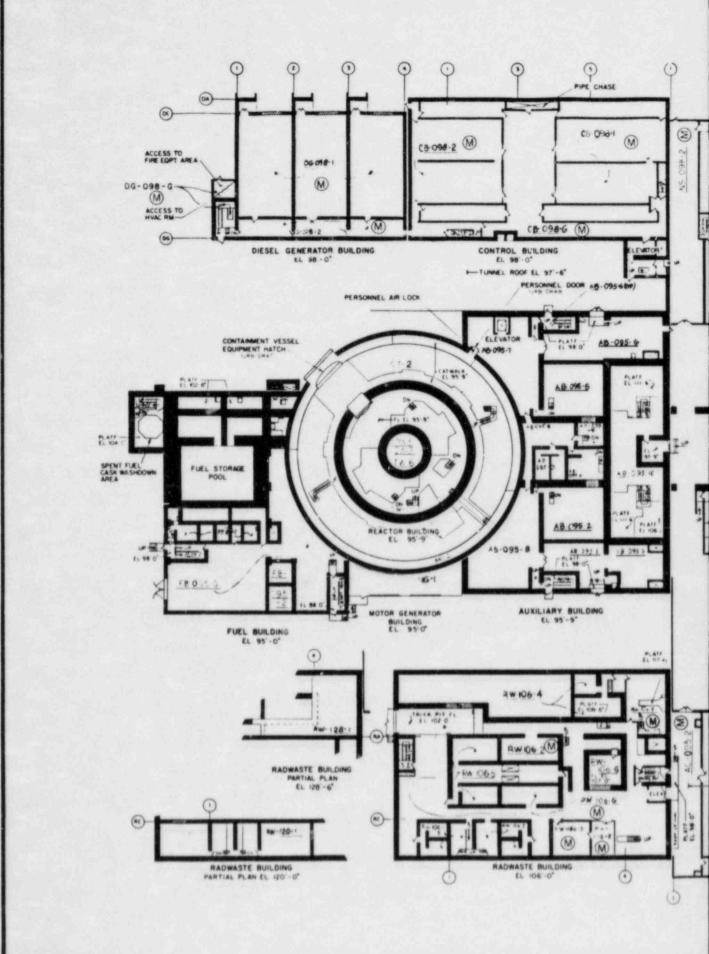
CB-136-1 Control Room

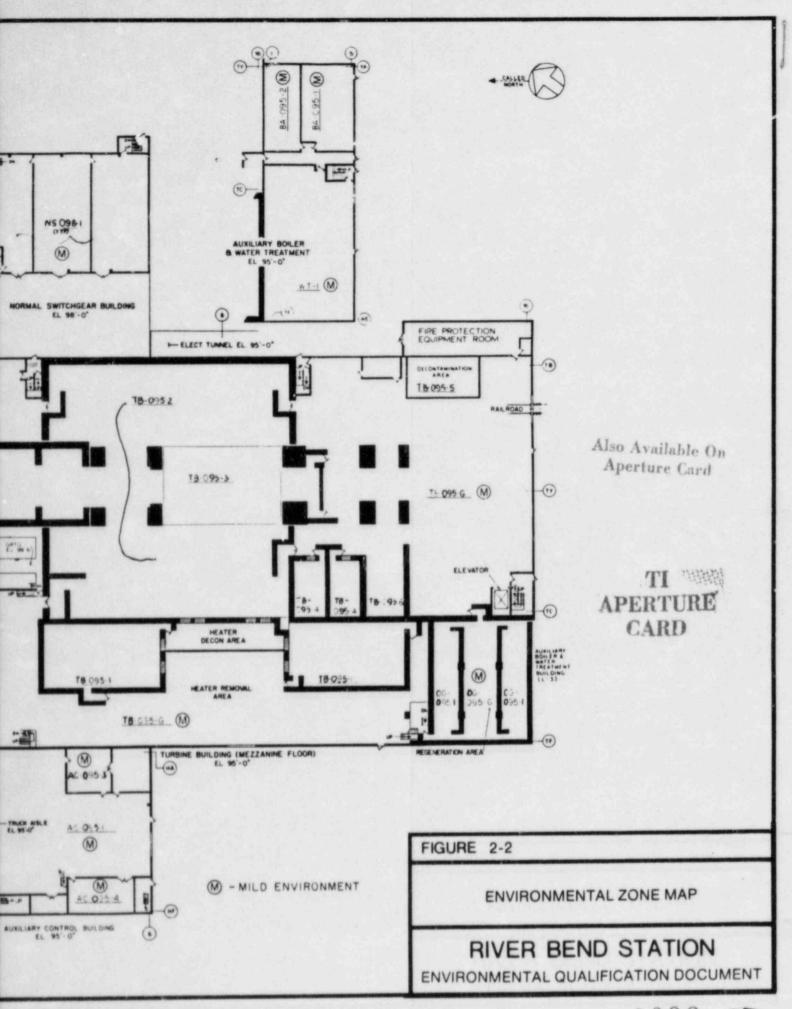
CB-136-G General Area

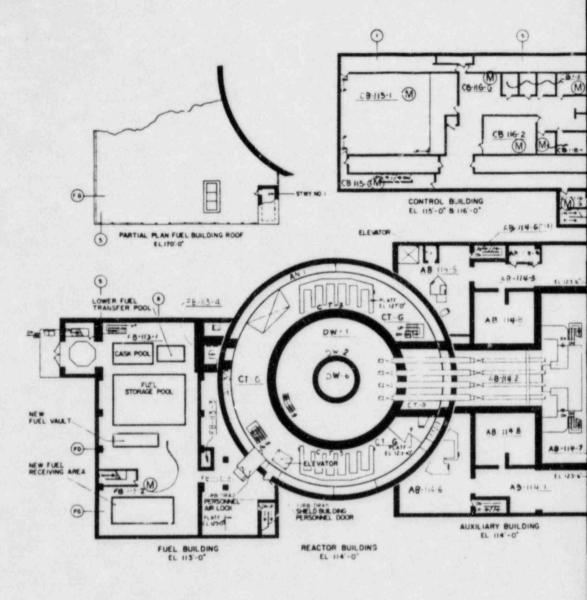


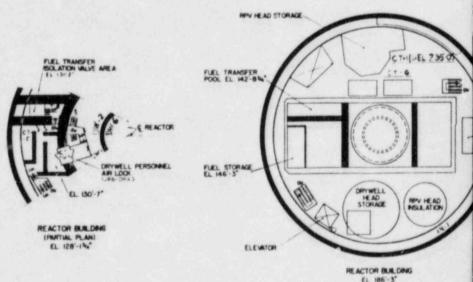
M-MILD ENVIRONMENT

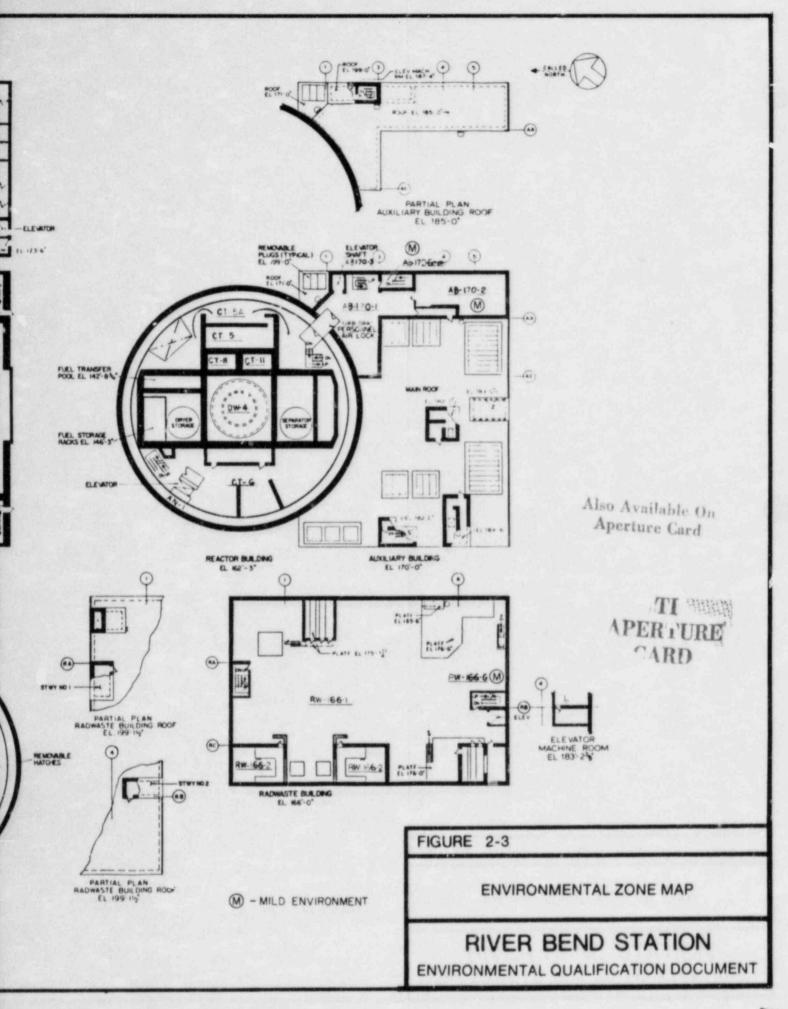


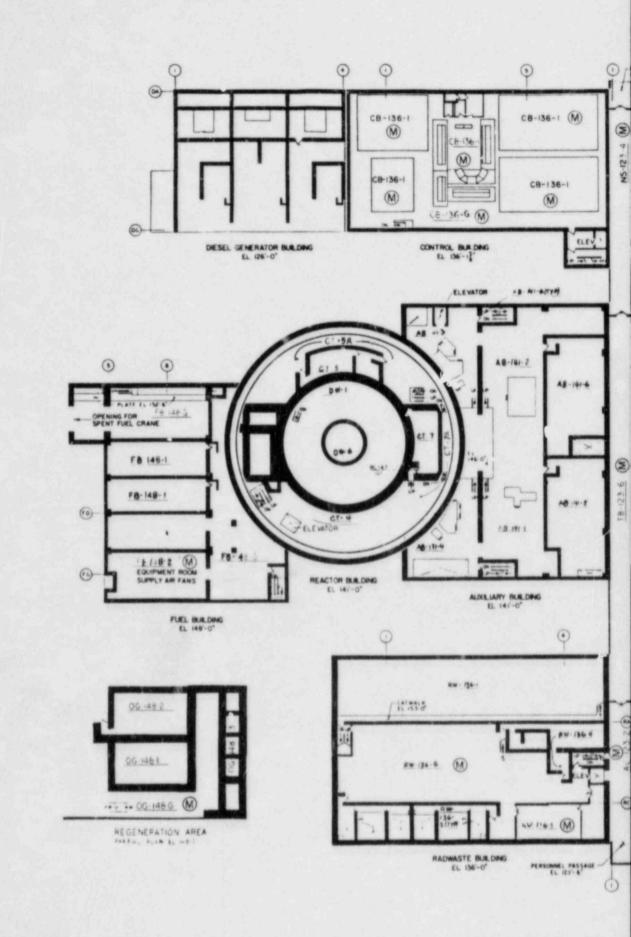




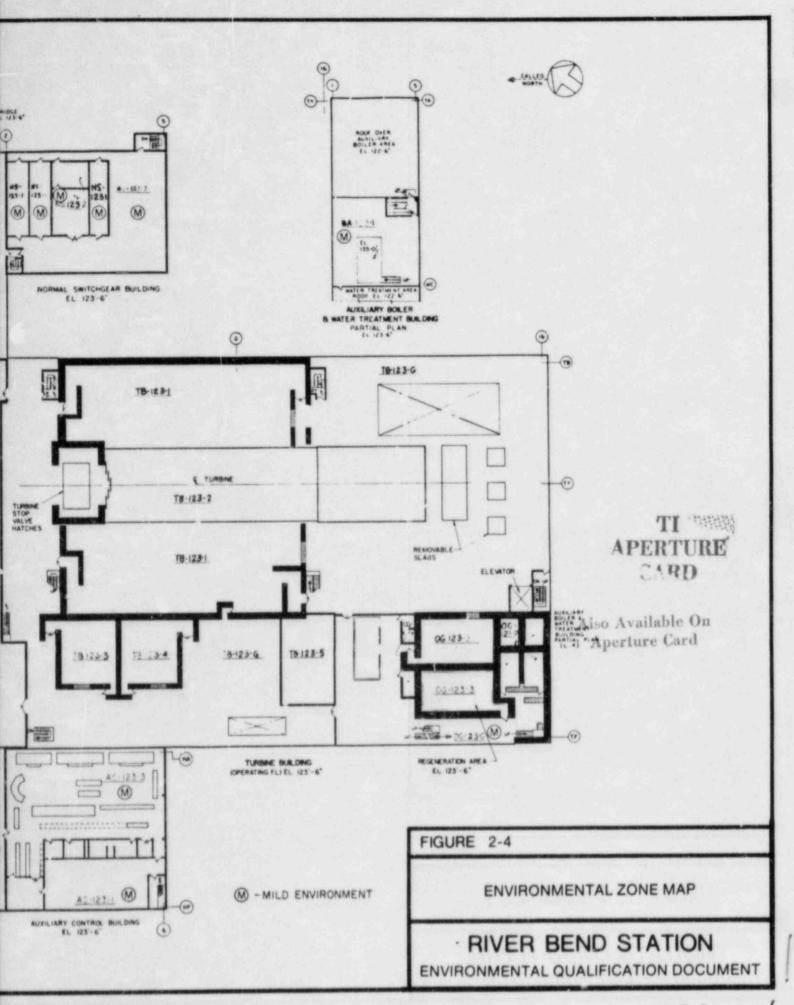








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### 2.1 TEMPERATURE, PRESSURE, HUMIDITY ENVIRONMENT

The plant ventilation/air-conditioning system is designed to maintain maximum normal operating temperature and pressure conditions for all normal reactor operating modes, including startup, power range, hot-standby, shutdown, and refueling. Average (expected) normal temperatures are also listed in the EQD. However, the humidity is uncontrolled unless otherwise specified. The normal conditions are assumed to persist continuously (i.e., steady state) until an abnormal or accident condition occurs, in which case the abnormal or accident condition persists for the duration specified. After the abnormal or accident condition is terminated, normal conditions are again assumed to exist.

Abnormal operating conditions are any reasonably expected or anticipated deviations from normal conditions (excluding accident conditions). Abnormal operating conditions include:

- Transients that result from a single HVAC equipment malfunction or a single operator action which was not planned, such as:
  - Pump, fan, or chiller inadvertently tripped by operator or tripped on overload
  - b. Main steam isolation valve isolation event (loss of condenser vacuum, turbine trip, MSIV closure including stuck open relief valve)
  - c. Unplanned loss of non-Class 1E HVAC
- Transients caused by loss of offsite power for a duration of 4 hr. Five of these transients are assumed to occur during the life of the plant.

An accident is defined in FSAR Chapter 15 and is postulated for analysis purposes to occur from unlikely but possible situations and that has the potential to cause a release of radioactivity to the environs which could endanger public safety if not mitigated. A reactor coolant pressure boundary rupture is an example of an accident.

Failure of high energy and moderate piping has been postulated in accordance with NRC Regulatory Guide 1.46, Branch Technical Positions MEB 3-1 and APCSB 3-1.

### 2.2 PADIATION ENVIRONMENT

Integrated radiation environments are specified in terms of rads for gamma and beta radiation. The gamma values are based on energy deposition in tissue (rads) or exposure in air (roentgen). However, the corresponding absorbed dose which would occur in equipment materials (e.g., carbon) when exposed to the environment would differ only slightly in magnitude. For equipment qualification testing, the equivalence of 1 rad to 1 roentgen is an appropriate assumption. The beta environment is stated in terms of a surface air dose and does not account for any shielding between the airborne or plateout activity and the material of interest. The total integrated dose equals the normal plus the accident conditions. Neutron environments are specified in terms of neutron fluence (neutrons/cm²) for that portion of the spectrum ≥1 Mev.

For normal operating condition, the radiological environments are specified as doses integrated over a 40-yr plant life for gamma and beta radiation. A plant capacity factor of 0.8 is used to develop the integrated doses for all equipment which operates in conjunction with normal reactor operation. Expected operation time over the 40-yr life of the plant is used to determine integrated doses in the vicinity of other auxiliary systems and equipment, such as radwaste and fuel handling systems. Radiation dose contributions due to abnormal conditions that are expected during the life of the plant are included in the 40-yr normal operating conditions.

For abnormal condition, radiation dose contributions due to abnormal conditions are for the MSIV isolation event resulting from a transient caused by a loss of condenser vacuum, an MSIV closure, or a turbine trip. The integrated dose contribution from this event is included in the normal 40-yr values.

For accident conditions, accident radiological doses are in addition to normal operational conditions. The accident dose contribution is determined for the single most limiting accident. Dose profiles as a function of time (t) following the accident are specified. The actual accident dose is determined based on the required operation time of the equipment following an accident. In most cases, the post-LOCA (DBA) environmental conditions will be the basis for the radiological requirements. High energy pipe breaks and fuel handling accidents are also considered. Accident integrated doses include combined dose contributions from airborne and contained sources and represent the maximum dose for the area specified.

### 2.3 CHEMICAL ENVIRONMENT

Engineered Safety Feature (ESF) systems are designed to perform their safety functions in the temperature, pressure, and humidity conditions described in the EDC.

River Bend Station does not utilize any chemical additives to the water recirculated by the ECCS during normal or accident conditions.

Following an accident, the containment and drywell atmospheres are maintained below 4 percent (by volume) hydrogen, as discussed in FSAR Section 6.2.5.

The water in these systems is not chemically inhibited. The maximum limits for the suppression pool water are compatible with those of the primary coolant and are listed as follows:

Parameter	Reactor Water Limits Shutdown Condition	Pressure Suppression Pool Water Quality Expected	Suppression Pool Water Maximum Limit
Conductivity	<10 umho/cm @ 25°C	<pre> ≤3 umho/cm @ 25°C</pre>	≤10 umho/cm @ 25°C
Chlorides (as C1-)	≤0.5 ppm	≤0.2 ppm	≤0.2 ppm
рН	5.3 to 8.6 @ 25°C	5.3 to 8.6 @ 25°C	5.3 to 8.6 @ 25°C
Total suspended solids		≤1 ppm	≤5 ppm

During reactor shutdown cooling, the RHR system is lined up with the reactor coolant pressure boundary (RCPB). The shutdown cooling piping and equipment in the RHR system are flushed with demineralized water from the condensate storage tank prior to commencing shutdown cooling.

### RBS TQD

During layup, the RHR system is filled with water of the following limits:

Parameter RHR System Maximum Limit

Conductivity \$ 3 umho/cm @ 25°C

Chlorides (as C1-) ≤0.05 ppm

pH 5.3 to 7.5 @ 25°C

### 2.4 SUBMERGENCE

The approach to design of River Bend Station is to locate devices above expected submergerce levels. At the present time, the flood levels are being determined for the buildings, and for the compartments within the buildings, for the natural phenomena and accident conditions that could cause flooding, in order to verify that the electrical equipment is above submergence levels. Upon completion of the analyses, if any Class 1E electrical equipment is found to be located at or below the submergence level, an analysis will be performed to determine the safety significance of the failure of this electrical equipment and the effect on its Class 1E electrical power source as a result of such submergence. If the results of this analysis show a detrimental effect on the safety system, the electrical equipment will be relocated. If it is not possible to relocate the electrical equipment above the submergence level, it will be demonstrated to be qualified to withstand submergence, or it will be appropriately protected and a qualification by test or analysis will be used to demonstrate the adequacy of such protection.

Table 2.4-1 identifies known equipment subjected to submergence.

# TABLE 2.4-1

# CLASS 1E EQUIPMENT SUBJECTED TO SUBMERGENCE ZONES CT-SP, CT-2

1E22*LTN055C Level Transmitter GE/Barton 1E22*LTN055G Level Transmitter GE/Barton 1CMS*RTD24A RTD PYCO 1CMS*RTD24B RTD PYCO 1CMS*RTD24C RTD PYCO	rks
1CMS*RTD24D       RTD       PYCO         1CMS*RTD24F       RTD       PYCO         1CMS*RTD24F       RTD       PYCO         1CMS*RTD24G       RTD       PYCO         1CMS*RTD24H       RTD       PYCO         1CMS*RTD24J       RTD       PYCO         1CMS*RTD40A       RTD       PYCO         1CMS*RTD40B       RTD       PYCO         1CMS*RTD40C       RTD       PYCO         1CMS*RTD42B       RTD       PYCO         1CMS*RTD42C       RTD       PYCO         1CMS*RTD42C       RTD       PYCO         1E51*LTN036A       Level Transmitter       GE         1E51*LTN036E       Level Transmitter       GE	

#### SLCTION 3

#### FUNCTIONAL PERFORMANCE REQUIREMENTS

#### 3.1 ACCIDENT/SYSTEM MATRIX

The systems and subsystems required to mitigate an accident are listed in Table 3.1-1. The accident/system matrix is given in Table 3.1-2.

The system and accident descriptions are consistent with the descriptions provided in Table 3.1-2 and Chapter 15 of the FSAR. They are provided in this document to clarify the RBS equipment identification as listed in Appendix A.

Some of the systems are described as follows. The only portion of the HVY system which is required to operate for an accident is the portion servicing the standby service water pumphouse to ensure that an adequate environment is provided for the SWP pumps and associated components.

The SFC system is indicated as being required for all accidents since it must operate to remove decay heat whenever spent fuel is stored in the spent fuel pool. It is not required to directly mitigate the consequences of any of the listed accidents. In addition, the HVF system must operate to ensure an adequate environment for the SFC system, and to maintain secondary containment integrity.

The SLS system is required to operate only in the event the normal scram system (RFS) or control rods do not function to shut down the reactor. Since each accident listed results in a scram, the SLS is not required for all accidents, but is considered to be available.

The containment isolation system includes the containment isolation valves associated with the systems listed in Table 3.1-3. The SWFC/GE system cross reference is given in Table 3.1-4.

The standby power system is capable of supplying ac power for electrical loads which are required for safe shutdown of the reactor. The systems included in the SPS are listed in Table 3.1-5.

The remote shutdown system includes the Divisions I and II remote shutdown panels, and is designed to achieve safe shutdown from either panel. The RSS utilizes some of the existing systems used for normal reactor shutdown operation to shut down the reactor from outside the main control room.

### TABLE 3.1-1

# SYSTEMS AND SUBSYSTEMS REQUIRED TO MITIGATE ACCIDENT

CSH	High Pressure Core Spray (HPCS) System
CSL	Low Pressure Core Spray (LPCS) System
RHS	Residual Heat Removal (LPCI, SPCM, SCM) System
svv	Nuclear Boiler (Main Steam Safety and Relief Valves, Automatic Depressurization (ADS) System)
ICS	Reactor Core Isolation Cooling (RCIC) System
RPS	Reactor Protection System
MSI	Main Steam Positive Leakage Control System
LSV	Penetration Valve Leakage Control System
RPC	Reactor (Rod Pattern Control) System
NMS	Neutron Monitoring System
SWP	Standby Service Water and Normal Service Water Systems
SLS	Standby Liquid Control System
GTS	Standby Gas Treatment System
HVR	Containment, Drywell, and Auxiliary Building Ventilation, Annulus Mixing, Annulus Pressure Control, Containment and Drywell Purge (Reactor Plant Ventilation) System
CMS	Containment Atmosphere Monitoring System
CPM	Combustible Gas Control (Hydrogen Mixing) System
HCS	Combustible Gas Control (Hydrogen Recombiner) System
SFC	Fuel Pool Cooling and Cleanup System
EGF	Fuel Oil Storage and Transfer (Emergency Generator Fuel) System

# TABLE 3.1-1 (Cont)

EGA	Diesel Generator (Air Startup - Standby Diesel Generator) Systems
HVC	Control Building Ventilation Air Conditioning System
HVK	Control Building Chilled Water System
HVN	Ventilation Chilled Water System
HVF	Fuel Building Ventilation System
HVP	Diesel Generator (Diesel Generator Building Ventilation) Systems
HVY	Standby Service Water Pumphouse Ventilation (Yard Structures Ventilation) System
RMS	Process and Area Radiation Monitoring Systems
SPS	Standby Electrical Power (Diesel Generator System)
CCP	Reactor Plant Component Cooling Water System
SSR	Reactor Plant Sampling System (Post Accident Sampling System)
LDS	Leak Detection System
RSS	Remote Shutdown System
CPP	Combustible Gas Control (Containment Hydrogen Purge) System
CES	Residual Heat Removal (LPCI, SPCM, SCM) System Auxiliary AC Power Systems (Class 1E) 125-Volt DC Power Systems (Class 1E)

TABLE 3.1-2

#### ACCIDENT/SYSTEM MATRIX

					5	Systems	Requ	ired	to Mi	tigat	e Acci	dent				
Ac	cidents	HPCS	LPCS	LPC1	ADS	RCIC	CIS	RPS	MSI	LSV	RPCS	NMS	SPCM	SWP	SLS	SCM
1.	Steam Line Break Outside Containment	×	х	×	×	×	×	×						×	×	×
2.	Feedwater Line Break Outs'de Containment	×	×	×	×	×	×	×						×	×	×
3.	LOCA	×	×	×	×		×	×	Х	Х			×	×	×	
4.	High Energy Line Break Outside Containment (RWCU/RCIC)						×	×						×		
5.	Rod Drop	×	×	×	×	х	×	×			×	×		х	×	×
6	Fuel Handling													Х		
7	Recirculation Pump Seizure	×	×	×	×	×		×						×	×	×
8	Recirculation Pump Shaft Break	×	×	х	×	×		×						×	×	×
9	Main Condenser Gas Treatment System Failure				×	×		х						×	×	×

#### TABLE 3.1-2 (Cont)

					Syst	ems F	tequir	ed to	Miti	qate	Accid	ent					
Accidents	GTS	HVR	CMS	CPM	HCS	SFC	EGF	EGA	SPS	HVK	HVC	HVF	HVP	HVY	RMS	LDS	PAM
1. Steam Line Break Outside Containment	×	×	×			×	×	×	×	×	×	×	×	×	×		
2. Feedwater Line Break Outside Containment						×	×	×	×	×	×	×	×	×	×		
3. LOCA	×	×	×	х	×	х	×	Х	×	×	×	Х	×	X	X		×
<ol> <li>High Energy Line Break Outside Containment (RWCU/RCIC)</li> </ol>	×	×				×			×	×	×			×	×	×	
5. Rod Drop	×	х	х			х	×	×	×	×	Х	х	×	Х	Х		
6. Fuel Handling						×	×	×	×	×	×	×	×	×	X		
7. Recirculation Pump Seizure	×	×	×			×	×	×	×	×	×	×	×	×	×		
8. Recirculation Pump Shaft Break	×	×	×			×	×	×	×	×	×	×	×	×	×		
9. Main Condendser Gas Treatment System Failure		×	×			×	×	×	×	×	×	×	×	×	×		

TABLE 3.1-2 (Cont)

	Syste	ms Requ				dent
Accidents	HVN	CCP	SSR	CPP	RSS	CES
1. Steam Line Break Outside Containment					×	×
2. Feedwater Line Break Outside Containment					×	×
3. LOCA	×	×	×	×	×	Х
4. High Energy Line Break Outside Containment (RWCU/RCIC)					*	×
5. Red Drop					×	×
6. fuel Handling						×
7. Recirculation Pump Seizure					×	Ж
8. Recirculation Pump Shaft Break					х	×
9. Main Condenser Gas Treatment System failure					×	×

TABLE 3.1-3

# SWEC/GE SYSTEM CROSS REFERENCE

SWEC	GE
MSS	B21
FWS	B21
SVV	B21
DTM	B21
RDS	C11
SLS	C41
RHS	E12
CSL	E21
CSH	E22
MSI	E33
ICS	E51
WCS	G33
RCS	B33
LDS	E31

#### TABLE 3.1-4

AND REAL PROPERTY AND ADDRESS OF THE PARTY.	the contract of the contract of	Table 1 - Street Control of Control					
CONFORMACI	KOOMME	B. rengeron	\$43 T PENEZ	CONTRACT TO	LEMEST WESTER	FORE	A PROPERTY.
SYSTEMS	PASSING I	PLIBIT	AN T T DE	CONTRACT	MINIBER 1	LOUE	ALT LUM

MSS Nuclear Boiler System - Power Conversion (Main Steam) System

MSI Main Steam Positive Leakage Control System

DTM Nuclear Boiler (Turbine Plant Miscellaneous Drains)
System

FWS Nuclear Boiler (Feedwater) System

RHS Residual Heat Removal System

WCS Reactor Water Cleanup System

CSH High Pressure Core Spray (HPCS) System

CSL Low Pressure Core Spray (LPCS) System

ICS Reactor Core Isolation Cooling (RCIC) System

SFC Fuel Pool Cooling and Cleanup System

RDS CRD Hydraulic (Control Rod Drive) System

HVR Containment, Drywell, and Auxiliary Building Ventilation, Annulus Mixing, Annulus Pressure Control, Containment and Drywell Purge (Reactor Plant Ventilation) System

CPF Combustible Gas Control (Containment Hydrogen Purge) System

DFR Equipment and Floor Drainage (Reactor Plant Floor Drains) System

DER Equipment and Floor Drainage (Reactor Building Equipment Drains) System

FPW Fire Protection - Water System

SAS Service Air System

IAS Instrument Air System

CCP Reactor Plant Component Cooling Water System

# TABLE 3.1-4 (Cont)

SWP	Standby Service Water and Normal Service Water Systems
svv	Nuclear Boiler (Main Steam Safety and Relief Valves, Automatic Depressurization) System
CMS	Containment Atmosphere Monitoring System
LMS	Containment Leakage Monitoring System
LSV	Penetration Valve Leakage Control System
HVN	Ventilation Chilled Water System
CNS	Condensate Makeup and Drawoff System

# TABLE 3.1-5

# SYSTEMS INCLUDED IN THE STANDBY POWER SYSTEM

EGS	Emergency Diesel Generator System
EJS	Standby 480-V Electrical System
ENB	Standby 125-V DC Control Supply
ENS	Standby 4.16-kV Electrical System
RCP	Reactor Containment Electrical Penetrations
SCM	Station Control Monitoring (Vital) - Indication
scv	Station Control Bus (Vital) - Ac supply including transformer and transfer switch
VBS	Vital Bus System (incoming supply from inverter)

#### 3.2 POST-ACCIDENT OPERABILITY TIME

Equipment must be qualified for the length of time it is required to perform its safety function and must remain in a safe mode after the function is performed. The length of time the equipment is required to function following the onset of an accident is its post-accident operability time (PAOT).

The required PAOT is determined by an analysis of the functional performance requirements of a device for each applicable event listed in FSAR Chapter 15. For each device, the required active function time, based upon the intended safety function, is determined. The determined operability time ranges from very short periods, where safety functions are performed early in the event and subsequent actions are not called for, to longer periods of time where process variables are stabilized. For long periods of required operability, the parameters selected to environmentally qualify needed products assure the capability to bring the reactor to, and maintain a safe shutdown condition.

For equipment within the BOP scope of supply, an accident/system matrix, described in Section 3.1, has been developed to determine the PAOT as explained above.

The PAOT is provided in the EQD Master List (see Table 5.1-1).

#### SECTION 4

#### QUALIFICATION METHODOLOGY

- 4.1 HARSH ENVIRONMENT
- 4.1.1 BOP Equipment
- 4.1.1.1 Electrical

The methodology established for the RBS equipment qualification program is in accordance with the guidelines provided in NUREG-0588 for Category I plants, and in compliance with the regulation of 10CFR50.49. The methodology consists of developing the Environmental Design Criteria (EDC)<sup>(1)</sup>, which establishes the temperature, pressure, humidity, and radiation dose levels, for normal, abnormal, and accident conditions. Post-accident operability time is developed to assure that the equipment will be qualified to maintain a safety function during a post-accident event.

These requirements are included in the procurement specification for the electrical equipment important to safety. The specification mandates that the qualification will be accomplished in accordance with IEEE 323-1974 and in accordance with the quality assurance program referenced in 10CFR50 Appendix B.

Based on these requirements the equipment manufacturer develops an equipment qualification program.

The environmental qualification documents for the equipment are obtained for engineering evaluation from equipment vendors, equipment manufacturers and/or testing facilities. These documents, in the form of qualification procedures, reports, and supplementary information, are evaluated in accordance with NUREG-0538, IEEE 323-1974. Review of these documents includes assurance that they are technically adequate and conform to the environmental qualification requirements of the applicable emergency conditions, operability times, and service conditions.

As each vendor qualification document is reviewed and assessed, a Supplier Document Data Form (SDDF) number is assigned. This number, as well as numbers of other support documents, is referenced on the System Component Evaluation Work (SCEW) Sheet where the results of the review of the

qualification documents are summarized for each equipment listed on the Master List (ML). Support documentation for qualification of any ML item can be accessed through the equipment number on the ML which references the SCEW sheet, or through the manufacturer/model designation of the SCEW sheet itself.

#### Aging

The effects of age are documented as part of the qualification program.

Arrhenius aging methodology is the preferred method for evaluating equipment aging and in general is used as a basis for determining qualified life. When other methods are used, appropriate justification is provided. The thermal aging methodology used for qualifying BOP safety-related devices is described in the qualification test reports referenced in the SCEW sheets.

Prior to simulating seismic and DBA event, equipment or its age-sensitive components were preconditioned to their end-of-qualified life condition.

If it was known that aging improved performance capability, new or partially aged devices were used in testing.

Advanced life conditioning was accomplished by applying an appropriate combination of operational and environmental cycling to simulate the expected service listed in the equipment specification and by subjecting the device to physical and chemical stresses that are known to degrade the device. Normal cycling of in-plant conditions was performed in any combination aging procedure.

In the case where accelerated aging was used, the procedure employed considered the expected application and design life of the device being tested.

Synergistic effects were considered when these effects were known to have a significant effect on equipment performance.

Where required, a maintenance or replacement schedule consistent with qualified life is provided as part of the support documentation and is referenced on the SCEW sheets.

When type testing was selected as the qualification method, the type test was run on the device(s) in a specified sequence that was set down as part of the written test procedure. All sequential testing was performed on the same

unit(s), including aging. The sequence given in IEEE 323-1974, paragraph 6.3.2, is generally used. However, other sequences used are justifiable on the basis that it is severe enough to verify that the device qualified will perform its intended functions within the requirements of the purchase specification before, during, and after a design basis accident. The test specimen has been subjected to all normal manufacturing and QA procedures and is representative of the devices supplied.

#### Margin

Margins are not included in the parameters given in the equipment specifications. However, the specification does include an insert which requires that margin be added to comply with IEEE 323-1974 requirements.

Qualification type test results were reviewed to verify that adequate margin exists between the most severe specified service conditions for the equipment and the conditions used in type testing. Margins are in addition to any conservatism applied during the derivation of local environmental conditions of the equipment. Margin accounts for production variations of equipment and inaccuracies in test instrumentation. Increased levels of testing, number of test cycles, and test duration are among the methods used for ensuring adequate margin.

Some equipment is required by the design to perform its safety function only within the first 10 hrs of an accident. For this equipment in general, a time margin of at least 1 hr in excess of the time assumed in the accident analysis was used.

#### Dose Rate and Synergistic Effects

Qualification for radiation was based on the calculated total integrated dose. Safety-related electrical equipment qualified for use in a nuclear radiation environment was exposed to radiation which simulated the conservatively calculated integrated dose (normal and accident) that the equipment is expected to withstand prior to completion of its intended safety function. In general, a gamma radiation source, typically CO-60, is used to simulate expected radiation exposure. Where beta and gamma radiation exposure is expected, beta radiation is taken into account either during simulated exposure (directly or as a gamma equivalent) or during evaluation of the results. Reduction in the total beta dose was allowed only after considering appropriate shielding factors. If the beta radiation dose

contribution to the equipment or component was calculated to be less than 10 percent of the total gamma radiation dose to which the equipment or component had been qualified, then the equipment or component was considered qualified for the beta and gamma radiation environment.

Dose rate effects were considered when these effects were known to have a significant effect on equipment performance.

The dose rate, energy spectrum, or particle type was addressed to arrive at a gamma equivalent total dose to which the equipment must be exposed. Actual testing using dose rate, energy spectrum, or particle type as qualification parameters was not considered.

Therefore, synergistic effects involving dose rate are not addressed. However; where synergistic effects of radiation and temperature were identified prior to the initiation of qualification, they are included in the program.

#### 4.1.1.2 Mechanical

The Mechanical Equipment Qualification (MEQ) Program provides a documented analysis of the nonmetallic materials, used in active safety-related mechanical equipment, to demonstrate that the environmental effects due to plant operation and postulated accidents would not degrade these materials in such a way as to prevent this equipment from performing its required safety function.

The MEQ Program details the environmental design conformance review of active safety-related mechanical equipment located in the harsh environment identified in Table 2-1. The conformance review includes nonmetallic subcomponents of active mechanical equipment. Equipment categories included in this review are listed in Table 4.1-1. Active safety-related mechanical equipment is detailed in Appendix A.3. Environmental conditions listed in the EDC are used as the basis for the MEQ review.

Generally, mechanical equipment has not been shown to be as sensitive to radiation exposure as electrical components. Metallic portions of the equipment are particularly resistant to radiation. Nonmetallic parts of mechanical equipment, while more sensitive to radiation and temperature, are used in the equipment so that the degradation of mechanical properties will not substantially affect the required active safety function of the component.

#### Methodology

The review consists of the following five-step process.

- Identification of active safety-related mechanical equipment
- 2. Identification of nonmetallic components
- 3. Identification of environmental design conditions
- 4. Identification of nonmetallic material capabilities
- 5. Evaluation of environmental effects

The MEQ Program consists of analyses of active safetyrelated equipment located in systems required for the following functions:

- 1. Emergency reactor shutdown
- 2. Emergency core cooling (short term)
- 3. Reactor core cooling (long term post accident)
- 4. Primary containment isolation
- 5. Containment integrity
- 6. Prevention of release of radioactive material

To accomplish the above functions, complete systems and portions of systems are included in the MEQ Program.

Category I active mechanical equipment within those systems that are located in a harsh environment, and required for performance of the above functions, are included in the MEQ Program. The review is performed by using the specifications, SWEC drawings, vendor drawings, and manuals.

Of the environmental conditions (temperature, pressure, humidity, and radiation) only radiation and temperature were considered in the review. Pressure and humidity were not considered relevant since the design of nonmetallic portions of mechanical equipment for these parameters is governed by system process conditions which have been addressed in the specification.

Each material identified was examined to determine the effect of the environmental conditions on the material

properties. For initial screening, it was conservatively chosen to use the threshold radiation level and maximum service temperature. Materials handbooks, textbooks, and industry and government reports were researched to obtain material data. In some cases vendor data were utilized to supplement the above sources.

A conservative initial screening of the nonmetallic components was made by the comparison of the material capabilities (threshold radiation level and maximum service temperature) with the maximum postulated environmental conditions. Those items which were not shown to be acceptable based on the comparison were evaluated in further detail considering:

- 1. Degree of material degradation
- 2. Material properties affected
- 3. Equipment/component function
- 4. Degree of functional degradation

#### Acceptance Criteria

In order to be considered acceptable, nonmetallic portions of mechanical equipment must either be shown to be acceptable for the plant environment by:

- Exhibiting threshold radiation values and maximum service temperatures above the maximum postulated environmental conditions.
- Demonstrating that the safety function of the component is not compromised and noted as "Justified."

#### 4.1.2 NSSS Equipment

#### 4.1.2.1 Electrical

Safety-related electric NSSS equipment located in a harsh environment includes all three categories of 10CFR50.49(b). A Master List of this equipment is provided in Appendix A.2.

Category 1, 10CFR50.49(b) equipment is that equipment classified by the NSSS vendor as safety-related in the Master Parts List (MPL). Category 2, 10CFR50.49(b) equipment has been identified through review of the electrical connections for all equipment classified as

nonsafety-related in the MPL. Those items connected to ESF or RPS power without being electrically separated in accordance with Regulatory Guide 1.75 are included in the qualification program (3) Category 3, 10CFR50.49(b) equipment has been identified and is included in the qualification program.

The approach taken by General Electric to environmentally qualify safety-related equipment within the NSSC Scope of Supply for RBS to a level consistent with NUREG-0588 is described in the GE Licensing Topical Report NEDE-24326-1-P(4). This report has been approved by the NRC. The methodology described in this report is consistent with applicable Regulations (10CFR50 Appendix A); applicable Regulatory Guides; and with applicable consensus national standards (ANSI and IEEE). The work performed under this guidance is controlled in a manner consistent with the commitments contained in the NRC-approved GE Licensing Topical Report on Quality Assurance.

The approach to qualification described in NEDE-24326-1-P<sup>(4)</sup> is predicated on type testing being the preferred approach. Depending upon either the unique characteristics of the specific devices or on the availability of other sources of qualification data, other approaches such as partial type test with justification by analysis, operating experience, analysis or combination of the above mentioned approaches may be used. For any of these approaches the eventual approach used is justified in the accompanying qualification report. This justification is based on the demonstrated ability of the product to meet its intended safety function.

Where type testing is performed, the approach taken is to assure the device is functional under normal conditions as well as under extremes of such conditions; the devices next age to an end-of-qualified life condition, next the device is subjected to dynamic simulation; next the device is subjected to design basis event conditions and post design basis event conditions; and lastly the device is inspected for failures which may not have been apparent during the operational testing which occurs during each exposure to an environmental extreme. When a product is tested, where practical, the interface associated with the product is included in the test. The specific sequences environments applied during the testing are determined, using engineering judgment, to best select the sequence to which the product would be subjected during actual Furthermore, where synergisms between installation. are known, these effects are taken into environments consideration during the planning and conducting of the

test. All tests that are conducted include adequate margins as required in NUREG-0588. NRC personnel from the Region IV Office of Inspection Enforcement have routinely audited General Electric's environmental qualification efforts and have found no indication that what was being performed for RBS did not demonstrate adequate qualification.

Following the completion of the tests all of the associated documentation that led to the test and was generated during the test is formally assembled into a qualification report. That report is available for NRC audit.

For devices not qualified by test (e.g., devices classified as safety-related solely because they perform a pressure boundary function; devices that perform their safety function prior to the onset of harsh environments in which they do not contribute to the mitigation of the event after performance of the intended safety function, etc) qualification reports are also prepared demonstrating the adequacy of their qualification. As with devices qualified by test, these qualification reports are in an auditable form. The last step of qualification is to ensure that the device tested is similar to the device installed in the field. Therefore, before full qualification can be assured, there is a verification of the similarity between the tested device and the installed device.

#### 4.1.2.2 Mechanical

The NSSS mechanical equipment qualification program encompasses all safety-related active pumps and valves supplied by the NSSS vendor. A Master List (ML) of this equipment is provided in Appendix A.4.

The qualification program is based on a review of the nonmetallic materials in each of the items identified on the ML. The review also determines the functional requirements of the equipment and defines the contribution of each nonmetallic part to the equipment safety function.

Material data necessary to support the qualification evaluation are obtained from the NSSS vendor files or from original equipment vendors. The data are incorporated into the qualification evaluation as necessary to support qualification conclusions.

Using the RBS specific ambient environmental conditions as reported in the  $EDC^{(1)}$ , a qualification evaluation is performed as follows:

- Define the environment that exists locally to all nonmetallic parts.
- 2. Examine part capability relative to the threshold for degradation. Parts for which the environmental exposure is less than the threshold require no further evaluation.
- 3. Parts that cannot be exempted by the evaluation under paragraph 2 are evaluated in detail. If failure can be tolerated, no further evaluation is required. If failure cannot be tolerated, acceptability is demonstrated by analysis or test data, or a combination of both, that proves the part will support the equipment safety function when exposed to normal, abnormal, and accident environments.

For each item shown on the ML a qualification evaluation report is prepared which includes the following information:

- Summary statement of the results of the evaluation and qualification status.
- 2. Definition of any recommended maintenance or other conditions necessary to maintain qualification.
- 3. Definition of the applicable RBS environmental conditions.
- 4. Equipment safety function and function time.
- Nonmetallic material lists related to the equipment item.
- 6. Analysis performed.
- 7. Reference material not commonly available.

The report is maintained in an auditable file as described in Section 5.3.

#### TABLE 4.1-1

#### ACTIVE SAFETY-RELATED MECHANICAL EQUIPMENT CATEGORIES

Fans Dampers Air Treatment Units Hydrogen Recombiner Unit Coolers Pumps Valves - Relief Valves - Check Valves - Motor Operated

Valves - Air Operated

#### 4.2 MILD ENVIRONMENT

Mild environment plant areas are listed in Table 2-2. These areas or zones were selected based on the following guidelines and criteria:

- 1. Safety-related equipment in these zones is located outside of containment, and is not subject to accident environments due to a LOCA or pipe breaks.
- 2. Environmental conditions: 10CFR50.49 paragraph c. (iii) defines a mild environment as: An environment that would at no time be significantly more severe than the environment that would occur during normal plant operation, including anticipated operational occurrences. Anticipated operational occurrences, as defined in 10CFR50 Appendix A means those conditions of normal operation which are expected to occur one or more times during the life of the nuclear power unit and include, but are not limited to, loss of power to all recirculation pumps, tripping of the turbine generator set, isolation of the main condenser, and loss of all offsite power.

There is no significant change in environmental conditions, except radiation, in these zones during an accident.

- a. Temperature, pressure, and humidity: The accident environments are no worse and, in many cases, are less severe than the maximum normal or abnormal conditions. The maximum normal or abnormal conditions include and envelop conditions of anticipated operational occurrences.
- b. Radiation: The total integrated dose for normal 40-yr service plus 180-days accident is less than 104 rads, which is lower than the threshold damage level for organic materials. Electronic components in particular metal oxide semiconductor devices, may have a threshold damage level at somewhat lower doses. Justification for the use of these electronic components in the specified radiation environment shall be provided. Plant zones listed in Table 2-3 are served by the special control room charcoal air filters and will not experience any significant

increase in radiation during normal 40-yr service or accident; therefore, the use of electronic equipment in these zones is considered justified.

Equipment located in the zones listed in Table 2-2 are not exposed to environmental conditions that may cause common mode failures due to environmental conditions during DBE. Immediate access following a DBE is not required other than normal and periodic maintenance. Therefore, these plant zones may be considered mild environment areas.

#### 4.2.1 BOP Equipment

Safety-related equipment located in a mild environment meeting the following requirements is considered adequately qualified.

- 1. A Certificate of Compliance (C of C) which incorporates the qualification requirements specified and states that the functional requirements of the equipment subjected to the specified 1.35 environmental conditions have been met.
- The C of C shall identify the supplied equipment by equipment mark number.
- 3. The equipment has been manufactured in accordance with a quality assurance program that meets the requirements of 10CFR50, Appendix B and states compliance with 10CFR21.
- 4. The requirements for any scheduled surveillance, maintenance calibration, periodic tests, and parts replacements necessary to maintain qualification.

#### 4.2.2 NSSS Equipment

Safety-related NSSS vendor-supplied equipment that is located in a mild environment is considered qualified if:

- 1. The equipment manufacturer's design environmental parameters envelop the RBS specific environment.
- 2. The equipment manufacturer's design functional characteristics envelop the RBS application specific functional performance requirements.

 The NSSS vendor provides a Product Quality Certification (PQC) in accordance with NEDO 11209<sup>(5)</sup>.

The PQC establishes a tie between the supplied item and the respective equipment purchase part drawing which in turn provides further reference to the applicable environmental and functional performance specifications.

#### SECTION 5

#### QUALIFICATION DOCUMENTATION

#### 5.1 MASTER LISTS (ML)

The equipment and components that are within the scope of 10CFR50.49(b) and require qualification on RBS are listed in the ML, Appendix A.

This list includes and identifies 10CFR50.49(b) equipment categories 1, 2, and 3.

One important feature of the ML is its capability to identify all qualification documentation associated with any of the listed safety-related electrical equipment or components through reference to the associated System Component Evaluation Work (SCEW) sheets for that particular equipment or component (see Section 5.2). The identity of any qualification document associated with any of the listed items can be accessed through either the individual equipment identification number such as service water pump 1SWP\*P2A or through a generic equipment manufacturer and model number such as Rosemount 1153B pressure transmitter.

Examples of documentation accessible through this ML reference to the SCEW sheets are purchase specifications, vendor records such as test plans and test reports, and SWEC-generated documentation such as aging analyses of mechanical equipment and equipment operability periods.

The ML contains the majority of the required summary qualification information such as operability period, operability code, location, equipment specification, and other pertinent information, as shown in Appendix A.

For each device, the ML provides a summary of the key elements of the Environmental Qualification Program. Table 5.1-1 and Figure 5.1-1 contain the heading for the ML, with a description of each entry. The first four characters of the device indicate the unit number and the major system in which the device is used. The subsequent characters are used to further segregate the devices by specific type and number. Tables 5.1-2 through 5.1-5 define the various codes used in the ML.

# TABLE 5.1-1

# ENVIRONMENTAL QUALIFICATION DATA MASTER LIST

Number	Title	Description
1	MARK NO.	Indicates identifying number of SWEC equipment (the first four characters of which correspond to the unit number and major system in which the equipment is used).
2	EQUIPMENT DESCRIPTION	Brief description of equipment.
3	VENDOR	Indicates supplier filling purchase order.
4	PANFL/RACK	Mark Number of the panel/rack in which instruments are located.
5	SPEC. NO.	Indicates procurement specification number.
6	MAKE/MAN- UFACTURER	A four-digit code in- dicating the manufac- turer (not necessarily the same as the vendor) (Table 5.1-2 of this document).
7	MODEL/ CATALOG NO.	Manufacturer's Identification Number.
8	REMARKS	Indicates where special notes or further data may be entered concerning the device and its qualification.

# TABLE 5.1-1 (Cont)

Number	Title	Description
9	ENV ZONE	Indicates environmental condition associated with the device.
10	SUBMRG	Indicates if equipment is subjected to submergence.
11	EMRGCN	Indicates harsh environmental condition through which the device must be operable to perform the safety function (Table 5.1-3).
12	ENVTYP	<pre>Indicates type of environment, i.e., harsh, mild.</pre>
13	SFN1 SFN2 SFN3	Indicates the safety functions of the device when exposed to harsh environments (Table 5.1-4). Although three code lines are provided, there may not be three safety functions per device. A dash provided in the space indicates that the extra safety function spaces do not apply.
14	OPTIME	Indicates period of time following the onset of an accident during which the device must remain capable of performing its safety function (operability time).

# TABLE 5.1-1 (Cont)

Number	<u>Title</u>	Description
15	oc	Indicates the operability code category associated with the device with regard to Appendix E, NUREG 0588, Item 2 (Table 5.1-5).
16	QRN1 QRN2 QRN3	Indicates the qualification reference number of the SCEW (System Component Evaluation Work Sheet) applicable to the device.

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# TABLE 5.1-2

### MANUFACTURER NAMES AND MANUFACTURER CODES

# Manufacturer Name

### Manufacturer Code

American Corp/CP Div.	
American Air Filter	AAFC
Anaconda	ANAC
Asco	ASCO
Atlas COPCO Turbinetics	ACOT
Atwood-Morrill	
	COTA
Borg Warner Brand Rex	BORG
	BNRX
Brown Boveri Electric	ERBO
Buffalo Forge	BERG
Carrier	CARR
Ceramic	CRMC
COMSIP Inc.	COMS
Conax	CONX
Copes Vulcan Inc.	COVI
Crane-Deming	CRDE
Delaval	DLVL
Electro-Mechanics	ELEC
Elgar	ELGR
E. P. Porter	PRTC
Foxboro	FOXB
Fisher Controls	FCTL
Fluid Components Inc.	FCII
General Electric	GECO
General Atomic Corp.	GACO
Gould	GLDI
Goulds Pumps	GLDP
Haywood-Tyler	HATY
Indeeco	INDC
Jamesbury	JMSB
Limitorque	LMTQ
Mercury	MERC
Namco	NMCO
Nelson Elect.	NELE
Nu-therm	NUTH
Okonite	OKON
Posi-Seal	POSI
Power Conversion Products, Inc.	PCPI
Powell Electric Corp.	PECP
Pyco	PYCO
Quality Air Design	QADE
Reliance	RELI

# TABLE 5.1-2 (Cont)

'nufacturer Name	Manufacturer Code
Ruestos	ROCK
Rosemount	RSMT
RTE Delta	RTED
Siemens Allis	SALS
Southern Transformers	SXFR
Square D	SQRD
Super Pressure	SUPR
Target Rock	TRCP
Technology for Energy Corp.	TEEC
Thermexchanger	THRM
Transamerica Delaval	TRND
Velan	VLAN
Westinghouse	WEST

#### TABLE 5.1-3

#### EMERGENCY CONDITION CODES

Condition Code Normal NORM ABNO Abnormal High-energy line breaks inside and outside of containment: Inside containment HLBI Outside containment HLBO Fuel handling accident FHA Main steam line break MSLB TRNS Transient caused by HLBI or HLBO (radiation and temperature)

# TABLE 5.1-4

### SAFETY FUNCTION CODES

Code	Description
ADS	Automatic Depressurization System
BCNT	System Boundary Control
CCGC	Containment Combustible Gas Control
CISL	Containment Isolation
DISP	Safety-related Display Instrumentation
EMPW	Emergency Power/Electrical Distribution
ESA	Engineered Safeguards Actuation
HPCS	High-pressure Core Spray
HVAC	Ventilation, Heat, A/C (general/safety-related)
HVC	Main Control Room HVAC
HVR	Containment Ventilation
LCS	Leakage Control System
LPCI	Low-Pressure Coolant Injection
LPCS	Low-Pressure Core Spray
MSI	Main Steam Isolation
PAM	Post-Accident Monitoring
PANL	Panel - Seismic Support, Protection, Termination and Display Point for Class 1E Devices
PNET	Electrical Penetration
RACK	Seismic Support, Protection, and Termination of Class 1E Devices
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RMS	Radiation Monitoring System
RPRT	Reactor Protection
RTRP	Reactor Trip
SFC	Spent Fuel Cooling
SGTS	Standby Gas Treatment System
SW	Service Water

#### TABLE 5.1-5

# OPERABILITY CODES (NUREG 0588, Appendix E, Section 2 Categories)

Operability Code	Equipment Type
A	Equipment that will experience environmental conditions of design basis accidents for which it must function to mitigate such accidents and that will be qualified to demonstrate operability in the accident environment for the time required for accident mitigation with safety margin to failure.
В	Equipment that will experience environmental conditions of design basis accidents through which it need not function for mitigation of such accidents but through which it must not fail in a manner detrimental to plant safety or accident mitigation and that will be qualified to demonstrate the capability to withstand any accident environment for the time during which it must not fail with safety margin to failure.
С	Equipment that will experience environmental conditions of design basis accidents through which it need not function for mitigation of such accidents and whose failure (in any mode) is deemed not detrimental to plant safety or accident mitigation and need not be qualified for any accident environment.

NOTE: If Categories B and C are found to be necessary, a "basis" for inclusion in those categories has been developed on a case-by-case basis.

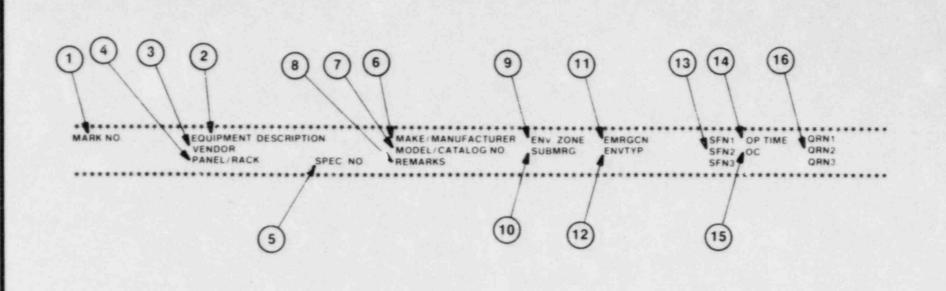


FIGURE 5.1-1

RBS EQD MASTER LIST HEADING FORMAT

RIVER BEND STATION

**ENVIRONMENTAL QUALIFICATION DOCUMENT** 

#### 5.2 SYSTEM COMPONENT EVALUATION WORK (SCEW) SHEET

The SCEW sheet presents a description of the individual equipment and its location. A comparison is made, in summary, of the actual environmental zone specified, with the environmental parameters encompassed in the qualification program. It also contains references to all of the supportive environmental qualification documents which demonstrate that the equipment is qualified to perform its safety function in the postulated environmental conditions.

The SCEW sheet format is shown on Figure 5.2-1.

Reference to the qualification documents which contain detailed supporting information, including test data, can be found listed in the individual equipment or component SCEW sheet.

Documents that are referenced are test reports, maintenance/surveillance documents, Certificates of Compliance (C of C), and other such items that are retained in Supplier's Document Data Form (SDDF) files. Other documents which may be referenced are equipment specifications (SPEC), calculations (CALC) of composite environmental zone profiles, qualified life and supplemental analyses.

The SCEW sheets are compiled in Appendix B.

NOTES: 1.FOR CONTLETE ENVIRONMENTAL CONDITIONS SEE THE DOCUMENT REFERENCED. REMARKS NOTE 1,2 NOTE 1 NOTE 1 NOTE 1 47.24 2.SEE CALCILATION FOR EQUIVALENT TID GAMMA. SHEET 1 MANGIN: ENVIRONMENTAL CONDITIONS AND OLDE, IFTCATION SPECIFIED : OUNLIFIED : SPECIFIED : OUNLIFIED : DOCUMENT REFERENCE DATE DOCUMENT REFERENCES PREPARED BY: ACCIDENT ACCIDENT PRESS (PS15) NORMA ACCIDENT PURGAMETER .. SHEWENCE DOCUMENTATION ACCEPTABLEITY: NAMES 0568,CAT FOUTFMENT DESCRIPTION MAINT/SLENE ILL - - - - REFERENCE: WHEE CHESCHIFTIONS SAFETY FLAKETIONS GLAR REF \* FLOOD LEVEL ELEVATIONS ABOVE FLOOD MANUFACTURER: ACCINACY - - SPECs SPECs BERDs SPEC NO.: SYSTEM: MODEL NO. 1 COME NO.:

SYSTEM COMPONENT EVALUATION JOHN SHEET

RIVER BEND STATION - UNIT 1 DOCKET NUMBER 50-458

5.2-1 FIGURE EQD SULM SHEET

RIVER SEND STATION

ENVIRONMENTAL QUALIFICATION DOCUMENT

5.3 AUDITABLE FILE

LATER

RBS EQD

SECTION 6

MAINTENANCE AND SURVEILLANCE

LATER

## RBS EQD

## SECTION 7

## REFERENCES

- 1. Environmental Design Criteria (EDC) for River Bend Station Unit 1. Stone & Webster Engineering Corporation, Document No. 215.150, Revision 2, 1984.
- Title 10, Code of Federal Regulations, Paragraph 50.49, Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants. Federal Register, Vol. 48, No. 15. January 21, 1983.
- Regulatory Guide 1.75, Physical Independence of Electric Systems, Rev. 2, September 1978.
- Shirley, N.C. et al. General Electric Qualification Program, Licensing Topical Report NEDE-24326-1-P, January 1983.
- General Electric Nuclear Energy Business Group, BWR Quality Assurance Program, NEDO-11209-04A, March 1978.

APPENDIX A.1
SAFETY-RELATED ELECTRICAL EQUIPMENT - BOP

04/23/84

## RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MADE DO MADE DATA HASTER LIST

MARK NO	EQUIPMENT DESCRIPTI VENDOR PANEL/RACK		HAKE/HANUFACTURER HODEL/CATALOG NO. RENARKS	ENV. ZONE SUGHRG	ENVTYP	SFN2	OC BASIS	QRN1 QRN2 QRN3
**********			*******	*********	********			
21 NUCLEAR BOI	LER STEAM							
B21*AOVF032A	AIR OPERATED VALVE			AB-114-2	HARSH		N/R	
	ATROODSTORRICE	228.218	N/R FOR SAFETY FUNC	TION	1160.511			
B21*AOVF032B	AIR OPERATED VALVE			AB-114-2			N/R	
	ATHOOD & HORRILL	228.218	N/R FOR SAFETY FUNC	TICN	HARSH			
1821*MOVF001	MOTOR OPERATED VALV		LHTQ		HLBI	BCNT	N/R	
1021*1001001	VELAN		51/3-000-5		HARSH		A -	
		228.214	NAR FOR SAFETY FUNC	TION				
1821*MOVF002	HOTOR OPERATED VALV	/E	LHTQ	DH-1	HLBI		N/R	
	VELAN	228.214	SIB-000-5 N/R FUR SAFETY FUNC	TION	HARSH		Α -	
1821+MOVF005	MOTOR OPERATED VALV	/E	LHTQ	DH-1	HLBI		N/R	
	VELAN	228.214	SIIS-000-2 N/R TO CLOSE		HARSH	1	Α -	
1821*MOVF016	HOTOR OPERATED VALV	/F	LHTQ	DW-1	HLBI	CTSL	1 HR	
2022411041 920	VELAN		SB-00-10		HARSH		A -	
		228.212						
1821*MOVF019	MOTOR OPERATED VALV	Æ	LMTQ SB-00-10	AB-114-2	HLBO HARSH		1 HR	
		228.212	35-00-10		nacan	-		
1821*MOVF027A	MOTOR OPERATED VALV	/E	LHTO	AB-114-2		LCS	1 HR	
	VELAN	228.214	SHC-04-2		HARSH		Α -	
1921*MOVF027B	HOTOR OPERATED VALV	/F	LHTO	AB-114-2	HI BO	LCS	1 HR	
	VELAN		SHC-04-2		HARSH	-	A -	
		228.214						
1821*MOVF027C	MUIOR OPERATED VALV	/E	LNTQ SHC-04-2	AB-114-2	HLBO HARSH	LCS	1 HR	
	VELAN .	228.214			пакоп		Α -	

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MARK NO	EQUIPMENT DESCRIP	TION	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EIRGCN	SFN1	OP TIME QRN1
	PANEL/RACK	SPEC.NO	REHARKS	50511115	CHALLE	SFN3	
******			********	********	******		
321 NUCLEAR BOI	LER STEAM						
1821*HOVF027D	MOTOR OPERATED VA	ALVE	LHTQ	AB-114-2	HLBO	LCS	1 HR
	VELAN		SHC-04-2		HARSH		A -
		228.214					
1821*!!OVF065A		ALVE		AB-114-7	HLEO	BCNT	1 HR
	VELAN		51:8-4-250		HARSH	P. P. P.	A -
		228.212					
1821*HOVF0658		ALVE		AB-114-7	HLB0	BONT	1 HR
	VELAN		116-4-250		H. ARSH	-	Α -
		228.212					
1821×HOVF067A	MOTOR OPERATED V	ALVE	LHTQ	AB-114-2	HLEO	BENT	1 HR
	VELAN		53-00-5		HARSH		A -
		228.214					
1821*MOVF067B	MOTOR OPERATED V	ALVE	LHTQ	AB-114-2	HLBO	BCNT	1 HR
	VELAN		58-00-5		HARSH		A -
		228.214					
1821*HOVF067C	MOTOR OPERATED V	ALVE	LHTQ	AB-114-2	HLBO	BCNT	1 HR
	VELAN		SB-00-5		HARSH		A -
		228.214					
1821*MOVF067D		ALVE	LHTQ	AB-114-2	HLBO	BCNT	1 HR
	VELAN		SB-00-5		HARSH		A -
		228.214					
1821*MOVF085	The same and the same and the	ALVE	LHTQ	AS-114-2	HLBO	CISL	1 HR
	VELAN	1	SHB-00-10		HARSH		A -
		228.212					
1821*MOVF086	CONTRACTOR OF STREET	ALVE	LHTQ	AB-114-7	HLBO	CISL	1 HR
	VELAN		SH3-00-10		HARSH		A -
		228.212					
1821*MOVF098A	HOTOR OPERATED V	ALVE	LHTQ	AB-114-7			1 HR
	VELAN		SI/B-4-250		HARSH		
		228.212					

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MARK NO	EQUIFHENT DESCRIPTION VENDOR PANEL/RACK	SPEC.NO	MAKE/HANUFACTURER MUDEL/CATALOG NO. REMARKS	ENV. ZONE SUZHRG	ENROCH ENVTYP	SFN1 SFN2 SFN3	
*********	***************	******	**************	******	***********	*****	************
B21 NUCLEAR BOI	CLER STEAM						
1821×MOVF0988	MOTOR OPERATED VALVE VELAN	228.212	LHTQ 51/8-4-250	AB-114-7	HARSH		1 HR
1821+MOVF098C	MOTOR OPERATED VALVE VELAN	228.212	LHTQ 51/6-4-250	AE-114-7	HARSH		1 HR
1821*MOVF096D	MOTOR OPERATED VALVE VELAN	228.212	LHTQ 51/3-4-250	AB-114-7	HARSH		1 HR
B33 REACTOR REC	TIRC VALVE FLOW CONTROL						
1833*AOVF019	AIR OPERATED VALVE FISHER CONTROLS	247.491	FCTL,NMCO DBQ,EA180	DH-1	HLBI HARSH	BCNT	1 HR
1833*AOVF020	AIR OPERATED VALVE FISHER CONTROLS	247.491	FCTL,NYCO DSQ,EA180	C1-3	HLBI HARSH	BCNT	1 HR
1B33*SOVF019	SOLENOID VALVE FISHER CONTROLS	247.491	ASCO NP8320	DW-1	HLBI HARSH	BCNT	1 HR
1633*SOVF020	SOLEMOID VALVE FISHER CONTROLS	247.491	ASCO NP8320	CT-3	HLBI HARSH	BCNT	1 HR
CCP COMPONENT C	COOLING - PRIHARY CONTAI	NHENT OR F	REACTOR				
1CCP*HOV129	MOTOR OPERATED VALVE JAMESBURY	228.243	LHTQ 51/3-000-5	AB-070-8	HARSH		1000
1CCP*MOV130	MOTOR OPERATED VALVE JAMESBURY	228.243	LMTQ SMS-000-5	AB-070-8	HARSH		100D

FAGE 4

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACH	014	MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE	EHRECH	SFN1	OP TIME OC BASIS	QRN1
**********	*********	*********	*********	*******	*********	******	********	**********
CCP COMPONENT	COOLING - PRIHARY CONTA	INHENT OR RE	EACTOR					
1CCP*MOV138	HOTOR OPERATED VALVE VELAN	E 228.212	LHTQ 51:8-0-25	AB-114-6	HLBO HARSH	CISL	1HR A -	
1CCP*MOV142	JAMESBURY	E 228.243	LHTQ 5H5-000-2	CT-G	HARSH		1HR	
1CCP*MOV143	HOTOR OPERATED VALV	E 228.243	LHTQ 5:8-000-2	CT-G	HARSH		1HR	
1CCP*HOV144	HOTOR OPERATED VALV JAMESBURY	E 228.243	LHTQ SHS-000-2	DH-1	HARSH		1HR	
1CCP*HOV158	MOTOR OPERATED VALV	E 228.212	LHTQ SH3-0-25	CT-G	HLBI HARSH	CISL - -	1HR A -	
1CCP*MOV159	MOTOR OPERATED VALV	E 228.212	LMTQ 51/8-0-25	AB-114-6	HLEO HARSH	CISL	IHR A -	
1CCP+MOV16A	HOTOR OPERATED VALV JAMESBURY	E 228.243	LHTQ SHS-000-5	AB-070-8	HARSH		1000	
1CCP+MOV16B	HOTOR OPERATED VALV	E 228.243	LHTQ SHS-000-5	AB-070-8	HARSH		100D	
1CCP*MOV163	MOTOR OPERATED VALV	228.214	LMTQ 51/3-060-2	FB-070-G	HL50 HARSH		100D A -	
1CCP+MOV169	MOTOR OPERATED VALV	228.214	LHTQ 51/8-000-2	FB-070-G	HLBO HARSH	BCNT	100D A -	

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## RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY HARM NO - HARSH ENVIRONMENT ONLY

MARK NO	EQUIPMENT DESCRIPTION VENDOR	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCN	SFN1	OP TIME QRN1 OC BASIS GRN2
	PANEL/RACK SF		30011119	ENVIIP	SFN3	
**********		**********	******	*********		
CCP COMPONENT	COOLING - PRIMARY CONTAINS	MENT OR REACTOR				
1CCP+MOV335		LHTQ	AB-070-8			1000
	JAHESBURY 22	SIIB-000-5		HARSH		Α -
100P+H0V336	MOTOR OPERATED VALVE	LHTQ	AB-070-8	HLEO	ECNT	1000
		SMB-000-5		HARSH		A -
1CCP*PT1A	PRESSURE TRANSMITTER	PSUT	AB-070-8	HLEO	ECNT	1000
	ROSEMOUNT	1153G37		HARSH	The state of the s	A -
		7.491				
1CCP*FT1B	PRESSURE TRANSMITTER ROSEMOUNT	RSHT 1153G37	AB-070-8	HLBO HARSH	120000000	1000 A -
	24	7.481				
1CCP*PT1C	PRESSURE TRANSHITTER		AB-070-8			1000
	FOSENDUNT 24	1153GB7		HARSH	-	Α -
1CCP*PTID	PRESSURE TRANSHITTER	RSHT	AB-070-8	HLED	ECNT	1000
	ROSEMOUNT 29	1153GB7		HARSH		Α -
1CCP*PT1E	PRESSURE TRANSHITTER	RSHT	AB-070-8	HLBO	BCNT	100D
	ROSEHOUNT 24	1153987		HARSH		A -
1CCP*PT1F	PRESSURE TRANSMITTER ROSEMOUNT	1153687	AB-070-8	HLBO HARSH	1000000	1000 A -
	24	7.491				
1CCP*PT1G	PRESSURE TRANSHITTER		AB-070-8			1000
	ROSEHOUNT 24	1153637		HARSH		Α -
1CCP*PT1H	PRESSURE TRANSMITTER	RSHT	AB-070-8	HLEO	ECNT	1000
	ROSEHOUNT	1153GB7		HARSH		A -

247.481

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACH SPEC.NO	MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE	ENTYP	SFN1	OF TIME	QRN1
********	****		*******	*****	********	*******	*********
HS CONTAINMENT	T ATMOSPHERE MONITORING						
CHS*AI25A	HYDROG. ANALYZER INDICATOR COMSIP 1CHS*FNL12A 247.421	API 704S-N5-4702-6000	A5-141-1	HLBO HARSH	DISP	30 D B A	
CHS+AI25B	HYDROG ANALYZER INDICATOR COMSIP 1CHS*PNL10B 247.421	API 7045-NS-4702-0000	A5-141-1	HLBO HARSH	DISP	30 D 6 A	
CHS+AT25A	HYDROG. ANALYZER IND. TRANSM COMSIP 1CHS*FML10A 247.421	DELP 85 REG.G.1.97	AB-141-1	HLBO HARSH	PAH	30 D A -	
CHS*AT25B	HYDROG. ANALYZER IND. TRANSH COMSIP ICMS-PNLICB 247.421	DELP B5 REG.G.1.97	AS-141-1	HLEO HARSH	PAH -	30 D A -	
CHS+LT23A	LEVEL TRANS & REMOTE SEAL ROSEMOUNT 247.481	RSMT 1153DB5PG, 1159C60A REG.G.1.97	CT-2	HARSH		1000	
CHS*LT23B	LEVEL TRANS & REMOTE SEAL ROSEMOUNT 247.461	RSMT 1153085PG, 1159C60A REG.G.1.97	CT-2	HARSH		1000	
CHS*PDT29A	DIFF PRESSURE TRANSMITTER ROSEHOUNT 1JPB*RAK4 247.481	RSHT 1153DB6	AB-141-2	HLBO HARSH	PAH	100D A -	
CHS*PDT29B	DIFF PRESSURE TRANSMITTER POSEMOUNT 1JPB=RAK3 247.481	RSMT 1153083	AB-141-2	HLBO HARSH	PAH -	100D A -	
CHS-PNL10A	REHOTE CABINET COMSIP 247.421	COHS NONE, UNIQUE	AB-141-1	HLBO HARSH	FANL	1000 A -	
ICHS*PNL10B	REMOTE CABINET CONSIP 247.421	COMS NONE, UNIQUE	AB-141-1	HLBO HARSH	PANL	100D A -	

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MARK NO	EQUIPMENT DESCRIPTI	ION	MAKE/MANUFACTURER MCDEL/CATALOG NO.	ENV. ZONE	EMRGCN	SFN1	OP TIME	QRN1
	PANEL/RACK	SPEC.NO	REMARKS			SFN3		CRN3
***********	****************	*********	**********	******	******	*******	********	***********
CHS CONTAINMEN	T ATMOSPHERE MONITORING	;						
1CHS*PNL12A	LOCAL CONTROL CAB. CCHSIP	247.421	COHS NONE, UNIQUE	AB-141-1	HARSH		1000	
1CHS*FNL12B	PANEL ELECTRONECHANICS			AB-141-1	HARSH		1000	
	The second secon	247.421			TIAN SIT			
1CHS*PT2A	PRESSURE TRANSHITTE	R		AB-141-2			1000	
	ROSEMOUNT 1JPB=RAK4	247.481	1153AB6 REG.C.1.97		HARSH		Α -	
1CHS*PT28	PRESSURE TRANSMITTE	R	RSMT 1153AB6	AB-141-2	HLEO HARSH	PAM	100D A -	
	1JPB-PAR3	247.481						
1CMS*PT4A	PRESSURE TRANSMITTE	R	RSHT 1153AB6	AB-141-2	HLBO HARSH		1000 A -	
	1JPB+RAK4	247.481			tirans.			
1CHS*PT4B	PRESSURE TRANSMITTE	R	RSHT 1153AB6	AB-141-2	HLEO HARSH		100D A -	
	1JPB*RAH3	247.481						
1CHS*RTD24A	RTD PYCO		PYC0 122-3046-12	CT-2	HLBI	A man of the court	100D A -	
		247.461						
1CHS*RTD248	RTD PYCO		PYC0 122-3046-12	CT-2	HLBI HARSH		1000 A -	
		247.461						
1CHS+RTD24C	RTD PYCO		PYC0 122-3046-12	CT-2	HLBI HARSH		100D A -	
	7100	247.461	***************************************					
1CHS*RTD24D	RTD		PYC0 122-3046-04	CT-2	HLBI HARSH	DISP	100D A -	
	PYCO	247.461	122-3046-12		nar.an			

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MARK NO	EQUIPMENT DESCR		HAKE/HANUFACTURER	ENV. ZONE	ENRECH	SFNI	OP TIME ORNI
	PANEL/RACK	SPEC.NO	HODEL/CATALOS NO. REMARKS	Subtines	ENVIYP	SFN2 SFN3	OC BASIS CRN2
*****			*******	********	******	********	**************************************
CHS CONTAINNEN	ATMOSPHERE HONITO	RING					
1CMS*RTD24E	RTD		PYCO	CT-2	HLBI	DISP	100D
	PYCO	247.461	122-3096-12		HARSH	*	A -
		541.401					
1CHS*RTD24F	RTD		PYCO	CT-2	HLBI	DISP	1000
	PYCO	247.461	122-3046-12		HARSH		A -
		247.401					
1CHS*RTD246	RTD		PYCO	CT-2	HLBI	DISP	1000
	PYCO	207 043	122-3046-12		HARSH	-	A -
		247.461					
1CHS*RTD24H	RTD		PYCO	CT-2	HLBT	DISP	1000
	FYCO	247.461	122-3046-12		HARSH	-	Α -
		247.401					
1CHS+RTD24J	RTD		PYCO	CT-2	HLBI	DISP	1000
	PYCO	247.461	122-3046-12		HARSH		A -
		104,143					
1CMS+RTD24K	RTD		PYCO	CT-2	HLBI	DISP	1000
	PYCO	247.461	122-3046-12		HARSH	- T	A -
		247.401				100	
1CHS+RTD40A	RTD		PYCO	CT-2	HLBI	PAM	1000
	PYCO	247.461	122-3046-12		HARSH	-	A -
		247.401	REG.G.1.97				
1CMS+RTD408	RTD		PYCO	CT-2	HLBI	PAH	1000
	PYCO	207.043	122-3046-12		HARSH		Α -
		247.461				-	
1CMS+RTD40C	RTD		PYCO	CT-2	HLBI	PAH	100D
	PYCO	***	102-3046-12		HARSH		A -
		247.461					
1CHS*RTD40D	RTD		PYCO	CT-2	HLBI	FAM	100D
	PYCO	202 242	122-3046-12		HARSH	-	A -
		247.461	REG.G.1.97				

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MARK NO	EQUIPMENT DESCR		HAKE/HANUFACTURER HODEL/CATALOS NO.	ENV. ZONE		SFNI	OP TIME GRN1 CC BASIS GRN2
	PANEL/RACK	SPEC.NO	REMARKS	SOUTHS	ENVITE	SFN3	
**********	***********			********	*********		
CHS CONTAINHEN	ATHOSPHERE HONITO	RING					
1CHS*RTE41A	PYCO	247.461	PYC0 122-3046-12 REG.G.1.97	DW-1	HLBI HARSH	PAH -	100D A -
1CHS*RTD41B	RTD PYCO	247.461	PYC0 122-3046-12 REG.G.1.97	DN-1	HLBI HARSH	PAM -	100D A -
1CHS*RTD41C	RTD PYCO	247.461	PYC0 122-3046-12	DN-1	HLBI HARSH	PAH -	100D A -
1CMS+RTD410	RTD PYCO	247.461	PYC0 122-3046-12	DH-1	HLBI HARSH	PAH	1000 A -
1CHS+RTD42A	RTD PYCO	247.461	PYC0 122-3046-12	CT-G	HLBI HARSH	PAN -	100D A -
1CHS+RTD428	PYCO	247.461	PYC0 122-3046-12	CT-2	HLBI HARSH	PAM	100D A -
1CHS+RTD42C	PTD PYCO	247.461	PYCO 122-3046-12	CT-2	HLBI HARSH	PAH	100D A -
1CHS*RTD42D	PYCO	247.461	PYC0 122-3046-12	CT-6	HLBI HARSH	PAH	100D A -
1CHS*RTD42E	PYCO	247.461	PYC0 122-3046-12	CT-3	HLBI HARSH	PAM	100D A -
1CHS*RTD42F	RTD PYCO	247.461	PYC0 122-3046-12	CT-3	HLBI HARSH	PAH -	100D A -

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HARK NO	EQUIPMENT DESCRIPTS VENEOR PANEL/RACK		HARE/MANUFACTURER HODEL/CATALOG NO. REHARKS		ENVTYP		OF TIME	3950 955
*******	***********	*******	**********	********	*******		*****	*******
HS CONTATINIEN	T ATMOSPHERE MONITORING							
TO CONTAIN LINE	AIROSPHERE HUNITURING							
ICHS×RTD42G	PYCO		PYC0 122-3046-12	CT-G	HLBI HARSH	PAM	100D A -	
		247.461				-		
ICHS*RTD42H	RTD PYCO		PYC0 122-3046-12	CT-G	HLBI		1000	
	7.00	247.461	155-3046-15		HARSH		Α -	
CHS+RTD42J	RTD PYCO		PYCO	CT-3	HLBI	13,000	1000	
	7.00	247.461	122-3046-12		HARSH		Α -	
CHS*RTD42K	RTD PYCO		PYCO	CT-G	HLBI	PAH	1000	
	Pico	247.461	122-3046-12		HARSH		Α -	
ICMS*RTD43A	RTD		PYCO	DW-1	HLBI	PAH	1000	
	PYCO	247.961	102-3046-12		HARSH		A -	
CHS-RTD438	RTD		PYCO	DN-1	HLBI	PAH	1000	
	PYCO	247.461	122-3046-12		HARSH		Α -	
CMS*RTD43C	RTD		PYCO	DM-1	HLBI	PAH	1000	
	PYCO	247.461	122-3046-12		HARSH	2.1	Α -	
CHS*RTD43D	RTD		PYCO	DW-1	HLBI	PAH	1000	
	FYCO	247.461	122-3046-12		HARSH	1	Α -	
ICHS*RTD43E	RTD		PYCO	DH-1	HLBI	PAM	1000	
	PYCO	247.461	122-3046-12		HARSH		Α -	
ICHS*RTD43F	RTD		PYCO	DW-1	HLBI	PAN	1000	
	PYCO	247.461	122-3046-12		HARSH		A -	

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MARK NO	EQUIPMENT DESCRIP	TICN	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRIGEN	SFN1	OP TIME QRN1 OC BASIS GRN2
	PANEL/RACK	SPEC.NO	REMARKS			SFN3	
**********	********	********	*********	*******	*****	*********	***********
CHS CONTAINMENT	T ATHOSPHERE MONITORI	NG					
1CHS*SOV31A	SOLENDID VALVE TARGET ROCK	247.501	TRCP 77KK-002	AS-114-6	HLBO HARSH		30 D
1CMS*SOV31B	SOLENOID VALVE TARSET ROCK	247.501	TRCP 77HK-002	A3-141-3	HLBO HARSH		30 D
1CHS*50V31C	SOLENDID VALVE TARGET ROCK	247.501	TRCP 77KK-002	AB-114-6	HLBO HARSH		30 D A -
1CHS*SOV31D	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-002	AB-141-3	HLBO HARSH	- 130100.00.00	30 D A -
1CHS*SOV32A	SOLENDID VALVE TARGET ROCK	247.501	TRCP 776K-002	CT-G	HLBI	PAM - -	100D A -
1CHS×SOV326	SOLENOID VALVE TARGET ROCK	247.501	TRCP 7710K-002	CT-G	HLBI HARSH	PAH -	100D A -
1CMS×SOV33A	SOLENDID VALVE TARSET ROCK	247.501	TRCP 77KH-003	CT-1	HLSI HARSH		100D A -
1CHS+SOV33AA	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-003	CT-2	HLBI HARSH		100D A -
1CMS+S0V338	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77NK-003	CT-1	HLBI HARSH		100D A -
ICHS*SOV33EB	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-003	CT-2	HLBI HARSH		100D A -

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MARK NO	EQUIPMENT DESCRIP	TION	HAKE/HANUFACTURER HODEL/CATALCS NO.	ENV. ZONE	EHRGCN	SFN1	OP TIME	CHNI
		SPEC.NO		200120	EUGITE	SFN3	CC BASIS	QRN3
*********			********	*****	*****			
CHS CONTAINMEN	T ATMOSPHERE MONITORI	NG NG						
1CHS+SOV33C			TRCP	CT-1	HLBI	PAH	1000	
	TARSET ROCK	247.501	77KK-003		HAPSH	-	A -	
		647.501						
1CH5*S0V330			TRCP	CT-1	HLSI	PAH	1000	
	TARGET ROCK		77KK-003		HARSH	-	A -	
		247.501						
1CMS+SOV33E	SOLENDID VALVE		TRCP	CT-1	HLBI	PAH	1000	
	TARGET ROCK		77HH-003		HARSH		Α -	
		247.501						
1CHS*SOV33F	SOLENOID VALVE		TRCP	CT-1	HLBI	PAH	1000	
	TARGET ROCK		77KK-003		HARSH		A -	
		247.501						
1CHS+S0V336	SOLENDID VALVE		TRCP	CT-5	HLBI	DAN	1000	
and the state of t	TARGET ROCK		77504-003		HARSH	-	A -	
		247.501				1.0		
1CHS+SOV33H	SOLENOID VALVE		TRCP	CT-5	HLBI	DAM	1000	
20101001001	TARGET ROCK		7768-003	C1-3	HARSH	Part		
		247.501						
1CHS+SOV33J	SOLENDID VALVE		TRCP	CT-10	HLBI	P. 414	1000	
101134304333	TARGET ROCK		7758-003	C1-10	HARSH		100D A -	
		247.501						
1CHS+SOV33K	SOLENDID VALVE		TRCP	CT 10		Date	2000	
***********	TARGET ROCK		77KK-003	CT-10	HLBI HARSH		100D	
		247.501						
1CHS+S0V33S	COLENOTO VALUE		YOUR			20.400		
1013*300333	SOLENOID VALVE TARGET ROCK		TRCP 77HK-003	CT-5	HLBI HARSH		1000 A -	
		247.501						
TOUC COURTY	COLENDAD NAVIE		TROP					
TC1:2+30V331	SOLENDID VALVE TARGET ROCK		77KH-003	CT-5	HARSH		100D A -	
		247.501			1100.211			

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HARK NO	EQUIPHENT DESCRIP VENDOR PANEL/RACK	TION	HAME/HANUFACTURER HODEL/CATALOG NO. REMARKS	ENV. ZONE	EMRGEN	SFN1	OP TIME OC BASIS	QRN1
********	************	**********	*************	*******	******		*******	
CHS CONTAINHEN	T ATHOSPHERE MONITORI	ING						
1CHS+SOV33U	SOLENDID VALVE TARGET ROCK	247.501	TRCP 776H-003	CT-7	HLBI HARSH	PAH	100D A -	
1CHS*\$0V33V	SOLEMOID VALVE TARGET ROCK	247.501	TRCP 77KK-003	CT-7	HLBI HARSH	PAH	100D A -	
ICHS*SOV33H	SOLENDID VALVE TARGET ROCK	247.501	TRCP 77:0K-003	CT-G	HLBI HARSH	PAH -	1000 A -	
ICHS+SOV33X	SOLENDID VALVE TARGET ROCH	247.501	TRCP 77EN-003	CT-G	HLBI HARSH	PAN	100D A -	
ICHS*SCV33Y	SOLENDID VALVE TARGET ROCK	247.501	TRCP	CT-6	HLBI HARSH	PAH	100D A -	
1CHS+SOV33Z	SOLENOID VALVE TARGET ROCK	247.501	TRCP	CT-6	HLBI HARSH	PAH - -	100D A -	
ICHS*SOV34A	SOLENDID VALVE TARGET ROCK	247.501	TRCP 77KK-003	CT-G	HLBI HARSH	PAH -	1000 A -	
1CHS×SOV34B	SOLENOID VALVE TARGET ROCH	247.501	TRCP 77HH-003	CT-G	HLBI HARSH	PAH -	100D A -	
1CHS+S0V34C	SOLENOID VALVE TARGET ROCK	247.501	TRCF 77KK-003	CT-G	HLBI HARSH	PAH	1000 A -	
1CHS*S0V340	SOLEMOTO VALVE TARGET ROCK	247.501	TRCP 77KK-003	CT-G	HLBI HARSH	PAH	100D A -	

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HARK NO	EQUIPMENT DESCRIP	TION	MANE/HANUFACTURER MCDEL/CATALOG NO.	ENV. ZONE	EHRGON	SFN1	OP TIME	QKNI
	PANEL /PACK	SPEC NO	REMARKS			SFN3		QRN3
*********	******	********	**************	*******	*********	*****	******	*********
CHS CONTAINMEN	T ATHOSPHERE HONITORI	NG						
ICHS+SOV35A	SOLENDID VALVE		TRCP	CT-G	HLBI	200000000000000000000000000000000000000	30 D	
	TARGET ROCK		77KK-002		HARSH	PAH	Α -	
		247.501						
ICHS+SOV358	SOLENOID VALVE		TRCP	CT-S	HLBI		30 D	
	TARGET ROCK		77KK-002		HARSH	PAH	A -	
		247.501						
CHS*SOV35C	SOLENUID VALVE		TRCP	CT-G	HLBI	CISL	30 D	
.0134304330	TARGET ROCK		77KK-002		HARSH	PAH	A -	
		247.501						
ICHS+SOV350	SOLENOTO VALVE		TRCP	CT-G	HLBI	CISL	30 D	
(C1)3#30 v 330	TARGET ROCK		77HH-002		HARSH	PAH	A -	
		247.501				- Till		
NS CONDENSATE	- MAKE-UP AND DRANOF	F						
ICNS+MOV125	MOTOR OPERATED VA	LVE	LHTQ	AB-114-6	HLBC	CISL	1HR	
TCU2*UUA152	VELAN		SMB-00-10		HARSH	LCS	A -	
		228.212						
IENS+MOV130	MOTOR OPERATED VA	LVE	LHTQ	AB-114-6	HL50	CISL	IHR	
1011341104430	VELAN		SHB-00-10		HARSH	LCS	Α -	
		228.212						
CPH CONTAINHE	IT HYDROSEN HIXINS							
1CPH+FN1A	FAN HOTOR		WEST	CT-G	HLBI	BENT	30 D	
ICEMERNIA	EUFFALO FORGE		TEFC 145T	2772	HARSH		A -	
		215.400						
1CPM*FN1B	FAN HOTOR		WEST	CT-G	HLBI	BENT	30 D	
TOLIJALISTO	BUFFALO FORGE		TBFC 145T		HARSH		A -	
		215.400						
1CPH*HOVIA	MOTOR OPERATED VA	UVE	LHTQ	CT-G			1 HR	
TOLINGIAN	POSI-SEAL		SHB-000-2		HARSH			
		228.241						

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## RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

GENIZ GENIZ GENIZ SFN1 OF TIME SFN2 OC BASTS SFN3 1 HR 1 HR 1 HB 1 HR 1 HR H 1 HR N/S NA mi BCNT BCNT HARSH HLBI TRNS HARSH HARSH HARSH HARSH HAPSH HARSH CT-G CT-6 CT-G CT-6 CT-G CT-6 CT-6 CT-6 CT-6 HODEL/CATALOS NO. REMARKS LMTQ SHB-000-2 LMTQ SIB-000-2 LHTQ SHB-000-5 LHTQ SHB-000-2 LMT0 S/18-000-2 5:13-000-2 SI'B-000-2 Sr.B-000-5 SIB-000-2 LHTQ LHTQ LMTQ L MTG SPEC. NO 228.212 228.241 228.241 228.241 228.241 228.241 228.212 228.241 228.241 HOTOR OPERATED VALVE PCSI-SEAL HOTOR OPERATED VALVE POSI-SEAL HOTOR OPERATED VALVE HOTOR OPERATED VALVE PUSI-SEAL HOTOR OPERATED VALVE HOTOR OPERATED VALVE HOTOR OPERATED VALVE HOTOR OPERATED VALVE MOTOR OPERATED VALVE POSI-SEAL CPM CONTAINMENT HYDROGEN MIXING PANEL/RACH POSI-SEAL POSI-SEAL CFP CONTAINMENT PURGE ICPP\*MOV104 1CPP\*!10V105 1CPH\*HOVIB 1CPH+HOV3B 1CPH\*HOV4B 1CPH\*/IOV2A 1CPH+HOV2B 1CPH\*HOV9A 1CPH\*HOV3A

04/23/84 DEVISION:

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HARK NO	EQUIPMENT DESCRIPTION	WAXAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	**************************************	**********			*********
	VENDOR	HODEL/CATALOG NO.	SUEMEG	ENVTYP		OF TIME	
	PANEL/RACK SPEC.	NO REMARKS			SFN3		QRN3
************	**************	****************	*******	******	*******	********	********
CPP CONTAINMENT	PURSE						
1CPP*PNL102	PANEL	ELEC	AB-141-3	HLBO	PANE	N/A	
	ELECTROMECHANICS	NONE, UNIQUE		HARSH		A -	
	242.4	44					
1CPP*SOV140	SOLENDID VALVE	TRCP	AB-114-6	HLBO	CISL	1000	
	TARGET ROCK 247.5	77KK-004		HARSH	-	A -	
CSH CORE SPRAY	- HIGH PRESSURE						
1CSH*SOV103	SOLENOID VALVE		DW-1			N/R	
	ATHOOD & MORRILL	HITH 1E22*AOVF005 N/R FOR SAFETY FUT		HARSH			
	228.2	18 N/R FOR SAFETY FUN	CTION				
CSL CORE SPRAY	- LOW PRESSUPE						
1CSL*SOV103	SOLENOID VALVE		DW-1			N/R	
	ATIRSON & COCHTA	MITH 1E21*AOVF006		HARSH			
	228.2	18 N/R FOR SAFETY FUR	CTION				
C11 CONTROL RO	D DRIVE HYDRAULIC CONTROL SYS	STEM					
1C11*MOVF083	HOTOR OPERATED VALVE	LHTQ	FB-113-6	FHA		1 HR	
	VELAN 228.1	SHB-000-5		HARSH		A -	
	220.0						
C41 STANDBY LI	QUID CONTROL SYSTEM						
1C41*MOVF001A	HOTOR OPERATED VALVE		DW-1	HLBI	BCNT	1 HR	
	VELAN 228.1	SNB-000-2		HARSH		Α -	
1C41*MOVF001B	MOTOR OPERATED VAL'/E VELAN	LHTQ	DH-1	HLBI	BCNT	1 HR	
	VELAN 228.3	SMB-000-2		HARSH		A -	

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MARN NO	VENOCR PANEL/RACK	SPEC.NO	MAKE/MANUFACTURER MODEL/CATALOS NO. REMARNS	SUDING	ENVTYP	SFN1 SFN2 SFN3		QRN1 QRN2 QRN3
***********	***************	*******	*************	********	*********	****	******	*********
DER DRAINS - RE	ACTOR BLDG EQUIPMENT							
IDER+ADV126	AIR OPERATED VALVE		FUTE,NHCO ET,EA180	CT-3	HLBI HARSH	DISP	IHR A -	
		247.491	QUAL FOR LMTS 33-10E	RB03 ONLY				
IDER*#0V127	AIR OPERATED VALVE FISHER CONTROLS		FCTL,NMCO ET-EA180 GUAL FOR LMTS 33-10E		HARSH	DISP	1HR A -	
		247.491						
DER*SOV126	SOLENOID VALVE FISHER CONTROLS			CT-3	HLBI HARSH	-	IHR A -	
		247.491						
DER*SOV127	SOLENDID VALVE FISHER CONTROLS	247.491	ASCO NP8320	FB-113-G	FHA HARSH	CISL -	1HR A -	
		241.471						
day a series and a large	EACTOR PLANT FLOOR							
DFR*ACV161	AIR OPERATED VALVE FISHER CONTROLS		FCTL,NMCO ET,EA160			DISP		
			QUAL FOR LHTS 33-10					
DFR+AOV102	AIR OPERATED VALVE FISHER CONTROLS		ET,EA183		HARSH		1HR A -	
		247.491	QUAL FOR LMTS 33-10	FRA04 ONLY				
DFR*LT134	ROSEHOUNT	247.481	RSHT 1153084PG, 1159C30A	AB-070-1	HARSH		1HR	
LOFR+LT135	LEVEL TRANSH & REHOTE ROSEHOUNT	TE SEAL	RMST 1153DB4PG, 1159C30A	AB-070-2	HARSH		IMR	
10FR*LT136			RSHT 1153084PG, 1159C30A	AB-070-3			1HR	

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HARK NO	EQUIPMENT DESCRIPT VENDOR FANEL/RACK	ION	HAKE/HANGFACTURER MCDEL/CATALOG NO. REMARKS	ENV. ZONE	EMRGEN	SFN1		QRN1
***********			*************	********	*********	******	********	********
OFR DRAINS - R	EACTOR PLANT FLOOR							
IDFR+LT137	LEVEL TRANSH & REM ROSEHOUNT	OTE SEAL 247.481	RSNT 1153084PG, 1159C30A				183	
DFR*LT139	LEVEL TRANSH & REH ROSEHOUNT	247.481	RSHT 1153D54PG, 1159C30A				1HR A	
IDFR*LT139	LEVEL TRANSH & REH ROSEHOUNT	10TE SEAL 247.481	RSHT 11530B4PG, 1159C30A	A3-070-6	HLBO HARSH	DISP	1HR A	
IDFR*SOVI01	FISHER CONTROLS	247.491	ASCO 17/8320	CT-3	HLBI HARSH		1HR A -	
DFR*SOV102	SOLENOID VALVE FISHER CONTROLS		ASCO NP 6320	AB-114-6	HLEO HARSH		IHR A -	
HS MOTOR CONT	TROL CENTER STANDBY SYS	STEH						
LEHS*MCC2A	STANDSY HOTOR CONT	TROL CENTERS 242.562	GLDI SERIES 5600	AB-141-4	HLBO HARSH		100D A -	
LEHS+MCC2B	STANDBY MOTOR CONT GOULD INC	TROL CENTERS 242.562	GLDT SERIES 5600	AB-141-2	HLEO HARSH	300,000,000	100D A -	
EHS*MCC2C	STANDBY HOTOR CONT SOULD INC	TROL CENTERS 242.562	GLDI SERIES 5600	AB-141-4	HLBO HARSH	EHPW	100D A -	
1EHS+MCC2D	STANDBY HOTOR CONT	TROL CENTERS	GLDI SERIES 5600	AB-141-E	HLBO HARSH		100D A -	

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCH	SFN1	OP TIME	QRN1
**********	*************************	***************	*******	*********	*******	*******	***********
EHS NOTOR CONT	TROL CENTER STANDBY SYSTEM						
1EHS+MCC2E	STANDBY MOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-114-1	HLBO HARSH		100D A -	
1EHS+MCC2F	STANDBY HOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-114-3	HLBO HARSH	EHPH -	1000 A -	
1EHS*HCC2G	STANDBY HOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-114-1	HLBO HARSH	EMPH -	100D A -	
LEHS*HCC2H	STANDBY HOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-114-3	HLBO HARSH	EMPH - -	100D A -	
1EHS*MCC2J	STANDBY HOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-141-1	HLBO HARSH	EMPW - -	100D A -	
IEHS*MCC2K	STANDBY MOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AB-141-2	HLBO HARSH	EMPW	100D A -	
LEHS*HCC2L	STANOBY HOTOR CONTROL CENTERS GOULD INC 242.562	GLDI SERIES 5600	AS-141-1	HLBO HARSH	EMPN -	1000 A -	
EJS UNIT SUBS	TATION STANDBY SYSTEM						
1EJS+LDC2A	STANDBY 480V LOAD CENTERS POWELL ELECTRIC CORP 242.533	PECP AKDG	AB-141-1	HLBO HARSH	100000000000000000000000000000000000000	100D A -	
1EJS*LDC2B	STANDBY 480V LOAD CENTERS FOHELL ELECTRIC CORP 242.533	PECP AHDG	AB-141-2	HLBO HARSH	EMPW -	100D A -	

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## RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SCRIED BY MARM NO - MARSH ENVIRONMENT ONLY

EQUIPMENT DESCRIPTION MANEZMANUFACTURER ENV. ZONE EMRGON SENI OF TIME GRN1 VENDOR MODEL/CATALOG NO. SUCHES ENVTYP SFN2 OC BASIS ORN2 PANEL/RACK SPEC.NO REMARKS SFN3 ENB SHOR STANDBY 4160V - DC CONTROL SUPPLY 1ENE-HCC1 STANDBY HOTOR CONTROL CENTERS GLDI AS-095-8 HLBO EMPH GOULD INC SERIES 5600 HARSH 292.562 ENS SHOR STANDBY 4160V - SYSTEM 1ENS+SHG3A SNITCHSEAR FB-095-G 182 GOULD-BROWN BOVERT HARSH 242.521 1ENS\*SHG3B SWITCHGEAR AB-114-6 IHR GOULD-BROWN BOVERI HARSH 242.521 1ENS\*SHG4A SWITCHSEAR FB-095-G 1HR GOULD-EROUN BOVERI HARSH 242.521 1ENS+SHG4B SNITCHGEAR AS-114-6 IHR GOULD-BROWN BOVERI HARSH 242.521 E12 RESIDUAL HEAT REHOVAL 1E12\*ADVF041A AIR OPERATED VALVE DN-1 N/P HARSH 228.218 N/R FOR SAFETY FUNCTION 1E12\*A0VF041B AIR OPERATED VALVE DN-1 N/R HARSH 228.218 N/R FOR SAFETY FUNCTION 1E12\*ADVF041C AIR OPERATED VALVE DH-1 N/R HARSH 228.218 N/R FOR SAFETY FUNCTION 1E12\*AOVF098 AIR OPERATED VALVE AB-095-5 N/R HARSH 228.218 N/R FOR SAFETY FUNCTION

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## RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SCRIED BY MARK NO - HARSH ENVIRONMENT ONLY

HARH NO	EQUIPHENT DESCRIPTION VENDOR	N	HAKE/HANUFACTURER HODEL/CATALOG NO.	ENV. ZONE SUDMRG	ENVTYP		OC BASIS	QRNZ
	PANEL/RACK :							
************	*****************		***************************************					
E12 RESIDUAL HE	AT REHOVAL							
IE12+MOVE003A	HOTOR OPERATED VALVE		LMTQ	AB-070-2	HLBO	RHR	1000	
	VELAN				HARSH		Α -	
		228.212						
E12*HOVF003B	MOTOR OPERATED VALVE		LHTQ	AB-070-5	HLEO	RHR	1000	
	VELAN				HARSH		A -	
		228.212						
F12*HOVF004A	HOTOR OPERATED VALVE		LHITO	AS-070-7	HLBO	RHR	N/R	
	HOTOR OPERATED VALVE		S118-0-25		HARSH		A -	
		228.212	NA FOR SAFETY FUNC	TION				
E12*HOVE004B	MOTOR OPERATED VALVE		LMTQ	AB-070-7	HLEO	RHR	N/R	
	VELAN		SI-8-0-25		HARSH	-	Α -	
		228.212	N/R FOR SAFETY FUNC	TION				
IE12*MOVF006A	MOTOR OPERATED VALVE		LHTQ	AB-070-2	HLBO	RHR	N/R	
**********	VELAN		S1/B-0-25		HARSH		A -	
		228.212	N/R FOR SAFETY FUNC	TION				
1E12*HOVF006B	HOTOR OPERATED VALVE		LHTQ	AB-070-5	HLBO	RHR	N/R	
	VELAN		SI/B-0-25		HARSH		Α -	
		228.212	N/R FOR SAFETY FUNC	TIONS				
1F12#HOUFOOR	HOTOR OPERATED VALVE		LHTQ	AB-114-2	HLBO	RHR	N/R	
	VEL AN		SB-2-60		HARSH		Α -	
		228.212	N/R FOR SAFETY FUNC	TION		*		
1E12*HOVF009	HOTOS OPERATED VALVE		LHTQ	DH-1	HLBO	RHR	N/R	
************	VELAN		55-2-60		HARSH		A -	
		228.212	N/R FOR SAFETY FUNC	TIONS				
1F12=HOVF011A	MCTOR OPERATED VALVE		LHTO .	AS-095-8	HLBO	RHR	N/R	
ACALTINETI VAAR	VELAN		SHB-00-5		HARSH		A -	
	MCTOR OPERATED VALVE VELAN	228.212	N/R FOR SAFETY FUNC	TION				
1512×HOVE0118	HOTOP OPERATED VALVE		LHTO	AB-095-7	HLEO	RHR	N/R	
TUTE WILL OF TO	MOTOR OPERATED VALVE	The Street	SMB-00-5		HARSH		A -	
		228.212	N/R FOR SAFETY FUNC	TION				

MAKE NO	PANEL/RACK SP	HAKE/HANUFACT HODEL/CATALOT EC.NO REMARKS	TURER ENV. ZONE S NO. SUBHRS	ENVTYP	SFN1 SFN2 SFN3	OF TIME	QRN1 QRN2 QRN3
*************	**************	**********	*********	******	*******	*******	*******
12 RESIDUAL HE	AT DEHOUAL						
The state of the s	The state of the s						
IE12*MOVF021	HOTOR OPERATED VALVE VELAN	LHTQ 53-3-60	AB-095-7	HLBO HARSH	RHR	N/R A -	
	VELAN 22	8.212 N/R FOR SAFE	TY FUNCTION				
E12*HOVF023	HOTOR OPERATED VALVE VELAN	LHTO	AS-095-4	HLBO HARSH		N/R	
	20	8.212 NER FOR SAFE	Y FUNCTION	nasan	- 1	Α -	
E12*MOVF024A	MOTOR OPERATED VALVE	LHTQ	/R_005_8	HIED	DND	1000	
	VELAN	SMB-1-60	1.5-075-6	HARSH		A -	
	22	8.212					
E12*MOVF0248	HOTER OPERATED VALVE	LHTQ	AB-095-7	HLEO	RHR	1000	
	VELAN 22	8.212		HARSH		Α -	
E12+HOVF026A	HOTOR OPERATED VALVE	LHTO	AB_070_2	HI 50	pup	N/P	
	VELAN	LHTQ 518-00-10	20-010-2	HARSH	-	A -	
		8.212 N/R FOR SAFE					
E12*HOVF026B	HOTOR OPERATED VALVE	LHTQ 51'B-00-10	AB-070-5	HLEO	EHR	N/R	
	VELAN 22	8.212 N/R FOR SAFE	TY FUNCTION	HARSH		A -	
E12*HOVF027A	VELAN	LHTQ 5:18-0-40	AB-114-6	HLBO	2000000	N/R A -	
	**	8.212 N/R FUR SAFE	IT FUNCTION		- 9		
E12*HOVF027B	MOTOR OPERATED VAL'E VELAN	LHTQ	43-114-5	HLEO	RHR	N/R	
	VELAN	8.212 N/R FOR SAFE		HARSH	*	Α -	
	**	O. ELE IVN FUN SAFE	IT PUNCTION				
E12+MOVF037A	HOTOR OPERATED VALVE	LHTQ	CT-G		RHR	N/R	
	VELAN 22	8.212 N/R FOR SAFE	TY FUNCTION	HARSH		A -	
ELZ*MOVF037B	HOTOR OPERATED VALVE VELAN	LHTQ SIG-1-25	CT-6	HLBI HARSH		N/R A -	
		8.212 N/R FOR SAFE		manuan.			

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RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT GALY

RESIDUAL HEAT REHOVAL  HOTOR OPERAT  MOVEDAN  HOTOR OPERAT  VELAN	MARKANA ON MENN	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	MONECAUNUFACTURER MODEL/CATALOS NO. REHURKS	ENV. ZONE SUCHRS	ENGEN	SFNI SFNZ SFN3	OP TIME O', BASIS	Control Control
##STEDULAL HEAT REMOVAL  ##SUFGAG HEAT REMOVALE  ##SUFGAG HE	精有植木 医白喉状态 医皮肤 医皮肤							
NOTOR OPERATED VALVE		AT REHOVAL						
Hander   CT-6   Hander   CT-	12*H50F040	CPERATED VALVE	SB-005-15 N/R FOR SAFETY FUNC	AB-070-2	HLEO HARSH	RHR	A A	
HOTOR OPERATED VALVE   CT-6   HLBT   RHR	12*MOUF0424	HOTOR OPERATED VALVE VELAN 228.212	LMTQ SB-2-63	5-12	HLBI HARSH	<u>x</u>	100D A	
NOTOR OPERATED VALVE   SB-2-60   AB-114-5   HLEO   RHR	12************************************	MOTOR OPERATED VALVE VELAN 228.212	LMTQ SS-2-60	6-13	HLBI HARSH	RHR	1000 A	
HOTOR OPERATED VALVE         LHTQ         AB-095-2         HLBQ         RHR           VELAN         228.212         LHTQ         AB-095-5         HLBQ         RHR           HOTOR OPERATED VALVE         LHTQ         AB-070-2         HLBQ         RHR           HOTOR OPERATED VALVE         SHB-1-40         AB-070-2         HLBQ         RHR           HOTOR OPERATED VALVE         SHB-3-60         AB-070-2         HLBQ         RHR           NOTOR OPERATED VALVE         SHB-3-60         AB-070-5         HLBQ         RHR           VELAN         228-212         LHTQ         AB-070-5         HLBQ         RHR           VELAN         228-212         LNTQ         AB-070-5         HLBQ         RHR           VELAN         228-212         LNTQ         AB-114-8         HLBQ         RHR           VELAN         228-212         N.R FUN SAFETY FUNCTION         -         -           VELAN         228-212         N.R FOR SAFETY FUNCTION         -         -	12*MOVF092C	NELAN 228.212	LMTQ SB-2-60	48-114-5	HLBO HARSH	<u>a</u>	100D A	
HOTCR OPERATED VALVE  VELAN  228.212  HOTCR OPERATED VALVE  VELAN  228.212  HOTCR OPERATED VALVE  SHS-1-40  AB-075-5  HLEO  AB-075-5  HLEO  AB-070-2  HLEO  RHR	12*:10VF047A	CPERATED VALVE	LM10 Srf5-1-40	AB-095-2	HLBO HARSH	œ æ	100D A	
HOTCR OPERATED VALVE SHB-3-60 AB-070-2 HLBO RHR HASSH - 1	12*HOVF0478	HOTCR OPERATED VALVE VELAN 228.212	LHTQ SHB-1-40	AB-095-5	H_BO HARSH	H 1 1	100D A	
HOTOR OPERATED VALVE SIB-3-60 AB-070-5 HLEO RHR HASH - 228.212 LMTQ SB-005-15 HLEO RHR HASH - 1485M -	12*MOUF048A	MOTOR OPERATED VALVE VELAN 228.212	LHTQ St8-3-60	AB-070-2	HLBO HARSH	E I I	100D A -	
VELAY  VELAY  VELAY  228.212  N.R. FUM SAFETY FUNCTION  HOTOR OPERATED VALVE  SYB-2-40  VELAN  AB-114-8  HLBO  RHR	112*HOUF0488	OPERATED VALVE	LMTQ SIB-3-60	AB-070-5	HLB0 HARSH	SH I I	10cD A	
HOTOR OPERATED VALVE SHB-2-40 HARSH - RHR LARSH - 228.212 N.R FOR SAFETY FUNCTION -	112*FOUF049	MOTOR OPERATED VALVE VELAN 228.212	SB-00S-15 NR PUN SAFETY FUNC	AB-070-2	HLEO HARSH	<u>α</u> Η , ,	N/R A	
	ELC*MONF052A	HOTOR OPERATED VALVE VELAN 228.212	SHB-2-40 N/R FOR SAFETY FUNC	48-114-8	HL80 HARSH	<u>a</u> , ,	N A	

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# RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MARK NO - MARSH ENVIRONMENT ONLY

SFNI OF TIME CENI
SFNZ OC BASIS OCHIZ
SFNX OCHNI ENGEN ENGLA ENV. ZONE SUCHRS HAME/MANDFACTURER HODEL/CATALCS NO. REMAINS EQUIPMENT DESCRIPTION
VENCOR
PAMEL/RACK
SPEC.NO 

ELZ RESIDUAL HEAT REMOUAL	AT REMOUAL					
IEI2*HOVF05CB	MOTOR OPERATED VALVE VELAN 228.212	UNTO SIB-2-40 N/R FOR SAFETY FUNCTION	AB-114-8 CTICN	HLEO HARSH	E	N.R.
1E12***0VF053A	HOTOR OPERATED VALVE VELAN 228.212	SYS-3-80 N/R FOR SAFETY FUNCTION	A9-095-2	HARSH	E	N.R.
IEIC*HOUF0538	HOTOR OPERATED VALVE VELAN 228.212	STS-3-80 NUR FOR SAFETY FUNCTION	AB-095-5 CTION	HUBO	BH	N/B
lE12*MOUF064A	HOTCH OPERATED VALVE VELAN 228.212	LHTQ S3-005-10	48-070-2	HLEO HARSH	MH	1000 A -
1E12viOvF0648	HOTCR OPERATED VALVE VELAN 228-212	LMTQ 55-005-10	48-070-5	HL80 HL25N	811	1000 A -
1E12*:100F064C	HOTOR OPERATED VALVE VELAN 228.212	LMT0 S3-005-10	A9-070-4	HLEO HARSH	ž	1005 A -
1E12*FOVF068A	HOTCH OPERATED VALVE JAMESBURY 228.243	LHTQ S:3-00-10	F-14	HS2VH HS2VH	RHR BCMT	1003 A -
1512*150/50658	HOTOR OFFRATED VALVE JAMESBURY 228.243	LHT0 S-00-10	F-19	HLEG FASCH	ECNT.	1000 A -
1E12*HOUF075A	NOTES OPERATED VALVE VELAN 228.219	LMTQ AS-095 SYS-603-2 N/R FOR SAFETY FUNCTION	AS-075-8 CTION	HLEO HASSA	SH8	N. W
1E12*FOUF0738	MOTOR OPERATED VALVE VELZN 228.219	SHS-000-2 N/W FCR SAFETY FUNCTION	AB-095-7 ETION	HLEO HLESSH	8H	χ « α

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MICH NO	EQUIPMENT DESCRIPTION VENCOS PANEL/PACK SPEC.NO	HONEL/VARMERCTURES C HONEL/CATALOS NO. S REVINAS	US., 2255 SASSOS	ENTRE	SFR	OF THE STATE OF STATE
	· · · · · · · · · · · · · · · · · · ·					
ELZ RESIDUAL HEAT POPUNA.	AT POSCINE					
15124-047744	NELEN 2015 ATL VELVE ALLEN ALLEN 2016.214	MS FOR SAFETY FUNCTION	A2-695-2	RLEO HLIDSH	2	N.S.
15124/01/19148	HOTES CPERATED VALUE VELLIN  228.214	SS-755-2 NA FES SMEW ROCTON	48-695-5 CTION	K.EO HECESH	g	N. W. W.
1E1124-FOUF1873	HOTOP OPERAISE WALVE VELAN 223.212	SS-C-48 SS-C-48 PPS FOR SAFETY FUNCTION	25-114-8 N	RLEO RESSN	£	10.5
1112,450/71833	MOTOR OPERATED WALVE VELAN TERAN	SS-2-46 SS-2-46 SUR FOR SAFETY FUNCTION	23-114-8 N	FLESS HISSN	ğ	N. R.
1212*/03/50/4	HOLOR OPERATED VALVE VELLY 228.212	23-6-15	2-295-5	RLES HJRSH	¥	1000 A -
10114-04-096	HOTOR OPERATES VALVE VELLAN 228.212	25-6-25	29-042-5	HLED HGRSH	813	1000 A .
SHEWEVERS	MOTOR OPERATED VALVE VELAY 228.212	SIS-6-25 N/S FOR SAFETY FUNCTION	45-079-7	RLEG HLEGSH	ã	N. P.
16124/0003	SOLLES PUICS CONTEN FILL FUED SOLLES PUICS CT7.160	FELLIE 1847 - TEYC	28-070-4	HLSO HLPSN	8	1000 A .
1E12+50/F051A	SOLEMID VALVE FISHER CONTROLS 297.491	ASCO 1705320	25-114-8	HARCON		1000
1612-500:F0518	SOLENDID WALVE FISHER CENTROLS 247,491	ASCO NFS320	25-114-8	HZDZH		1000

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MARK NO	EQUIPHENT DESCRIPTION VENDOR		**************************************	ENV. ZONE	EHROON	SFN1	OP TIME	QRN1
		SPEC.NO	PENARKS	Journa	CHAILE	SFN3	CC 64313	ORN3
******			*************	*********	********		********	**********
E12 RESIDUAL HE	AT REMOVAL							
1E12*SOVF060A	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-001	AB-070-2	HLBO HARSH	RHR BCNT	100D A	
1E12*SOVF060B	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77NK-001	AB-070-5	HLBO HARSH	RHR	1000 A	
1E12×SOVF065A	SOLENOID VALVE FISHER CONTROLS	247.491	ASCO NFB320	AB-070-5	HARSH		1000	
1E12*SOVF065B	SOLENOID VALVE FISHER CONTROLS	247.491	ASCO NPB320	AB-070-5	HARSH		1000	
1E12*SOVF075A	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-001	AB-070-2	HLBO HARSH	RHR BCNT	100D A	
1E12*SOVF075B	SOLEMOID VALVE TARGET ROCK	247.501	TRCP 77KK-001	AB-070-5	HLBO HARSH	RHR	100D A	
1E12*SOVF095	SOLENOID VALVE TARGET ROCK	247.501	TRCP 77KK-001	AB-070-6	TR HARSH	LTR	100D L	
E21 CORE SPRAY	- LOW PRESSURE							
1E21*AOVF006	AIR CPERATED VALVE ATMOOD & MORRILL	226.218	N/R FOR SAFETY FUNC	DH-1	HARSH		N/R	
1E21*MOVF001	HOTOR OPERATED VALVI	E 228.212	LHTQ SHB-0-25	AB-070-8	HLBO HARSH	LPCS	N/R A -	

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HARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SF		MAKE/HANUFACTURER MODEL/CATALOG NO. REHARKS	ENV. ZONE SUCHRS	ENUTYP		OF TIME	The state of the s
********	*******	*******	********	*********	**********	****	*******	**********
E21 CORE SPRAY	- LOW PRESSURE							
1E21*HOVF005	HOTOR OPERATED VALVE VELAN	28.212	LMTQ SS-2-60	AB-114-6	HLBO HARSH	LPCS	1000 A -	
1E21*MOVF011	HOTCR OPERATED VALVE VELAN	28.212	LMTQ 58:5-00-10	AB-095-8	HLBO HARSH		100D A -	
1E21*MOVF012	MOTOR OPERATED VALVE VELAN		LMTQ SHB-2-25	AS-095-8	HLBO HARSH		1 HR A -	
1E21*PC002	GOULDS FUMPS	ILL PUMP 37.160	MEST FRAME 184T - TEFC	AB-070-1	HLEO HARSH	LPCS	100D A -	
E22 CORE SPRAY	- HIGH PRESSURE							
1E22*AOVF005	ATHOOD & HORRILL	28.218	N/R FOR SAFETY FUNCT.	DH-1	HARSH		N/R	
1E22*PC003	HPCS ECCS SUBSYSTEM FI GOULDS PUMPS	ILL FUMP 37.160	WEST FRAME 213T - TEFC	AB-070-6	HLEO HARSH	HPCS	1000 A -	
E33 MAIN STEAM	ISOLATION VALVE SEALS							
1E33*HOVF005	MCTOR OPERATED VALVE VELAN 22	28.214	LHTQ SHB-000-5	AB-114-6	HLBO HARSH	LCS -	1000 A -	
1E33*MOVF006	MOTOR OFERATED VALVE VELAN 22	28.214	LHTQ 51/B-000-2	AB-114-6	HLBO HARSH		100D A -	
1E33*MOVF007	MOTOR OPERATED VALVE VELAN 23	28.214	LHTQ SI:B-000-5	AB-114-2	HLBO HARSH	LCS	100D A -	

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HAIN STEAM ISCLATION VALVE SEALS  HOTOR OPERATED VALVE  SIB-000-5	**************************************	**************************************	HAKE/HANUI HODEL/CATA REHARKS	ENV. ZONE SUDING	ENTYP	SFN12 SFN3 SFN3	OP TIME	GRN1 GRN2 GRN3 ************************************
NOTOR OPERATED VALVE   LHTG	**************************************	ISOLATION VALVE SEALS	¥ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$					
HOTOR OPERATED VALVE  VELAN  Z28.214  HOTOR OPERATED VALVE  VELAN  VELAN  Z28.214  HOTOR OPERATED VALVE  ECTT., DGRG  FCTL, DGRG  AB-114-8  HARSH  LGS  FCTL, DGRG  FGTL, DGRG  FCTL, DGRG  FGTL, DGRG  FCTL, DGRG  FGTL, DGRG  FCTL, DGRG  FCTL, DGRG  FCTL, DGRG  FCTL, DGRG  FGTL, DGRG  FCTL, DGRG  FGTL,	1E33*!f0VF008	67	S18-000-5	AB-114-2	HLEO HLRSH	rcs	1000 A -	
MARCH   MARC	1E33*HGVF025	63	LNTQ S10-000-5	AS-114-3	HLEO HARSH	rcs	1000 A -	
HOTOR OPERATED VALVE	1E33*!!OVF026	67	LM79 S18-000-2	AS-114-8	HLEO HARSH	571	1000 A -	
HOTOR OPERATED VALVE	1E33*HOVF027	HOTOR OPERATED VALVE VELAN 228.214	LMT9 S13-000-5	43-114-7	HLEO HARSH	577	1000 A -	
CONTROL VALVE FISHER CONTROLS  CONTROL VALVE FISHER FISHER CONTROLS  CONTROL VALVE FISHER	1E33*MOVF028	HOTOR OPERATED VALVE VELAN 228.219	S13-000-5	AB-114-7	HLBD HARSH	537	1000 A _	
CONTROL VALVE	1E33*PVF002	5	FCTL, BORG EC ELECTRCHICS(CB-116-2		HLBO	LCS	30 D	
SOLENOID VALVE TRCP 77WK-005 HEBO LCS TARGET ROCK 247.501 TRCP AB-141-3 HLBO LCS TARGET ROCK 247.501 TRCP AB-141-3 HLBO LCS HARSH BCNT ERRET ROCK 247.501	1E33*PVF022		FCTL, BORG EC ELECTRONICS(CB-116-2		HLEG	S T	30 D	
SOLENDID VALVE TRCP AB-141-3 HLBO LCS TARGET ROCK 247.501	1E33*SOVF014		TRCP 77/4K-005	AB-141-3	HLBO	LCS	39 D	
	1E33*SOVF034		TRCP 778K-005	AB-141-3	HLB0 HARSH	LCS	30 D A	

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RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

EQUIPMENT DESCRIPTION MAKE/MANUFACTURER ENV. ZONE ENRGCN SFN1 OP TIME GRN1 VENDOR ! DDEL/CATALOG NO. SUBMEG ENVTYP SENS OC BASIS CENS PANEL/RACK SPEC.NO REMARKS SFN3 EST REACTOR CORE ISOLATION COOLING SYSTEM 1E51\*AOVF004 CONTROL VALVE FCTL , NICO AB-070-3 HLBO DISP 70 H FISHER CONTROLS ES. EA180 HARSH 247.491 QUAL FOR LHTS ONLY 1E51\*A0VF005 CONTROL VALVE FCTL, NHCO AB-070-3 HLBO DISP 70 H FISHER CONTROLS ES. EA180 HARSH 247.491 QUAL FOR LHTS ONLY 1E51\*AOVF025 CONTROL VALVE FCTL . NMCO AS-070-3 HLEO DISP 70 M FISHER CONTROLS DBQ, EA180 HARSH A 247.491 QUAL FOR LMTS ONLY 1E51\*AUVF026 CONTROL VALVE FCTL, NICO DISP 70 H AB-070-3 HLEO FISHER CONTROLS DEQ, EA180 HARSH QUAL FOR LHTS ONLY 247.491 1E51\*A0VF054 CONTROL VALVE FCTL . NMCO AB-070-3 HLEO DISP 70 H FISHER CONTROLS 08Q, EA180 HARSH A 247.491 QUAL FOR LHTS ONLY 1E51\*A0VF065 AIR OPERATED VALVE AB-114-2 N/R ATHOOD & HORRILL HARSH 228.218 N/R FOR SAFETY FUNCTION AIR OPERATED VALVE 1E51\*AOVF066 DW-4 N/R HARSH ATROOD & HORRILL 228.218 N/R FOR SAFETY FUNCTION 1E51\*MOVF010 MOTOR OPERATED VALVE LHTQ A3-070-3 NLBO RCIC N/R SMB-00-10 HARSH VELAN 228.212 N/R FUR SAFETY FUNCTION LHTQ MOTOR OPERATED VALVE AS-095-3 HLDO RCIC 1 HR 1E51\*HOVF013 VELAN 5113-0-40 HARSH A -228.212 MOTOR OPERATED VALVE 1E51\*MOVF019 LHTQ AB-095-G HLBO RCIC N/R VELAN 5113-00-10 HARSH A -228.214 N/R FOR SAFETY FUNCTION

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	EQUIPHENT DESCRIPTION VENDOR PANEL/RACK SPEC.	MAKE/MANUFACTURER MODEL/CATALOS NO.	ENV. ZONE SUDNEG	EHRGCH ENVTYP	SFN1 SFN2	OP TIME OC BASIS	QRN1 QRN2
******	PANEL/ HACK SPEC. 1	(A************************************	******	******			
ES1 REACTOR COR	E ISOLATION COOLING SYSTEM						
1E51*HOVF022	MOTOR OPERATED VALVE VELAN	SMB-0-10		HLBO HARSH		1 HR A -	
	228.2	12					
1E51*HOVF031	MOTOR OPERATED VALVE VELAN		AS-070-8	HLBO HARSH		1 HR A -	
	229.2	12					
1E51*MOVF045	MOTOR OPERATED VALVE VELAN 228.2	S:IB-0-10	A3-070-3	HLEO HARSH		1 HR A -	
1E51*HOVF046			48-070-3	HLBO HARSH		1 HR A -	
	228.2						
1E51+MOVF059	MOTOR OPERATED VALVE VELAN	Sh3-0-10	AB-070-3	HLBO HARSH		1 HR A -	
	226.2	12					
1E51*MOVF063	MOTOR OPERATED VALVE VELAN	SB-1-60	CT-9	HLBI HARSH		1 HR	
	228.2	12					
1E51*!!0VF064	MOTOR OPERATED VALVE VELAN 228.2	:3-1-60	AB-114-2	HLEO HARSH		1 HR A -	
1E51*MOVF068	MOTOR OPERATED VALVE VELAN 228.2	5!10-0-15	AB-095-7	HARSH	1 210000000	1 HR A -	
1E51*MOVF076	MOTOR OPERATED VALV.	LHTQ 51/3-000-2	CT-G	HARSH		A -	
		N/R FOR SAFETY FU					
1E51*HOVF077	MOTOR OPERATED VALVE VELAN	LMTQ SIB-000-2	AB-095-G	HLBO HARSH		1 KR A -	
	228.2	14			11000		

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MARK NO	EQUIPHENT DESCRIPTION VENDOR	HAKE/HANUFACTURER HODEL/CATALOS NO.	ENV. ZONE	EHRGCH	SFN1	OP TIME GR	NI NI
	PANEL/RACK SPEC.N				SFN3		
*********	******************	***********	*********	*********	*********	*****	********
ESI REACTOR CON	RE ISOLATION COOLING SYSTEM						
1E51*MOVF078	MOTOR OPERATED VALVE VELAN	51/3-000-2	AB-095-G	HLBO HARSH		1 HR A -	
	228.21						
1E51*PCVF015	PRESSURE CONTROL VALVE TARGET ROCK 247.50		AB-070-3	HARSH		70 M	
1E51*PC003	RCIC SUBSYSTEM FILL PUMP GOULDS PUMPS 237.16	FRAME 213T - TEFC	AB-070-3	HLBO HARSH		70 H A -	
1E51*SOVF004	SOLENOID VALVE FISHER CONTROLS 247.49	ASCO NP8320	AB-070-3	HLEO HARSH		70M A A	
1E51*SOVF005	SCLENOID VALVE FISHER CONTROLS 247.49	ASCO NP8320	A9-070-3	HLBO HARSH		70 H A A	
1E51*SOVF025	SOLENOID VALVE FISHER CONTROLS 247.49	ASCO NP8320	AB-070-3	HLBO HARSH	RCIC	70 H A A	
1E51*SOVF026	SOLENDID VALVE FISHER CONTROLS 247.49	ASCO NP8320	AB-070-3	HLBO HARSH	RCIC	70 H A A	
1E51*SOVF054	SOLENOID VALVE FISHER CONTROLS 247.49	ASCO NP8320	AB-070-3	HLBO HARSH	RCIC	70 M A A	
FPH FIRE PROTEI	CTION - MATER						
1FPH=HOV121	MOTOR OPERATED VALVE VELAN 228.21	51/3-00-10	AB-141-3	HLBO HARSH		1 HR A -	

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MARK NO	ECUIPHENT DESCRIPTION VENDOR	MAKE/MANUFACTURER MCDEL/CATALOG NO.	ENV. ZONE	ENRGON	S NI	OP TIME CRMI
	PANEL/RACK SPEC.NO	REMARKS			SFN3	
***********	*******		******	*********	*******	*************
FPW FIRE PROTE	CTION - WATER					
1FPW*MOV122	MOTOR OPERATED VALVE VELAN 228.212	SMB-00-10	AB-141-3	HLSO HARSH	CISL	1 HR A -
FHS FEEDMATER	SYSTEM					
1FNS*MOV7A	MOTOR OPERATED VALVE VELAN 228.212	51:8-4-200	AB-114-7	HLBO HARSH		1HR A -
1FWS*r:OV7B	MOTOR OPERATED VALVE VELAN 228.212	51:3-4-200	AB-114-7	HLBO HARSH		1HR A -
GTS GAS TREATH	ENT STANDBY					
1GTS*ACD1A	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.480	NP6321,EA740	A6-141-5	HLBO HARSH	DISP -	100D A -
1GTS*AOD1B	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.480	NP8321,EA740	AB-141-6	HLBO HARSH		100D A -
1GTS*AOD21A	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.480	NP3321,EA740	AB-141-5	HLBO HARSH		100D A -
1GTS*AOD21B	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.480	NP8321,EA740	AB-141-6	HLBO HARSH		100D A -
1GTS*AOD22A	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.480	NF8321,EA740	A3-141-5	HLEO HARSH	10 2 2 3 11	100D A -
1GTS*AOD22B	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.460		AB-141-6	HLBO HARSH	100.000	100D A -

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MARK NO	EQUIPHENT DESCRIPTION VENDOR		MANE/MANUFACTURER NODEL/CATALOG NO.	ENV. ZONE	EMRGEN	SFN1	OP TIME	QRNI
	PANEL/RACK	SPEC.NO	REMARKS	SULTING	ENVITE	SFN3	DC BASIS	GRN3
******	***********			********	******			
GTS GAS TREATH	HENT STANDBY							
1915*A0023A	AIR OPERATED DAMPER			AB-141-5		DISP	1000	
	QUALITY AIR DESIGN	215.480	NPB321,EA740		HARSH	3.1	Α -	
IGTS*A0023B	AIR OPERATED DAMPER		1000 1000					
1913+400230	QUALITY AIR DESIGN		NP8321,EA740	AS-141-6	HLBO HARSH		100D A -	
		215.480						
1GTS*A0D3A	AIR CPERATED DAMPER			AB-141-5		DISP	1000	
	QUALITY AIR DESIGN	215.480	NP8321,EA740		HARSH		Α -	
1GTS+ACD3B	QUALITY AIR CESTEN		ASTO,NICO 198321,EA740	AB-141-6	HLBO HARSH		1000	
		215.480	170321,24740		пакэп		Α -	
1GTS+ACD4A	ATT COSRATED JAMPER		ASCO, NICO	A3-191-5	HLEO	DISP	1000	
	QUALITY AIR DESIGN		NF8321,5A740		HARSH		A -	
		215.480						
IGTS*A004B	AIR OPERATED DAMPER			AB-141-6			100D	
	QUALITY AIR DESIGN	215.480	NP8321,EA740		HARSH		Α -	
1GTS*FE24A	FLOW ELEMENT FLUID COMPONENTS		FCI FR72-4R	A3-141-5	HARSH		1000	
		247.433						
1GTS*FE24B	FLON ELEMENT		FCI	AB-141-6			1000	
	FLUID CONPONENTS	247.433	FR72-4R		HARSH			
		247.433						
IGTS*FN1A	FAN HOTOR		WEST	AB-141-5	HLBO		100D	
	EUFFALO FORGE	215.400			HARSH	110	Α -	
1GTS*FNIB	FAN MOTOR		WEST	AB-141-6	HLEO	SGTS	1000	
	BUFFALO FORGE				HARSH		A -	
		215.400						

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HARK NO	VENDOR		MAKE/MANUFACTURER MODEL/CATALOS NO.		ENRIGON ENVTYP		OP TIME	The state of the s
		SPEC.NO	REMARKS			SFN3		QRN3
	*************	********	********	*******	******	*****	********	******
GTS GAS TREATM	ENT STANDBY							
IGTS*FN2A	FAN HOTOR BUFFALO FORGE		WEST TEFC 143T	AB-141-5	HLBO HARSH	SGTS	100D A -	
		215.400			1177.31	-		
IGTS*FN2B	FAN HOTOR		WEST	AB-141-6	HLBO	SGTS	1000	
	BUFFALO FURSE	215.400	TBFC 143T		HARSH		A -	
1GTS*FS2A	FLON SNITCH			AB-141-5			100D	
	AMERICAN AIR FILTER	225.220			HARSH			
IGTS*FS2B	FLOH SNITCH			AB-141-6			100D	
	AMERICAN AIR FILTER	225.220			HARSH			
IGTS*FS24A	FLON SHITCH		FCI	AD-141-5	HLEO	SSTS	1000	
	NOT YET PURCHASED	247.433	FR72-4R		HARSH		Α -	
IGTS*FS24B	FLOW SNITCH		FCI	AB-141-6	HLEO	SGTS	100D	
	NOT YET PURCHASED	247.433	FR72-4R		HARSH		Α -	
IGTS*PT15A	PRESSURE TRANSHITTER		RSMT	AB-141-5			100D	
	ROSEHOUNT	247.481	1153GB3		HARSH		1000	
IGTS*PT15B	PRESSURE TRANSHITTER		RSHT	AB-141-6			1000	
	ROSEHOUNT	247.481	1153GB3		HARSH			
IGTS*RTD18A	RTD		PYCO	AB-141-5	HLBO	SGTS	1000	
	PYCO	247.461	122-4030-04		HARSH	-	Α -	
GTS*RTD18B	RTD		PYCO	AB-141-6	HLEO	SGTS	1000	
	PYCO		122-4030-04		HARSH	-	A -	

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MARK NO	EQUIPMENT DESCRIPTION	ON	MAKE/MANUFACTURER	ENV. ZONE			OP TIME	QRN1
	VENDOR		MODEL/CATALOG NO.	SUBHRG	ENVTYP		OC BASIS	The second secon
	PANEL/RACK	SPEC.NO	REHARKS			SFN3	*****	QZN3
******	*********	*********	**************					
STS GAS TREATM	ENT STANDBY							
IGTS*RTD27A	RTD		PYCO	AB-141-5	HLBO	SGTS	1000	
	PYCO	247.461	122-4030-04		HARSH	11.	Α -	
GTS*RTD27B	RTO		PYCO	AB-141-6	HLEO	SGTS	1000	
	PYCO	247.461	122-4030-04		HARSH	1	A -	
GTS*SOV1A	SOLENOID VALVE		ASCO	AB-141-5			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
GTS*SOVIB	SOLENOID VALVE		ASCO	AB-141-6			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV21A	SOLENOID VALVE		ASCO	AB-141-5			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV21B	SOLENOID VALVE		ASCO	AB-141-6			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV22A	SOLENOID VALVE		ASCO	AB-141-5			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV22B	SOLENOID VALVE		ASCO	AB-141-6			100D	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV23A	SOLENOID VALVE		ASCO	A8-141-5			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			
IGTS*SOV23B	SOLENOID VALVE		ASCO	AB-141-6			1000	
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH			

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(ADU NO	EQUIPMENT DESCRIPTI	ON	MAKE/HANUFACTURER	ENV. ZONE	ENRECH	SFN1	OP TIME	GRNI
MARK NO	VENDOR		MODEL/CATALOG NO.	SUDIRG	ENVTYP		OC BASIS	QRN2 CRN3
	PANEL/RACK	SPEC.NO	REMARKS			SFN3		
*********	*************	*********	* ************	******	***********			
STS GAS TREATHENT	STANDBY							
LGTS+SOV3A	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP8321ASE	A8-141-5	HARSH		1000	
		215.480						
IGTS*SOV3B	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP3321ASE	AB-141-6	HARSH		100D	
		215.480						
1GTS*SOV4A	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NF9321A5E	AB-141-5	HARSH		1000	
		215.490						
IGTS*SOV43	SOLENOID VALVE QUALITY AIR DESIGN	215.490	ASCO NP8321ASE	AB-141-6	HARSH		1000	
		215.450					100D	
IGTS*TS35A	TEMPERATURE SWITCH AMERICAN AIR FILTER			AB-141-5	MARSH		1000	
							1000	
IGTS*TS35B	TEMPERATURE SWITCH AMERICAN AIR FILTER			AB-141-6	HARSH		1000	
		223.220					100D	
LGTS*TS5A	TEMPERATURE SWITCH AMERICAN AIR FILTER			AB-141-5	HARSH		1000	
				AB-141-6			1000	
GTS*TS5B	TEMPERATURE SWITCH AMERICAN AIR FILTER			AS-141-0	HARSH			
33 REACTOR WATE	R CLEAN-UP							
1G33*HOVF001	HOTOR OPERATED VALV	VE	LMTQ 58-1-25	DW-1	HLBI HARSH		1 HR A -	

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#### RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

ISSUE DATE: 04/23/84 EQUIPMENT DESCRIPTION MAKE, ANUFACTURER ENV. ZONE ENRGCH SFN1 OP TIME VENDOR HODEL/CATALOG NO. SUBHIRG ENVTYP SFN2 OC BASIS QRN2 PANEL/RACK SPEC.NO REMARKS SFN3 G33 REACTOR WATER CLEAN-UP 1G33\*MOVF004 MOTOR OPERATED VALVE LMTQ AB-114-2 HLEO ESA 1 HR VELAN 53-1-40 HARSH CISL A -228.212 1G33\*HOVF028 HOTOR OPERATED VALVE LHTQ CT-7 HLEI ESA 1 HR VELAN SB-00S-10 HARSH CISL A -228.212 1G33\*MOVF031 HOTOR OPERATED VALVE LHTQ CT-7 HLBI ESA N/R VELAN SMB-0-10 HARSH A -228.212 N/R FOR SAFETY FUNCTION 1G33\*HOVF034 LMTQ HOTOR OPERATED VALVE AB-114-2 HLBO ESA 1 HR VELAN S8-00S-10 HARSH CISL A -228.212 1G33\*HOVF035 MOTOR OPERATED VALVE LHTQ AB-114-7 HLEO ESA N/R SHB-0-7.5 VELAN HARSH A -228.212 N/R FOR SAFETY FUNCTION 1633\*HOVF039 HOTOR OPERATED VALVE LHTQ AB-114-2 HLBO ESA 1 HR VELAN SB-0-25 HARSH CISL A -228.212 1G33\*HOVF040 MOTOR OPERATED VALVE LHTQ CT-7 HLBI ESA 1 HR VELAN HARSH 53-0-25 CISL A -228.212 1G33\*HOVF042 MOTOR OPERATED VALVE LHTQ HLBI ESA N/R VELAN S!13-1-25 HARSH A -228.212 N/R FOR SAFETY FUNCTION 1G33\*!!OVF044 MOTOR OPERATED VALVE LHTO CT-7 HLBI ESA N/R VELAN SH3-0-10 HARSH 228.212 N/R FOR SAFETY FUNCTION 1G33\*MOVF046 MOTOR OPERATED VALVE LHTQ AB-114-7 HLBO ESA N/R VELAN SI:3-0-7.5 HARSH A -

N/R FOR SAFETY FUNCTION

228.212

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MARK NO	EQUIPHENT DESCRIPTION VENDOR	MAKE/MANUFACTURES	R ENV. ZONE	EHRGCN	SFN1	OP TIME	GRH1
	PANEL/RACK SPEC	MODEL/CATALOG NO.			SFN3		QRN3
*****	*********	******	******	******	*****	*****	******
G33 REACTOR HA	TER CLEAN-UP						
1G33*HOVF053	MOTOR OPERATED VALVE		CT-7		ESA	1 HR	
	VELAN	58-0-15		HARSH	CISL	A -	
	228.	.212					
1633*HOVF054	HOTOR OPERATED VALVE		AB-114-2	HLEO	ESA	1 HR	
	VELAN	\$8-0-15		HARSH	CISL	A -	
	228.	.212					
1633*NOVF100	MOTOR OPERATED VALVE VELAN	LHTQ	DN-1	HLBI	ESA	N/R	
	VELAN	S!1B-00-10		HARSH		A -	
	228	.212 N/R FOR SAFETY F	UNCTION				
1G33*HOVF101	MOTOR OPERATED VALVE	LHTO	DW-1	HLBI	ESA	N/R	
	VELAN	SI:B-00-10		HARSH		A -	
	228	.212 N/R FOR SAFETY F	UNCTION				
1G33*HOVF102	HOTOR OPERATED VALVE	LHTQ	DW-1	HLBI	ESA	N/R	
	VELAN	Sti8-0-15		HARSH		A -	
	228	.212 NVR FOR SAFETY F	UNCTION		-		
1633×NOVF104	MOTOR OPERATED VALVE	LHTQ SIB-0-10	CT-7	HLBI	ESA	N/R	
	VELAN	SI/B-0-10		HARSH	-	A -	
	228	.212 N/R FOR SAFETY F	UNCTION				
1G33*!!OVF106	MOTOR OPERATED VALVE	LHTQ	DH-1	HLBI	ESA	N/R	
	VELAN	St:B-000-15		HARSH		A -	
	228	.212 N/R FOR SAFETY F	UNCTION				
1G33*HOVF107	MOTOR OPERATED VALVE	LHTQ	CT-7	HLBI	ESA	N/R	
	VELAN	SI:S-1-15		HARSH	-	Α -	
	228	.212 N/R FOR SAFETY F			1. 1		
1G33*SOVF041	SOLENOID VALVE	TRCP1	AB-119-6	HLEO		1 HR	
	TARGET ROCK			HARSH			
	247	.501					

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HARK NO	EQUIPMENT DESCRIPTI	ON	MAKE/HANUFACTURER	ENV. ZONE			OP TIME	QRN1
	VENDOR PANEL/RACH	SPEC.NO	HODEL/CATALOS NO.	SUSHRG	ENVTYP	SFN2 SFN3	OC BASIS	QRN2 QRN3
******	********			*****	*****		******	
HCS HYDROGEN R	RECOMBINER							
HCS*PKRS1A	POWER SOURCE PANEL		KEST	AB-141-1	HLBO	PANL	17 D	
	WESTINGHOUSE		HODEL B		HARSH		A -	
		224.520						
HCS*PNRS1B	POWER SOURCE PANEL		WEST	AB-141-1	HLEO	PANL	17 D	
	WESTINGHOUSE	224.520	HODEL B		HARSH	EMPW	A -	
HCS*RBNR1A	HYDROGEN RECOMBINER NESTINGHOUSE		MEST MODEL B	CT-G	HLBI	100000000000000000000000000000000000000	17 D	
	THE STATION OF SECTION	224.520	HOULE B		HARSH		Α -	
HCS*RBNR1B	HYDROGEN RECONSINER		WEST					
THE STROME TO	MESTINGHOUSE		MODEL B	CT-G	HLBI HARSH	GCNT	17 D	
		224.520						
VF VENTILATIO	N - FUEL BUILDING							
HVF*AOD102	AIR OPERATED DAMPER		ASCO, NHCO	FB-148-G	FHA	DISP	1 HR	
	QUALITY AIR DESIGN		138321,EA740		HARSH	-	A -	
		215.480						
HVF*A00104	AIR CPERATED DAMPER		ASCO, MICO	FB-148-G	FHA	DISP	1 HR	
	QUALITY AIR DESIGN	215.480	NP8321,EA740 REG.G.1.97		HARSH		Α -	
			NCO.0.1.77					
HVF*AOD112	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,NHCO NP8321,EA740	FB-148-G	FHA	DISP	1 HR	
	GONETIL MIN DESIGN	215.480	NFO321,CA740		HARSH		Α -	
HVF*AOD137	AIR OPERATED DAMPER		1000 11100					
mer amounds	QUALITY AIR DESIGN		ASCO,NMCO NP8321,EA740	FB-148-G	FHA HARSH	DISP	1 HR	
		215.480	REG.G.1.97			-		
HVF*A0D20A	AIR OPERATED DAMPER		ASCO, NICO	FB-149-1	FHA	DISP	24 HR	
	QUALITY AIR DESIGN		NP8321,EA740		HARSH	-	A -	
		215.480				-		

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MARK NO	EQUIPHENT DESCRIPTION VENDOR PANEL/RACK		MAKE/HANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE		SFN1	OP TIME OC BASIS	QRNI
**********	*********	******	*************	*******	*******	*******	*****	********
WE VENTTI ATTO	N - FUEL BUILDING							
VENITER 110	ii - rocc boicoms							
IHVF*A0D20B	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,NHCO NP8321,EA740	FB-148-1	FHA HARSH	DISP	24 HR A -	
		215.480						
1HVF*ADD3A	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,NMCO NF8321,EA740	FB-149-1	FHA HARSH	DISP	24 HR A -	
		215.480						
1HVF*AOD3B	AIR OPERATED DAMPER		ASCO,NHCO	FB-148-1	FHA	DISP	24 HR	
	QUALITY AIR DESIGN		NP8321,EA740		HARSH		Α -	
		215.480						
1HVF*A0031A	AIR OPERATED DAMPER		ASCO, MICO	FB-148-1	FHA	DISP	24 HR	
	QUALITY AIR DESIGN		NP8321,EA740		HARSH		Α -	
		215.480						
1HVF*A0D31B	AIR OPERATED DAMPER		ASCO.NHCO	FB-148-1	FHA		24 HR	
	QUALITY AIR DESIGN	215,480	NF8321,EA740		HARSH		Α -	
		215.400						
1HVF*A0033A	AIR OPERATED DAMPER		ASCO, NECO	FB-148-1	FHA	DISP	24 HR	
	QUALITY AIR DESIGN	215.480	NP8321,EA740		HARSH		A -	
		215.480						
1HVF*AOD338	AIR OPERATED DAMPER		ASCO . NIICO	FB-148-1	FHA	DISP	24 HR	
	QUALITY AIR DESIGN	215.480	NP8321,EA740		HARSH		Α -	
		215.480						
1HVF*FE109	FLON ELEMENT		FCI	FB-148-1			24 HR	
	FLUID COMPONENTS	207 277	FR72-4R		HARSH			
		247.433						
1HVF*FE32A	FLOW ELEMENT		FCI	FB-148-1			24 HR	
	FLUID COMPONENTS		FR72-4R		HARSH			
		247.433						
1HVF*FE32B	FLOW ELEMENT		FCI	F8-148-1			24 HR	
	FLUID COMPONENTS	207 277	FR72-4R		HARSH			
		247.433						

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MARK NO	EQUIPMENT DESCRIPTION VENDOR		MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCH	SFN1	OP TIME	QRN1
	PANEL/RACK	SPEC.NO	REMARKS			SFN3		QRN3
**********	********	******	*******	******	*******	*******	******	********
HVF VENTILATIO	ON - FUEL BUILDING							
1HVF*FN3A	FAN HOTOR		HEST	FB-148-1			24 HR	
	BUFFALO FORGE	215.400			HARSH		Α -	
1HVF*FN38	FAN HOTOR		WEST	FB-148-1	FHA	HVAC	24 HR	
	BUFFALO FORGE				HARSH		A -	
		215.400						
1HVF*FN7A	FAN HOTOR		HEST	FB-148-1	FHA HARSH		24 HR	
	BUFFALO FORGE	215.400			пакэп			
1HVF*FN7B	FAN HOTOR		WEST	FB-148-1	FHA	HVAC	24 HR	
	BUFFALO FORGE		TBFC 143T		HARSH		A -	
		215.400 .						
1HVF*FS109	FLOW SWITCH FLUID COMPONENTS			FB-148-1	FHA HARSH		24 HR	
		247.433						
1HVF*FS19A	FLOW SWITCH		FCI	FB-148-1			1000	
	AMERICAN AIR FILTER	225.220	FR72-4R		HARSH			
		223.220						
1HVF*FS19B	FLOW SWITCH AMERICAN AIR FILTER			FB-148-1	HARSH		1000	
		225.220						
1HVF*FS32A	FLOH SHITCH		FCI	FB-148-1	FHA		24 HR	
	FLUID COMPONENTS	247.433	FR72-4R		HARSH		A -	
1HVF+FS32B	FLON SWITCH FLUID COMPONENTS		FCI FR72-4R	FB-148-1	FHA HARSH		24 HR	
		247.433						
1HVF*PT38A	PRESSURE TRANSMITTER		RSIIT	FB-148-1	FHA	HUAC	24 HR	
	ROSEHOUNT	247.481	1153GB3		HARSH	5	A -	
		247.401						

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MARK NO	EQUIPMENT DESCRIPTI VENDOR	ON	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	ENVTYP	SFN1 SFN2	OF TIME	
	PANEL/RACK	SPEC.NO	REMARKS			SFN3		QRN3
********	**************	********	*****	**********				
VF VENTILATIO	N - FUEL BUILDING							
HVF*PT38B	PRESSURE TRANSMITTE	R	RSHT 1153GB3	FB-148-1	FHA HARSH	HVAC -	24 HR A -	
		247.481						
HVF*RTD1A	RTD PYCO		PYC0 122-4630-04	FB-148-1	FHA HARSH	HVAC	24 MR A -	
		247.461				1205		
HVF*RTD18	RTD PYCO		PYCO 122-4030-04	FB-148-1	FHA HARSH	HVAC	24 HR A -	
		247.461						
HVF*RTD30A	RTD		PYC0 122-4030-04	F8-148-1	FHA HARSH	JAVK	24 HR	
	PYCO	247.961	122-4030-04		· · · · · · · · · · · · · · · · · · ·			
HVF*RTD30B	RTD		PYCO	FB-148-1	FHA HARSH	HVAC	24 HR A -	
	PYCO	247.461	122-4030-04		пакэп			
HVF*SOV102	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NF8321ASE	FB-148-G	HARSH		1 HR	
	QUALITY AIR DESIGN	215.480						
HVF*SOV104	SOLENOID VALVE		ASCO NP8321A5E	FB-148-G	HARSH		1 HR	
	QUALITY AIR DESIGN	215.480	NEOSETASE		TIAN 311			
HVF*SOV112	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP8321ASE	FB-149-G	HARSH		1 HR	
	QUALITY MIR DESIGN	215.480						
HVF*SOV137	SOLENDID VALVE		ASCO NP6321A5E	FB-148-G	HARSH		1 HR	
	QUALITY AIR DESIGN	215.480	U-03ETH3E					
LHVF*SOV20A	SOLENDID VALVE		ASCO	FB-148-1	HARSH		24 HR	
	QUALITY AIR DESIGN	215.480	NP8321A5E		пакап			

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ARK NO	VENDOR PANEL/RACK	SPEC.NO	MAKE/HANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE SUBMRG	ENVTYP	SFN1 OP TIME QRN1 SFN2 OC BASIS QRN2 SFN3 QRN3
*******				*******	*********	*********************
WE VENTTI ATTOM	4 - FUEL BUILDING					
VENTILATION				FD 300 3		24 HR
HVF*SOV20B	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP8321A5E	FB-148-1	HARSH	24 114
		215.480				
HVF*SOV3A	SOLENDID VALVE		ASCO	FB-148-1		24 HR
	QUALITY AIR DESIGN		NP8321A5E		HARSH	
		215.480				
HVF*SOV3B	SOLENOID VALVE		ASCO NP8321A5E	FB-148-1	HARSH	24 HR
	QUALITY AIR DESIGN	215.480	MESSELASE			
	SOLENOID VALVE		ASCO	FB-148-1		24 HR
HVF*SOV31A	QUALITY AIR DESIGN		NP8321A5E		HARSH	
		215.480				
HVF*SOV318	SCLENOID VALVE		ASCO	FB-148-1		24 HR
	QUALITY AIR DESIGN	215.480	NP8321A5E		HARSH	
				FD 1/10 1		24 HR
HVF*SOV33A	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP8321A5E	FB-148-1	HARSH	24 110
		215.480				
HVF*SOV33B	SOLENOID VALVE		ASCO	FB-148-1		24 HR
	QUALITY AIR DESIGN	215 000	NP8321A5E		HARSH	
		215.480				
HVF*TS23A	TEMPERATURE SWITCH			FB-146-1	HARSH	1000
	AMERICAN AIR FILTER	225.220			1100.00	
LHVF*TS23B	TEMPERATURE SMITCH			FB-149-1		1000
myr #13235	AMERICAN AIR FILTER				HARSH	
		225.220				
IHVF*TS5A	TEMPERATURE SWITCH			FB-148-1	HARSH	1000
	AMERICAN AIR FILTER				пакэп	

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MARK NO	EQUIPMENT DESCRIPT		MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	ENRGEN	SFN1 OF TIME QRM1 SFN2 OC BASIS CRM2	
	PANEL/RACH	SPEC.NO	REMARKS			SFN3 QRN3	
*****	********	******	*******	*****		*******	****
VENTILATION	4 - FUEL BUILDING						
1HVF*TS5B	TEMPERATURE SHITCH			FB-148-1	HARSH	100D	
		225.220					
1HVF*TT1A	TEMP TRANSMITTER			FB-148-1	HARSH	24 HR	
		242.444					
1HVF*TT1B	TEMP TRANSMITTER			FB-148-1	MADEN	24 HR	
	ELECTROMECHANICS	242,444			HARSH		
1HVF×TT3CA	TEMP TRANSMITTER			FB-148-1	HARSH	24 HR	
	ELECTRONECHANICS	242.444			накън		
1HVF*TT30B	TEMP TRANSMITTER ELECTROMECHANICS			FB-148-1	HARSH	24 HR	
	LLLO INGILLO INGILLO	242.444			110.51		
1HVF*TY1A	TEMP RELAY ELECTROHECHANICS			FB-148-1	HARSH	24 HR	
	ELECTROPLEMANTES	242.444			HARSH		
1HVF+TY1B	TEMP RELAY ELECTROMECHANICS			FB-148-1	HARSH	24 HR	
	ELECTROMECHANICS	242.444			пакон		
HUN CHILLED HA	TER - VENTILATION						
1KVN+H0V102	HOTOR OPERATED VAL	LVE	LHTQ	AN-1	NORM HARSH	HVAC 1 HR	
	VELAN	228.212	SNB-00-15		пеляп		
1HVN*HOV127	MOTOR OPERATED VA	LVE	LHTQ	AB-141-4	NORM	HVAC 1 HR	
	VELAN	228.212	SNB-00-15		HARSH	- D -	

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# SORTE) BY MARK NO - HARSH ENVIRONMENT ONLY

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCH	SFN1	OP TIME OC BASIS	QRN1
**********	*********************	***********	**********	*******	*******	******	**********
HVN CHILLED WAT	TER - VENTILATION						
1HVN*HOV128	MOTOR OPERATED VALVE VELAN 228.21	SHB-00-15	AB-141-4	NORM HARSH		1 HR D -	
1HVN*MOV129	MOTOR OPERATED VALVE VELAN 228.21	SMB-00-15	AB-141-4	NORM HARSH	HVAC	1 HR 0 -	
1HVN*HOV130	MOTOR OPERATED VALVE VELAN 228.21	SM3-00-15	AB-141-4	NORM HARSH		1 HR 0 -	
1HVN*HOV22A	HOTOR OPERATED VALVE VELAN 228.21	SI/B-00-10	CT-G	NORM HARSH	The state of the s	1 HR 0 -	
1HVN*HOV22B	MOTOR OPERATED VALVE VELAN 228.21	51/5-00-10	ст-в	NORM HARSH	2770-2708	1 HR 0 -	
1HVN*SOV5A	SOLENOID VALVE FISHER CONTROLS 247.49	ASCO NP8320	C1-3	HLBI HARSH	100000000000000000000000000000000000000	1 HR A -	
1HVN*SOV58	SOLENOID VALVE FISHER CONTROLS 247.49	NP8320	CT-3	HLBI HARSH	1 0000000	1 HR A -	
HUR VENTILATION	N - REACTOR PLANT						
1HVR*ADD10A	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.48		AB-141-2	HLBO HARSH		1 HR A -	
1HVR*AOD10B	AIR OPERATED DAMPER QUALITY AIR DESIGN 215.48	NP8321,EA740	AB-141-2	HLBO HARSH	DISP	1 HR A -	

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RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST

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MARK NO	EQUIPMENT DESCRIPTION	M	HAKE/HANUFACTURER	ENV. ZONE	EMRGCN	SFN1	OP TIME	QRN1
	VENDOR PANEL/RACK	SPEC.NO	MODEL/CATALOG NO.	SUBMRG	ENVTYP	SFN2 SFN3	OC BASIS	QRN2 QRN3
**********	***********			*******	*******			
HUR VENTILATIO	N - REACTOR PLANT							
1HVR*AOD142	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,M/CO NF8321,EA740 REG.G.1.97	AB-141-6	HLBO HARSH		1 HR A -	
1HVR*A00143	AIR OPERATED DAMPER QUALITY AIR DESIGN	215.480		AB-141-1	HLBO HARSH		1 HR A -	
1HVR*AOD161	AIR OPERATED DAMPER QUALITY AIR DESIGN			AB-141-2	HLEO HARSH		1 HR A -	
1HVR*AOD162	AIR OPERATED DAMPER QUALITY AIR DESIGN			AB-141-2	HLBO HARSH		1 HR A -	
1HVR*AOD164	AIR OPERATED DAMPER GUALITY AIR DESIGN		ASCO,N1CO NP0321,EA740	A8-141-1	HLBO HARSH		1 HR A -	
1HVR*ADD18A	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,N1CO NP8321,EA740	AB-141-2	HLEO HARSH		1000 A -	
1HVR*A00183	AIR OPERATED DAMPER QUALITY AIR DESIGN	215.480	ASCO,NHCO NP8321,EA740	A9-141-2	HLBO HARSH		100D A -	
1HVR*A00214	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,NNCO NF6321.EA740 RES.G.1.97	AB-141-6	HLBO HARSH		1 HR A -	
1HUR*ACD22A	QUALITY AIR DESIGN	215.480	ASCO,NICO NP8321,EA740	AS-141-3	HLBO HARSH	4 77 75 6	100D A -	
1HVR*40022B	AIR OPERATED DAMPER QUALITY AIR DESIGN	215.480	ASCO,NMCO NF8321,EA740	AB-141-3	HLBO HARSH	DISP	100D A -	

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#### RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - MARSH ENVIRONMENT ONLY

ISSUE DATE: 04/23/84 EQUIPMENT DESCRIPTION MAKE/MANUFACTURER ENV. ZONE EMRGON SFN1 OP TIME QRN1 VENDOR MODEL/CATALOG NO. SUDMRG ENVTYP SFN2 OC BASIS QRN2 PANEL/RACK SPEC.NO REMARKS SFN3 QRN3 祖王安林武建军军士的城市的城市的大大大大大大大大军,而且的政士的战场处理的政府,从他不能不断处理,其他不可以的政政,而且他的政政政策,他们就是这些政政政策,而此时的政士,他们就就是这种的政府,他们对 HUR VENTILATION - REACTOR PLANT 1HVR#20023A AIR OPERATED DAMPER ASCO, MICO AB-141-2 HLBO DISP 1 HR QUALITY AIR DESIGN NF8321,EA740 HARSH 215.480 1HVR\*A00238 AIR OPERATED DAMPER ASCO, NHCO AB-141-2 HLBO DISP 1 HR QUALITY AIR DESIGN NP8321,EA740 HARSH 215.480 1HVR\*A00245 AIR OPERATED DAMPER ASCO.NMCO AB-141-2 HLBO DISP 1 HR QUALITY AIR DESIGN NP8321,EA740 HARSH 215.480 1HVR + A00249 AIR OPERATED DAMPER ASCO, MICO AB-141-2 HLEO DISP 1 HR QUALITY AIR DESIGN NP8321,EA740 HARSH A -215.480 1HVR\*A00261 AIR OPERATED DAMPER ASCO, NHCO AB-141-6 HLEO DISP 1 HR QUALITY AIR DESIGN NP8321,EA740 HARSH A -215.480 REG.C.1.97 IHVR . AOD262 AIR OPERATED DAMPER ASCO, NICO AB-141-6 1 H2 QUALITY AIR DESIGN NF8321,EA740 HARSH 215.480 REG.G.1.97 IHVR \*A00263 AIR OPERATED DAMPER ASCO, NICO AB-141-5 1 HR HARSH QUALITY AIR DESIGN NP8321,EA740 215.480 REG.G.1.97 1HVR\*A00264 AIR OPERATED DAMPER ASCO, Nº CO AB-141-5 1 HR QUALITY AIR DESIGN NF8321,EA740 HARSH 215,480 REG.G.1.97 1HVR + ACD 51A AIR OPERATED DAMPER ASCO, NHCO HLBO DISP 1000 AB-141-1 QUALITY AIR DESIGN NP8321,EA740 HARSI 215.480 1HUR\*ACC51B AIR CPERATED DAMPER ASCO, NYCO AB-141-2 HLBO DISP 1000 QUALITY AIR DESIGN NF8321,EA740 HARSH A -

215.480

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HARK NO	EQUIPMENT DESCRIPTION	ON	HAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCH	SFNI	OP TIME	GRN1
	PANEL/RACK					SFN3		QRN3
	***************************************							
HVR VENTILATION	N - REACTOR PLANT							
1HVR*A0053A	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO.N1CO NP8321.EA740	AB-170-1	HLBO HARSH	The second of	100D A -	
		215.480						
1HVR*A0053B	AIR OPERATED DAMPER QUALITY AIR DESIGN		ASCO,NICO NP8321,EA740	AB-170-1	HLBO HARSH	DISP	100D A -	
	WONEITT MIN DESIGN	215.480	111 03221127770					
1HVR*A0V123	AIR OPERATED VALVE			CT-G	MARCH		1 HR	
	POSI-SEAL	228.241			HARSH			
1HVR*AOV125	AIR OPERATED VALVE		NAMICO	CT-G			1 HR	
	POSI-SEAL	228.241	F4740-50100		HARSH			
1HVR*A0V126	AIR OPERATED VALVE		NAMCO	CT-G			1 HR	
	POSI-SEAL	228.241	EA740-50100		HARSH			
1HVR*ADV128	AIR OPERATED VALVE		NAMCO	CT-G			1 HR	
	POSI-SEAL	228.241	EA740-50100		HARSH			
1HVF*A0V147	AIR OPERATED VALVE		NAMCO	CT-G			1 HR	
111111111111111111111111111111111111111	POSI-SEAL	228.241	EA740-50100		HARSH			
							1 HR	
1HVR*ACV148	AIR OPERATED VALVE POSI-SEAL		NAMCO EA740-50100	CT-G	HARSH		I ne	
		228.241						
1HVR*AOV165	AIR CPERATED VALVE		NAMCO EA740-50100	AB-141-4	HARSH		1 HR	
	. USI-SERE	228.241						
1HVR*AOV166	AIR OPERATED VALVE		NAHCO	AB-141-3			1 HR	
	POSI-SEAL	228.241	EA740-50100		HARSH			

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MARK NO	EQUIPMENT DESCRIPT		MAKE/MANUFACTURER MCDEL/CATALOG NO.	ENV. ZONE	EHRSCN	SFN1 OP TIME GRN1 SFN2 OC BASIS GRN2
	PANEL/RACH	SPEC.NO				SFN3 QRN3
********	********	******	*************	******	******	****************
HVR VENTILATION	ON - REACTOR PLANT					
1HVR*FE111	FLOW ELEMENT FLUID COMPONENT	247.433	FCI FR72-4R	AS-141-4	HARSH	1000
1HVR*FE113	FLON ELEMENT FLUID COMPONENT	247.433	FCI FR72-4R	AB-141-2	HARSH	1000
1HVR*FE163	FLOW ELEMENT FLUID COMPONENT	247.433	FCI FR72-4R	AB-141-2	HARSH	1000
1HVR*FE28A	FLOH ELEMENT FLUID COMPONENTS	247.433	FCI FR72-4R	CT-G	HARSH	1000
1HVR*FE28B	FLON ELEMENT FLUID COMPONENTS	247.433	FCI FR72-4R	CT-G	HARSH	1000
1HVR*FE28C	FLUID COMPONENTS	247.433	FCI FR72-4R	CT-G	HARSH	100D
1HVR*FE29A	FLOW ELEMENT FLUID CONFONENTS	247.433	FCI FR72-4R	AS-170-1	наязн	1005
1HVR*FE29B	FLUID COMPONENTS	247.433	FCI F272-4R	AB-170-1	HARSH	100D
IHVR*FE56A	FLOW ELEMENT FLUID COMPONENTS	247.433	FCI FR72-4R	AB-141-1	HARSH	1005
1HVR*FE56B	FLUID COMPONENTS	247.433	FCI F272-4R	AB-141-1	HARSH	1000

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MARK NO	EQUIPMENT DESCRIPTION		ENV. ZONE	ENRGCN	SFNI	OP TIME	QRN1
	VENDOR PANEL/RACK SF	EC.NO REHARKS	. SUBHIRG	ENVTYP		OC BASIS	
*********		EC.NO REHARKS	********	*****	SFN3	*****	QRN3
NO VENTILATION	- REACTOR PLANT						
HVR*FN11A	FAN MOTOR	KEST	AB-170-1	HLBO	HVAC	100D	
	BUFFALO FORGE	TBDP 445TS		HARSH		Α -	
	•	5.400					
HVR*FN11B	FAN HOTOR	WEST	AB-170-1	HLBO	HVAC	1000	
	BUFFALO FORGE	T8CP 445TS		HARSH		A -	
		3.400					
LHVR*FS29A	FLOW SWITCH	FCI	AB-170-1	HLBO	ESA	1000	
	FLUID COMPONENTS	FR72-4R		HARSH		Α -	
HVR*FS29B	FLON SWITCH FLUID COMPONENTS	FCI FR72-4R	A8-170-1	HLBO	ESA	100D A -	
		17.433		HARSH	1 1	A -	
IHVR*FS56A	FLOW SWITCH	FCI	AB-141-2			100D	
	FLUID COMPONENTS	FR72-4R		HARSH			
	24	17.433					
1HVR*FS56B	FLOW SWITCH	FCI	AB-141-2			1000	
	FLUID COMPONENTS	FR72-4R		HARSH			
		17.433					
IHVR*PDT60A	DIFF PRESSURE TRANSMI		AB-141-2	HLEO	HVR	100D	
	ROSEMOUNT 1JPB*RAK4 2	1153DB3PA		HARSH		A -	
	10FB*RAN4	17,401					
1HVR*PDT60B	DIFF PRESSURE TRANSMI		AB-141-2	HLBO	HVR	1000	
	ROSEMOUNT 1JPB*RAN3 2	1153DB3PA		HARSH	211	A -	
	10rounds E				N . 4 - 5377 -		
1HVR*PDT60C	DIFF PRESSURE TRANSHI		AB-141-2	HLBO	HVR	1000	
	ROSEMOUNT 1JPB*RAN4 2	1153DB3PA		HARSH		Α -	
1HVR*PDT60D	DIFF PRESSURE TRANSMI		AB-141-2	HLBO	HVR	1000	
	ROSEHOUNT 1JPB*RAK3 2	1153DB3PA		HARSH	-	Α -	

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK		MAKE/MANUFACTURER MCDEL/CATALOG NO. REMARKS	ENV. ZONE SUBMRG		SFN1	OF TIME	
*********	********			********	*********	*******	*****	*********
NE VENTILATION	- REACTOR PLANT							
HVR*PDT60E	DIFF PRESSURE TRANSPROSEHOUNT	MITTER 247.481	RSMT 1153DB3PA	AB-141-2	HLBO HARSH	HVR	100D A -	
	1JPB∗RAK4	247.451						
1HVR*PDT60F	DIFF PRESSURE TRANSP ROSEHOUNT 1JP8*RAK3	247.481	RSHT 11530B3PA	AB-141-2	HARSH	HVR -	100D A -	
LHVR*SOV10A	SOLENOID VALVE QUALITY AIR DESIGN	215.460	ASCO NP8321A5E	AB-141-2	HARSH		1 HR	
LHVR¥SOV10B	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321ASE	AB-141-2	HARSH		1 HR	
1HVR*SOV123	SOLENOID VALVE FOSI-SEAL	228.241	ASCO HV-206-832-6F	CT-G	HARSH		1 HR	
1HVR*SOV125	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-B32-6F	CT-G	HARSH		1 HR	
1HVR*SOV126	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	CT-G	HARSH		1 HR	
1HVR*SOV128	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	C7-G	HARSH		1 HR	
1HVR×SOV142	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321A5E	AB-141-6	HARSH		1 HR	
1HVR*SOV143	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321A5E	AB-141-1	HARSH		1 HR	

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MARK NO	EQUIPMENT DESCRIPTI VENDOR PANEL/RACK	014	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE		SFN1 OP TIME GRN1 SFN2 OC BASIS GRN2 SFN3 GRN3
**********				*******	********	************
HVR VENTILATIO	ON - REACTOR PLANT					
1HVR*SOV147	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	CT-G	HARSH	1 HR
1HVR×SOV148	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	CT-G	HARSH	1 HR
1HVR*SOV161	SOLENOID VALVE QUALITY AIR DESIGN	215.460	ASCO NP8321A5E	AS-141-2	HARSH	1 HR
1HVR*SOV162	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321ASE	AB-141-2	HARSH	1 HR
1HVR*SOV164	SOLENDID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321ASE	AB-141-4	HARSH	1 HR
1HVR*SOV165	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	A8-141-4	HARSH	1 HR
1HVR*SOV166	SOLENOID VALVE POSI-SEAL	228.241	ASCO HV-206-832-6F	AB-141-3	HARSH	1 HR
1HVR*SOV18A	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321A5E	AB-141-2	HARSH	1000
1HVP*SOV18B	SOLENDID VALVE QUALITY AIR DESIGN	215.480	ASCO NP832A15E	AB-141-2	HARSH	1000
1HVR*SOV214	SOLENDID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321ASE	AB-141-6	HARSH	1 HR

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### RES-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

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HARK NO	EQUIPHENT DESCRIPTI VENDOR PANEL/RACK	ON	MAKE/HAMUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRSCN	SFN1 OP TIME QRN1 SFN2 OC EASIS QRN2 SFN3 CR::3
***********	**************	*********	*************	********	**********	***********************
HVR VENTILATION	N - REACTOR PLANT					
1HVR×SQV22A	SOLENOID VALVE CUALTRY AIR DESIGN	215.460	ASCO NF8321ASE	AS-141-3	HARSH	1000
1HVR*SOV22B	SOLENOID VALVE QUALITY AIR DESIGN	215.460	ASCO NP8321ASE	A9-141-3	HARSH	1000
1HVR+SOV23A	SOLENDID VALVE GUALITY AIR DESIGN		ASCO NP8321ASE	48-141-2	HARSH	1 HR
1HVR+90V23B	SOLENCID VALVE QUALITY AIR DESIGN		ASCO NP6321ASE	A8-141-2	HARSH	1 HP
1HVR*S0V295	SOLENOID VALVE QUALITY AIR DESIGN		ASCO NP8321ASE	S-191-8A	HARSH	1 HR
1HVR*50V249	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NF8321ASE	AB-141-2	HARSH	1 HR
1HVR*SOV261	SOLENDID VALVE QUALITY AIR DESIGN	215.460	ASCO NP3321ASE	AB-141-6	HARSH	1 HR
1HVR*SOV262	SOLENDID VALVE QUALITY AIR DESIGN	215.460	ASCO NP6321A5E	AB-141-6	HARSH	1 HR
INCR*SOV263	SOLENDID VALVE QUALITY AIR DESIGN	215.480	ASCO NP9321ASE	AE-141-5	HARSH	1 KR
1HVR*SOV264	SOLENOID VALVE QUALITY AIR DESIGN	215.490	ASCO NF6321ASE	A8-141-5	HARSH	1 HR

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#### ROS ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

HARK NO	EQUIPHENT DESCRIPTI		MAKE/MANUFACTURER MODEL/CATALOG NO.		EHROCH ENVTYP	SFN2	OP TIME	QRN2
	PANEL/RACK	TO SALA THE SALA STATE OF THE SALAS STATE OF THE SA				SFN3		QRN3
*********	*********	*****	**************	********	***********	*********	********	******
HVR VENTILATION	- REACTOR PLANT							
1HVR*SOV51A	SOLENDID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321ASE	ct-e	HARSH		1600	
1HVR*SOV51B	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP8321A5E	CT-G	HARSH		100D	
1HVR*SOV53A	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO 128321ASE	AS-170-1	HARSH		1000	
1HVR*SOV53B	SOLENOID VALVE QUALITY AIR DESIGN	215.480	ASCO NP3321A5E	AB-170-1	HARSH		1000	
1HVR*UC1A	UNIT COOLER MOTOR BUFFALO FORGE	215.252	WEST 445TCZ	ст-б	HLBI HARSH	HVAC	100D A -	
1HVR*UC1B	UNIT COOLER MOTOR BUFFALO FORGE	215.252	WEST 445TCZ	CT-G	HLBI HARSH	HVAC	100D A	
1HVR*UC10	UNIT COOLER MOTOR BUFFALO FORGE	215.252	WEST 213TCZ	AB-114-3	HLBO HARSH	HVAC	100D A -	
1HVR*UC11A	UNIT COOLER MOTOR BUFFALO FORGE	215.252	WEST 405TCZ	AS-141.4	HLEO HARSH		100D A -	
1HVR*UC11B	UNIT COOLER MOTOR BUFFALO FORGE	215.252	KEST 405TCZ	AB-141-4	HLBO HARSH	HVAC	1000 A -	
1HVR*UC2	UNIT COOLER MOTOR BUFFALO FORGE	215.252	WEST 213TCZ NO SAFETY FUNCTION	AB-095-G	HLEO HARSH	HVAC	N/R A -	

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HARK NO	EQUIPMENT DESCRIPT		MAKE/HANUFACTURER	ENV. ZONE	ENRECH		OP TIME	
	VENDOR		MODEL/CATALOS NO.	SUBTIRG	ENVTYP	SFN2	OC BASIS	QRN2
	PANEL/RACK					SFN3		GSN3
******	***********	******	*********	******	*****	*******	******	**********
HVR VENTILATIO	ON - REACTOR PLANT							
1HVR*UC3	UNIT COOLER HOTOR		WEST	AB-095-8	HLBO	HVAC	100D	
	BUFFALO FORGE		215TCZ		HARSH		A -	
		215.252						
1HVR*UC4	UNIT COCLER MOTOR		WEST	AB-095-7	HLBO	HVAC	1000	
	BUFFALO FORGE		215TCZ		HARSH		A -	
		215.252						
1HVR*UC5	UNIT COOLER HOTOR		WEST	AB-114-5	HLEO	HVAC	1000	
	BUFFALO FORGE		326TCZ		HARSH		A -	
		215.252						
1HVR*UC6	UNIT COOLER MOTOR		WEST	AS-114-8	HLBO	HVAC	1000	
	BUFFALO FORGE		326TCZ		HARSH		A -	
		215.252				100		
1HVR*UC7	UNIT COOLER MOTOR		WEST	AB-114-1	HLBO	HVAC	1000	
	BUFFALO FORGE		256TCZ		HARSH		A -	
		215.252						
1HVR*UC8	UNIT COOLER MOTOR		WEST	AB-114-5	HLBO	HVAC	1 HR	
	BUFFALO FORGE		256TCZ		HARSH		A -	
		215.252						
1HVR*UC9	UNIT COOLER MOTOR		WEST	AB-114-8	HLEO	HVAC	100D	
	BUFFALO FORGE		324TCZ		HARSH	-	A -	
		215.252						
IAS INSTRUMENT	TAIR							
11AS*!!OV106	MOTOR OPERATED VAL	VE	LHTQ	AS-114-6	HLBO	CISL	1HR	
	VELAN		SI18-000-5		HARSH	LCS	A -	
		228.212						
1IAS*HOV107	MOTOR OPERATED VAL	VE	LHTQ	AB-114-6	HLEO	CISL	1HR	
	VELAN		SHB-000-5		HARSH	LCS	A -	
		228.212				L 7 1		

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MARK NO	EQUIPHENT DESCRIPTION	HAKE/HANUFACTURER	ENV. ZONE			OP TIME	QRN1
	VENDOR PANEL/RACK SPE	HCDEL/CATALOG NO.	SUBHRS	ENVTYP	SFN2 SFN3	OC BASIS	QRN2 QRN3
*****		*********	****	****	******	*****	**************************************
TAS INSTRUMENT	AIR						
IAS*PT39A	PRESSURE TRANSMITTER ROSENOUNT	RSHT 1153GB7	AB-141-5	HLBO HARSH	N/A	1HR B	
	247	.481 QA CAT II ALARH ONLY					
IAS*PT39B	PRESSURE TRANSMITTER	RSHT	AB-141-6	HLBO	N/A	1HR	
	ROSEHOUNT 247	.481 GA CAT II ALARH ONLY		HARSH		В	
IAS*PT43A	PRESSURE TRANSHITTER	RSHT	FB-148-G	FHA	N/A	1HR	
	ROSEHOUNT 241	1153GB7 CA CAT II ALARM ONLY		HARSH		В	
IAS*PT43B	PRESSURE TRANSMITTER ROSENOUNT	RSMT 1153687	FB-148-6	FHA HARSH	N/A	1HR B	
	241	.481 QA CAT II ALARM ONLY					
IAS*PT48A	PRESSURE TRANSMITTER	RSHT 1153GB7	AB-141-5	HLBO HARSH	BCNT	1HR	
	24			nacan			
IAS*PT48B	PRESSURE TRANSMITTER		AB-141-6	HLEO	BCNT	1HR	
	ROSEHOUNT 24	.481		HARSH		A -	
IAS*PT49A	PRESSURE TRANSMITTER	RSHT	FB-143-G	FHA	BCNT	1HR	
	ROSENCUNT	1153687		HARSH		A -	
IAS*PT49B	PRESSURE TRANSMITTER ROSEHOUNT	1153GB7	FB-148-G	FHA HARSH	BUNI	A -	
	24	.481					
IAS*SOV41A	SOLENOID VALVE TARGET ROCK	TRCP 77KK-005	AB-141-1	HLEO HARSH	BCNT	1HR A -	
		.501		HAROH			
IAS*SOV41B	SOLENOID VALVE	TRCP	AB-141-1	HLBO	BCNT	1HR	
	TARGET ROCK	77KK-005		HARSH		A -	

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MARK NO	EQUIPMENT DESCRIPTION VENDOR		MAKE/MANUFACTURER HODEL/CATALOG NO.	ENV. ZONE	EMRGCN	SFNI	OP TIME	QRN1
	PANEL/RACK					SFN3		QRN3
IAS INSTRUMENT	AIR							
IIAS*SOV45A	SOLENOID VALVE TARGET ROCK		TRCP 77KK-005	FB-095-1	FHA HARSH	BCNT -	1HR A -	
		247.501						
11AS*S0V45B	SOLENOID VALVE TARGET ROCK		TRCP 77KK-005	FB-095-1	FHA HARSH	BCNT -	1HR A -	
		247.501						
ICS REACTOR COR	RE ISOLATION COOLING							
1ICS*SOVI02	SOLENOID VALVE ATMOOD & MORRILL			AB-114-2	HARSH		N/R	
		228.218	N/R FOR SAFETY FUNCTI	ON				
1ICS+SOV103	SOLENOID VALVE ATHOOD & MORRILL			DH-4	HARSH		N/R	
		228.218	N/R FOR SAFETY FUNCTI	ON				
ISC								
1ISC*PT101	PRESSURE TRANSMITTER	247.481	1153GB9PA	CT-G	HARSH		N/R	
ורם פווחבספיוסוורי	TURE - PRIMARY AUXILIARY							
		DOILDING						
IJPB*RAK1	INSTRUMENT RACK MERCURY		HERC NONE, UNIQUE	AB-095-6	HLBO HARSH		1000	
		247.411						
1JFB*RAK2	INSTRUMENT RACK		HERC	AB-095-6	HLBO	RACH	1000	
	MERCURY	247.411	NONE, UNIQUE		HARSH		Α -	
		247.411						
1JPB*RAH3	INSTRUMENT RACK HERCURY		MERC NONE, UNIQUE	AB-141-2	HLBO HARSH	RACK	100D A -	
	HENGONT	247.411	HONE JOIL GOE					

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HARK NO	EQUIPHENT DESCRIPT VENDOR PANEL/RACK		MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE SUBHRG	ENVTYP	SFN2 SFN3	OP TIME	QRN3
***********	**********	*********	*************	******	*******	********	*******	**********
UPB SUPERSTRUCTU	JRE - FRIMARY AUXILIA	RY BUILDING						
LJPB*RAK4	INSTRUMENT RACK MERCURY	247.411	HERC NONE, UNIQUE	AB-141-1	HLBO HARSH	RACK	1000 A -	
JRB SUPERSTRUCTU	RE - REACTOR BUILDIN	NG .						
IJRB*DRA1(JBE)	DOOR ACCESS GRAVER	219.711		CT-G	HARSH		1000	
IJRS*DRA1(JBF)	DOOR ACCESS GRAVER	219.711		CT-G	HARSH		1000	
1JRB*DRA2(JBE)	DOOR ACCESS GRAVER	219.711		CT-G	HARSH		1000	
1JRB*DRA2(JBF)	DOOR ACCESS GRAVER	219.711		CT-G	HARSH		1000	
1JR6*SOV15	SOLENDID VALVE GRAVER	219.711		AB-170-1	HARSH		1HR	
1JR8*SOV25	SOLENDID VALVE GRAVER	219.711		F6-113-G	HARSH		1HR	
1JR8*Z <b>S16</b>	POSITION SHITCH GRAVER	219.711		AB-170-1	HARSH		IHR	
1JRB*ZS17	POSITION SWITCH GRAVER	219.711		AB-170-1	HARSH		1HR	

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MARK NO	EQUIPHENT DESCRIPT VENDOR PANEL/RACK	TION	MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE		SFN1 OP TIME QRN1 SFN2 OC BASIS GRN2 SFN3 QRN3
******	*************	********	*******	*********	******	*****************
JRB SUPERSTRU	CTURE - REACTOR BUILDI	NG				
1JRB*ZS26	POSITION SWITCH GRAVER	219.711		FB-113-G	HARSH	IHR
		214.711				
1JRB*Z527	POSITION SHITCH GRAVER	219.711		FB-113-G	HARSH	1HR
LDS LEAK DETER	CTION SYSTEM					
1LDS*RTD1A	RTD PYCO	211.161	PYCO 122-3046-04	AB-095-10	HARSH	1 HR
1LUS*RTD18	RTD PYCO		PYC0 122-3046-04	AB-095-10	HARSH	1 HR
1LDS*RTD1C	RTD PYCO	211.161	PYC0 122-3046-04	AB-095-10	HARSH	1 HR
		211.161				
1LDS*RTD1D	RTD PYCO	211.161	PYC0 122-3046-04	AB-095-10	HARSH	1 HR
1LDS*RTD2A	RTD PYCO		PYC0 122-3046-04	AB-095-10	HARSH	1 HR
1LDS*RTD2B	RTD PYCO	211.161	PYC0 122-3046-04	AB-095-10	HARSH	1 HR
		211.161				
1LDS*RTD2C	PYCO	211.161	PYC0 122-3046-04	AB-095-10	HARSH	1 HR

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MARK NO	EQUIPHENT DESCR		MAKE/MANUFACTURER HODEL/CATALOG NO.	ENV. ZONE	EMRGCN ENVTYP	SFN1 OP TIME QRN1 SFN2 OC BASIS QRN2
	VENDOR PANEL/RACK	SPEC.NO	REMARKS	Journa		SFN3 QRN3
******	**********	********	*******	*******	*****	*********
	CTTON EVETEN					
LDS LEAK DETER	CITOU 2121CH					
1LDS*RTD2D	PYCO	211.161	PYC0 122-3046-04	AB-095-10	HARSH	1 HR
1LDS*RTD3A	RTD		PYCO	AB-114-2		1 HR
	PYCO	211.161	122-3046-04		HARSH	
11.DS*RTD3B	PYCO		PYC0 122-3046-04	AB-114-2	HARSH	1 HR
	PICO	211.161	122-3010-01			
1LDS*RTD3C	RTD PYCO		PYC0 122-3046-04	AB-114-2	HARSH	1 HR
		211.161				
1LDS+RTD3D	RTD PYCO		PYCO 122-3046-04	AB-114-2	HARSH	1 HR
	Pico	211.161				
1LDS+RTD4A	RTD PYCO		PYC0 122-3046-04	A8-114-7	HARSH	1 HR
		211.161				
ILDS*RTD4B	RTD PYCO		PYC0 122-3046-04	AB-114-7	HARSH	1 HR
	Fico	211.161				
1LDS*RTD4C	RTD PYCO		PYC9 122-3046-04	AB-114-7	HARSH	1HR
		211.161				
1LDS*RTD40	RTD		PYC0 122-3046-04	AB-114-7	HARSH	1 HR
	PYCO	211.161	122-3040-04			

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HARK NO	EQUIPMENT DESCRIPTI	ON	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EMRGCN	SFN1	OP TIME	QRN1
		SPEC.NO	REMARKS			SFN3		QRN3
***********	**********	********	*********	*********	***********	********	********	**********
LSV LEAKAGE CO	NTROL - PENETRATION VAL	.VE						
ILSV*C3A	COMPRESSOR SUPERPRESSURE, INC.			AB-141-2	HARSH		100 D	
		221.512						
ILSV*C3B	COMPRESSOR SUPERFRESSURE, INC.			A8-141-3	HARSH		100 D	
		221.512						
ILSV*FE20A	FLUID COMPONENTS	247.433	FCI FR72-4R	AB-141-2	HARSH		30 D	
LSV*FE20B	FLOW ELEMENT FLUID COMPONENTS		FCI FR72-4R	AB-141-2	HARSH		30 D	
		247.433						
ILSV*FS20A	FLOW SWITCH		FCI	AB-141-2	HLBO	10000	30 D	
	FLUID COMPONENTS	247.433	FR72-4R		HARSH	1. 1	Α -	
LSV*HOV11A	HOTOR OPERATED VALV	Æ	LHTQ	AB-141-2	HLB0		30 D	
	VELAN	228.214	SNC-04-2		HARSH	- BCN1	Α -	
ILSV*MOV11B	HOTOR OPERATED VALV	/E	LHTQ	AB-141-2	HLEO		30 D	
	VELAN	228.214	SHC-04-2		HARSH	BCNT	Α -	
ILSV*MOV13A	HOTOR OPERATED VALV	/E	LHTQ	AB-141-2	HLBO	LCS		
	VELAN	228.214	SHC-04-2		HARSH	BCN1	Α -	
ILSV*MOV13B	HOTOR OPERATED VALV	/E	LHTQ	AB-141-2	HLEO		30 D	
	VELAN	228.214	SHC-04-2		HARSH	BCNT -	Α -	
LSV+HOV15A	HOTOR OPERATED VALV	/E	LHTQ	AB-095-10	HLSO	LCS	30 D	
	VELAN	228.214	SHC-04-3		HARSH	BENT	Α -	

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MARK NO	EQUIPHENT DESCRIPTION VENDOR	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE		SFN1	OP TIME	QRN1
	PANEL/RACH SPEC.NO		SUDING	ENVIIP	SFN3	CC DASIS	QRN3
********	**********************		*****	*****	******	******	******
SV LEAKAGE CO	NTROL - PENETRATION VALVE						
ILSV*HOV15B	MOTOR OPERATED VALVE	LHTQ	AB-141-2	HLBO		30 D	
	VELAN 228.21	SMC-04-3		HARSH	ECNT -	Α -	
	MOTOR OPERATED VALVE	LHTQ	AB-095-10	HLBO	ırs	30 D	
ILSV*HOV16A	VELAN	SHC-04-3	20-073-10	HARSH		A -	
	228.21						
ILSV*MOV16B	MOTOR OPERATED VALVE	LHTQ	AB-141-2	HLBO	LCS	30 D	
	VELAN	SHC-04-3		HARSH	BCNT	A -	
	228.21						
ILSV*!10V19A	HOTOR OPERATED VALVE	LHTQ	AB-141-2	HLBO		30 D	
	VELAN 228.21	SH3-000-2		HARSH	BCNT	A -	
	220.21						
ILSV*MOV19B	MOTOR OPERATED VALVE	LHTQ SMS-000-2	AB-141-2	HARSH		30 D	
	VELAN 228.21			HEADH	-		
ILSV*H2A	MOTOR TO DRIVE COMPRESSOR	RELI	AB-141-2	HLBO	LCS	1000	
LEGINER	SUPERPRESSURE INC.	254T		HARSH		A -	
	1LSV*SHD9A 221.51	2					
1LSV+M2B	MOTOR TO DRIVE COMPRESSOR	RELI	AB-141-3	HLBO	LCS	1000	
	SUPERPRESSURE INC.	254T		HARSH		A -	
	1LSV*SKD98 221.51	2					
1LSV*PT10A	PRESSURE TRANSHITTER	RSHT	AB-141-2	HLBO	LCS	30 D	
	ROSEMOUNT	1153587		HARSH		A -	
	247.48	1					
1LSV*PT10B	PRESSURE TRANSMITTER	RSHT	AB-141-2	HLEO	LCS	30 D	
	ROSENOUNT	1153687		HARSH		Α -	
	247.48						
1LSV*PT12A	PRESSURE TRANSMITTER		AB-141-2	HLBO	LCS	30 D	
	ROSENOUNT	1153GB7		HARSH		Α -	
	247.46	11					

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC	HAKE/MANUFACTURER HODEL/CATALOS NO. NO REMARKS		EHRGCN ENVTYP		OP TIME OC BASIS	
***********	*********	*********	******	*******	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	******	
SV LEAKAGE CO	ONTROL - PENETRATION VALVE						
LSV*PT12B	PRESSURE TRANSMITTER ROSEHOUNT	RSHT 1153GB7	AB-141-2	HLBO HARSH	LCS	30 D	
	247.	181					
LSV*PT14A	PRESSURE TRANSMITTER	RSHT	AB-114-6	HLBO	LCS	30 D	
	ROSEHOUNT	1153687		HARSH	-	A -	
	247.	161					
LSV*FT14B	PRESSURE TRANSMITTER	RSHT	AB-141-2	HLBO	LCS	30 D	
	ROSEMOUNT 247.	1153GP7		HARSH		A -	
	241.	•					
LSV*PT17A	PRESSURE TRANSHITTER	RSHT	AB-095-2	HLBO	LCS	30 D	
	ROSEHOUNT 247.	1153687		HARSH		A -	
LSV*PT178	PRESSURE TRANSMITTER ROSEMOUNT	RSHT 1153GB7	AB-141-2	HLBO	LCS	30 D	
	247.			HARSH		Α -	
LSV*PT21A	ODECCIDE TRANSMITTER						
LSV*PIZIA	PRESSURE TRANSMITTER ROSEHOUNT	RSMT 1153GB7	AB-114-6	HLEO HARSH	LCS	30 D A -	
	247.						
LSV*PT21B	PRESSURE TRANSMITTER	PSHT	AB-114-5	HLEO	LCS	30 D	
	ROSEHOUNT	1153657		HARSH	-	A -	
	247.	161					
LSV*PT22A	PRESSURE TRANSMITTER	RSHT	AB-141-2	HLBO	LCS	30 D	
	ROSEHOUNT	1153GB7		HARSH		Α -	
	247.	+81					
LSV*PT22B	PRESSURE TRANSHITTER	RSHT	AB-114-3	HLSO	LCS	30 D	
	ROSEHOUNT 247.	1153GB7		HARSH	4 × 7	A -	
	247.	101					
LSV*PT26A	PRESSURE TRANSHITTER	RSMT	AB-141-2			30 D	
	ROSEHOUNT 247.	11536B7PA		HARSH			

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HARK NO	EQUIPMENT DESCRIPTION VENDOR		MAKE/MANUFACTURER HODEL/CATALOG NO.	ENV. ZONE SUBNEG	ENRGCN ENVTYP	SFN1 SFN2	OF TIME	QRN1 QRN2
	PANEL/RACH	SPEC.NO	REMARKS			SFN3		QRN3
***********	************	**********	*****	***********	**********	*********	********	*********
SV LEARAGE CON	TROL - PENETRATION	VALVE						
LSV*PT26B	PRESSURE TRANSHI	TTER	RSHT 1153GB7PA	AB-114-3	HARSH		30 D	
		247.481						
LSV*PT9A	PRESSURE TRANSHI	TTER 247.481	RSHT 1153GB7 REG.G.1.97	AB-141-2	HLBO HARSH	LCS -	30 D	
LSV*PT9B	PRESSURE TRANSMI ROSENOUNT	TTER 247.481	RSHT 1153GP7 REG.G.1.97	AB-114-3	HLBO HARSH	LCS	30 D A -	
LSV*PV10A	CONTROL VALVE FISHER CONTROLS	247.497	FCTL.BORG EC	AB-141-2	HLBO HARSH	LCS -	30 D A -	
LSV*PV10B	CONTROL VALVE FISHER CONTROLS	247.497	FCTL.BORG EC	AB-141-3	HLBO HARSH	LCS	30 D	
LSV*SOVX26A	SOLENDID VALVE TARGET ROCK	247.501	TRCP 1115005-1	AB-141-2	HARSH		300	
LSV*SOVX26B	SOLENDID VALVE TARSET ROCK	247.501	TRCP 1115005-1	AB-141-3	HARSH		300	
LSV*SOVY26A	SOLENDID VALVE TARGET ROCK	247.501	TRUP 115005-1	AS-141-3	HARSH		300	
LSV*SOVY26B	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1115005-1	AB-141-3	HARSH		300	

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#### RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SCRIED BY MARK NO - HARSH ENVIRONMENT ONLY

MARK NO	EQUIPHENT DESCRIPTION VENDOR PANEL/RACK	HODEL/CATALOG NO	ER ENV. ZONE D. SUBHRG	ENRGON	SFN"	OP TIME QRN1 OC BASIS QRN2 CRN3	
******		*************	***********	*******	*******	**********	******
NGP CABLE							
1NGP01	600 VOLT CONTROL CAB	LE OKON NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NGP02	600 VOLT CONTROL CAB OKONITE	LE CHON NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NGP03	600 VOLT CONTROL CAB OKONITE	LE OKON NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NSP04	600 VOLT CONTROL CAB ORONITE	LE OKON NOME 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NGP06	600 VOLT CONTROL CAB OKONITE	LE OKON NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NGP11	600 VOLT CONTROL CAS OKONITE	LE NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
1NGP12	600 VOLT CONTROL CAS OKONITE	NONE 241.240	VARIOUS	N/A HARSH	N/A	1000 A -	
INSP13	600 VOLT CONTROL CAB ONONITE	SLE OKONI NCNE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
INGP14	600 VOLT CONTROL CAR OKONITE	SLE OKCN1 NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	
INGP15	600 VOLT CONTROL CAR OKONITE	DLE NONE 241.240	VARIOUS	N/A HARSH	N/A	100D A -	

QRN3

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#### RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY HARK NO - HARSH ENVIRONMENT ONLY

SFN1 OF TIME OFN1 MAKE/MANUFACTURER ENV. ZONE EMRSON EQUIPMENT DESCRIPTION VENDOR HODEL/CATALOG NO. SUBNIRG ENVTYP SFN2 OC BASIS QRN2 SFN3 SPEC.NO PANEL/RACK REMARKS NSP CABLE N/A 1000 INSP16 600 VOLT CONTPOL CABLE VARIOUS N/A OKONITE FONE HARSH A -241.240 N/A 1000 1NGP22 600 VOLT CONTROL CABLE OHON VARIOUS N/A NONE HARSH OKCNITE A -241.240 N/A N/A 100D INGP24 600 VOLT CONTROL CABLE OKON VARIOUS NONE HARSH A -OKONITE 241.240 VARIOUS N/A N/A 1000 DKON INGP26 600 VOLT CONTROL CABLE OKCNITE NONE HARSH A -241.240 VARIOUS N/A N/A 1000 INGP27 600 VOLT CONTROL CABLE DHON HARSH A -OKONITE NONE 241.240 600 VOLT CONTROL CABLE DHON VARIOUS N/A N/A 1000 INGP28 HARSH OHONITE NONE A -241.240 VARIOUS N/A N/A 1000 600 VOLT CONTROL CABLE INGP30 OKONITE NONE HARSH 241.240 VARIOUS N/A N/A 1000 1NGP32 600 VOLT CONTROL CABLE DKON HARSH OKONITE NONE A -241.240 600 VOLT CONTROL CABLE DHON VARIOUS N/A N/A 100D INGP33 HAPSH OHONITE NONE 241.240 VARIOUS 100D 600 VOLT CONTROL CABLE INGF36 OHONITE HARSH 241.240

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HARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	HAKE/HANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	ENRGON	SFN1	OF TIME QRNI	
**********	*****************		*******	*****	********	***********	*******
IGP CABLE							
TOP CADLE							
INGP37	600 VOLT CONTROL CABLE ONGNITE 241.240		VARIOUS	HARSH		1000	
INGP42	600 VOLT CONTROL CABLE OKONITE 241.234		VARIOUS	HARSH		1000	
	641.634						
INGP50	600 VOLT POWER CABLE ONONITE	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
	241.234						
INCP51	600 VOLT POHER CABLE ONOMITE	NOTE	VARIOUS	N/A HARSH	N/A	1000 A -	
	241.234						
INGP52	600 VOLT POHER CABLE OKONITE	OKON NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
	241.234						
INGP53	600 VOLT POWER CABLE ONONITE	OKON NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
	241.234						
INGP54	600 VOLT POWER CABLE OKONITE	OHON NONE	VARIOUS	N/A HARSH	N/A	1000	
	241.239						
	600 VOLT POWER CABLE	OKON	VAPIOUS	N/A	N/A	1000	
INGP55	CKONITE	NONE	VAR-1003	HARSH	16.11	A -	
	241.234						
INGPS6	600 VOLT PONER CABLE		VARIOUS	N/A HARSH	N/A	1000 A -	
	CHONITE 241.234	NONE		men.am			
ALCONO.	455 101 7 50000 0101 5	CUCON	VARIOUS	N/A	N/A	100D	
INGP57	660 VOLT PONER CASLE CHONITE	NONE	VANIOUS	HARSH	H/A	A -	
	241.234						

09/23/84 REVISION: 0-D ISSUE DATE: 09/23/84

ON HRAH	EQUIFHENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE		SFN1	OP TIME GRN1 OC BASIS GRN2
***********	***************************************	****************	*******	*********		
NGP CABLE						
INGP58	600 VOLT POHER CABLE ONONITE 241.234	OKON NONE	VARIOUS	N/A HARSH	N/A	100D 4 -
INSP59	600 VOLT POHER CABLE OKONITE 241.234	OKON NONE	VARIOUS	N/A HARSH	N/A	100D A -
1KGP61	ROCKBESTOS 291.242		VARIOUS	HARSH		1000
1NGP62	ROCKDESTOS 241.242		VARIOUS	HARSH		1600
INGP63	SPECIAL INST. CABLE ERAND-REX 241.246		VARIOUS	HARSH		1000
INGP67	ROCKBESTOS 241.242		VARIOUS	HARSH		1000
INSP70	300 VOLT INSTRUMENTATION CABL ROCKDESTOS 241.242	E ROCK NONE	VARIOUS	N/A HARSH	N/A	1009 A
1NSP71	300 VOLT INSTRUMENTATION CABL ROCKBESTOS 241.242	E ROCK NONE	VARIOUS	N/A HARSH	N/A	100D A -
INGP72	300 VOLT INSTRUMEN ATION CABL ROCKBESTOS 241.242	E ROCK NONE	VARIOUS	N/A HARSH	N/A	1000 A -
INSP73	300 VOLT INSTRUMENTATION CAPE ROCKBESTOS 241.242	E ROCH NONE	VARICUS	N/A HARSH	N/A	100D A -

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HARK NO	EQUIPMENT DESCRIPTION	MAKE/HANUFACTURER	ENV. ZONE			OP TIME	
	VENDOR PANEL/RACH SPEC.NO	MODEL/CATALOG NO.		ENVTYP		OC BASIS	12807739
********	************************		*****	*****		******	
NSP CABLE							
INGP75	300 VOLT INSTRUMENTATION CABLE		VARIOUS	N/A	N/A	1000	
	ROCHBESTOS 241.242	NONE		HARSH		Α -	
INGP7€	300 VOLT INSTRUMENTATION CABLE		VARIOUS	N/A	N/A	1000	
	ROCKBESTOS 241.242	NONE		HARSH		A -	
INGP77	300 VOLT INSTRUMENTATION CABLE ROCKBESTOS	ROCK NONE	VARIOUS	N/A	N/A	1000	
	241.242	THUNE		HARSH		Α -	
INGP78	300 VOLT INSTRUMENTATION CABLE	ROCH	WARTONE		****	2000	
1110779	ROCKBESTOS	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
	241.242						
INSP80	300 VOLT INSTRUMENTATION CABLE	ROCK	VARIOUS	N/A	N/A	100D	
	ROCKEESTOS	NONE		HARSH		A -	
	241.242						
INGP81	300 VOLT INSTRUMENTATION CASLE		VARIOUS	N/A	N/A	1000	
	ROCKBESTOS 241.242	NONE		HARSH		A -	
INGP82	300 VOLT INSTRUMENTATION CABLE		VARIOUS	N/A	N/A	1000	
	ROCKBESTOS 241.242	NONE		HARSH		Α -	
INGP84	300 VOLT INSTRUMENTATION CABLE ROCKBESTOS	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
	241.242						
1NGP85	300 VOLT INSTRUMENTATION CABLE	BUCK	VARIOUS	N/A	N/A	1000	
1110/02	ROCKBESTOS	NONE	VIK1003	HARSH	IVA	A -	
	241.242						

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MARK NO	EQUIPMENT DESCRIPTION	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EMRGCN	SFRI	OP TIME QRN1 OC EASIS QRN2
	VENDOR PANEL/RACK SPEC.NO	REHARKS			SFN3	QRN3
************	***********************	************	*********	****	*******	************
NGR CABLE						
1NGR11	SHV POWER CABLE ANACONDA	NONE	VARIOUS	N/A HARSH	N/A	100D A -
	241.232					
INSR12	SHY PONER CABLE ANACONDA	NONE	VARIOUS	N/A PARSH	N/A	100D A -
	241.232					
1NGR30	SKV POWER CABLE ANACONDA	NONE	VARIOUS	N/A HARSH		100D A -
	241.232					
NGS CABLE						
1NSS01	THERMOCOUPLE EXT. WIRE CABLE ROCKBESTOS	ROCK	VARIOUS	N/A HARSH	N/A	100D A -
	241.243					
1NGS02	THERMOCOUPLE EXT. WIRE CABLE ROCKBESTOS	ROCH NONE	VARIOUS	N/A HARSH	N/A	1000 A -
	241.243					
1NG503	THERMOCOUPLE EXT. WIRE CABLE ROCKBESTOS	ROCK NONE	VARIOUS	N/A HARSH	N/A	100D A -
	241.243					
1NGS05	THERMOCOUPLE EXT. HIRE CABLE ROCKEESTOS	ROCK NONE	VARIOUS	N/A HARSH	N/A	100D A -
	241.243					
1NGS06	THERMOCOUPLE EXT. HIRE CABLE ROCKBESTOS	ROCK NONE	VARIOUS	HARSH		1000
	241.243					
1NG\$11	SPECIAL INSTRUMENTATION CABLE BRAND REX	BNRX	VARIOUS	N/A HARSH	N/A	100D A -
	241.246					

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MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	MAKE/MANUFACTURER MCDEL/CATALOG N). REMARKS	ENV. ZONE SUBMRS	ENTYP	The second secon	OF TIME OC BASIS	QRN1 QRN2 QRN3
*******	**********************	************	******	*********	*******	*********	**********
NGS CABLE							
INGS12	SPECIAL INSTRUMENTATION CABLE BRAND REX 241.246	BNRX NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
NGS13	SPECIAL INSTRUMENTATION CABLE BRAND REX 241.246	BNRX NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
NGS14	SPECIAL INSTRUMENTATION CAPLE BRAND REX 241.246	BARX	VARIOUS	N/A HARSH	N/A	100D A -	
NGS15	SPECIAL INSTRUMENTATION CABLE ERAND REX 241.246	BNRX	VARIOUS	HARSH		1000	
NGS17	SPECIAL INSTRUMENTATION CABLE ERAND REX 241.246	BNRX NONE	VARIOUS	N/A HARSH	N/A	100D A -	
NSS18	SPECIAL INSTRUMENTATION CABLE BRAND REX 241.246	BNRX NONE	VARIOUS	N/A HARSH	N/A	100D A -	
NSS20	SPECIAL INSTRUMENTATION CABLE BRAND REX 241.246	BNRX	VARIOUS	N/A HARSH	N/A	100D A -	
NGS21	SPECIAL INSTRUMENTAION CABLE BRAND REX 241.246	ENRX	VARIOUS	N/A HARSH	N/A	100D A	
NGS22	SPECIAL INSTRUMENTATION CABLE ERAND REX 241.246	BNRX NONE	VARIOUS	N/A HARSH	N/A	100D A -	
INGS23	SPECIAL INSTRUMENTAITON CABLE BRAND REX 241.246	BNRX	VARIOUS	HARSH		1000	

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ISSUE DATE: 04/23/84	SORTED BY MARK NO - HARSH ENVIRONMENT ONLY
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HARK NO	EQUIPMENT DESCRIPT: VENDOR	ION	MAKE/HANUFACTURER MODEL/CATALOG NO.	ENV. ZONE SUBHRG	ENRGCH ENVTYP		OP TIME	QRN1 QRN2
	PANEL/RACK	SPEC.NO	REHARKS			SFN3		QRN3
************	****************	*********	*************	******	*****	*******	*******	*******
NGS CABLE								
1NG\$40	COAXIAL CABLE ROCKBESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
1NGS41	COAXIAL CABLE ROCHBESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
1NGS42	COAXIAL CABLE ROCKBESTOS	291.292	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
1NGS43	COAXIAL CABLE ROCKSESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
1NGS44	COAXIAL CABLE ROCKBESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	1000 A -	
1NG545	COAXIAL CABLE ROCKBESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
1NG\$46	THINAXIAL CABLE ROCKBESTOS	241.242	NONE	VARIOUS	N/A HARSH	N/A	100D A -	
1NGS57	300 V INST. CABLE ROCKBESTOS	241.242		VARIOUS	HARSH		1000	
1NGS60	ROCKBESTOS	241.243		VAFIOUS	HARSH		1000	
1NGS61	ROCHBESTOS	241.243		VARIOUS	HARSH		1000	

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IGEN NO	EQUIPMENT DE VENDOR PANEL/RACK	HAME/NEWLFACTURER HODEL/CATALOS NO. REMARKS	ENV. ZONE SUCHRG	ENUTYP	SFN1 SFN2 SFN3	OP TIME OC BASIS	95H1 GRH2 95H3
SASSENER SERVICE	**************************************						
INNS*SH55A	SMITCHGEAR GOULD-ERONN BOVERI 242.521	CAT.II	FB-095-6	HARSH		N/R R/R	
1005*5658	SMITCHGEAR COLLD-ERGIN BOVERI 242.521	CAT.II	A5-114-6	HARSH		N/N	
RCP ELECTRICAL	ELECTRICAL PENETRATIONS						
IRCP*LVC05	ELECTRICAL PENETRATION ASSY CONAX CORP 291.211	CONX NONE,UNIQUE H.BI FOR INBOARD END, REMAINGER TRNS	CT-S REHAINSER	HLBI HARSH TRNS	PNIT	100D	
18C9*LVC66	ELECTRICAL PENETRATION ASSY CONAX COSP 291.211	NOME, UNIQUE H. REMAINDER TRNS H. BI FOR INSOARD END, REMAINDER TRNS	CT-S REHAINDER	HLBI HARSH TRNS	PNIT	100D A	
IRCF4LVC10A	ELECTRICAL PENETRATION ASSY CONAN CORP 241.211	CCPCK NOTICLE NOTICE HUB! FOR INCIONED END.	CT-G HLE HAR REMAINDER TRANS	HLBI HARSH TRANS	PNIT	1000 A	
IRCP+LVC11	ELECTRICAL PENETRATION ASSY COMMAX CORP 241.211	CCHAK NCNE, UNIQUE HASI FOR INCOARD END, REMAINDER TRNS	CT-6 PEMAINDER	HLBI RARSH TRNS	FNIT	100D A	
IRCP*LVCI1A	ELECTRICAL PENETRATION ASSY CONLX CORP 241.211	NOME, UNIQUE HS HLBI FOR INSOARD END, REMAINDER TRNS	CT-6 REMAINDER	HLBI HARSH TRNS	PNIT	100D	
18CP+LVC13A	ELECTRICAL PENETRATION ASSY CONCX CORP 241.211	NONE, UNIQUE HLBI FOR INCOARD END.	CT-G HLS HAR REMAINDER TRANS	HLSI HARSH TRAIS	PNIT	1000 A	
1907-17018	ELECTRICAL PENETRATION ASSY CONUX CORP 241.211	CONCK NONE, UNIQUE H.	CT-G REMAINDER	HLBI HARSH TRNS	PNIT	1000	

ENT DESCRIPTION MAKE/MANUFACTURER ENV. ZONE ENROCH SFN1 OF TIME GRN1 MODEL/CATALCS NO. SUENRS ENVTYP SFN2 OC BASIS GRN2 RACK SPEC.NO REMANS	DESCRIPTION	SFNI OP TIME GRNI SFNZ OC BASIS GRNZ SFNZ GC BASIS GRNZ
NT DESCRIPTION ACK	ENT DESCRIPTION	ENTYP
NT DESCRIPTION ACK	ENT DESCRIPTION	ENV. ZONE SLENAS
NT DESCRIPTION ACK	ENT DESCRIPTION	MANEZ PRANJFACTURER MCDEL/CATALOS NO. REPURNS
E 10 P EE	EQUIPH VENCY FUNCY	ENT DESCRIPTION

	1000 A	1000 A	A A	100D	7 100D A	T 1000	T 1600	7 1690 A -	T 1000	T 1000 A
	PNIT	PNIT	PNIT	PNIT	PNIT	PNIT	PNIT	PNIT .	TING	PINT
	HLBI HARSH TRIS	MLBI HAPSH TPANS	HAPSH TENS	HLBI HARSH TRPS	HLBI HARSH TRIS	HLBI HARSH TRUS	HLBI HARSH TRNS	HLSI HARSH TRNS	HLBI HARSH TRMS	HARSH TRNS
	CT-6 REMAINDER	CT-6 NLE HAGE REMAS	CT-S HLE HAS REMAINDER TRNS	CT-6 REMAINDER	CT-6 REMAINDER	CT-6 HLB HAR REMAINDER TRNS	CT-6 H2 H2 REMAINDER TRNS	CT-6 REMAINDER	CT-6 HI HEMAINDER TRMS	CT-6 REMAINDER
	CONST. LONG OUE HUSE FOR INSOLED END.	CCPK NCNE, UPITOJE HLBI FOR INJOARD END,	CCNX NCHE, UNIQUE H.BI FCA INGOARD END,	CCPX NCNE, LPHIQUE HLSI FCR INCOARD END.	CCCX NONE,UNIQUE H.BI FOR INSDARD END,	CONX NUTE, UNIQUE HIBI FOR INCOLED END,	CONK NONE,UNIQUE HLBI FOR INDOARD END,	CONK NEWE, UNIQUE HLSI FOR INSOARD END.	CCHX NCHE,UNIQUE MLGI FOR INSOARD END.	CONX NOME.UNIQUE NUME.UNIQUE NUME FOR INBOARD END, REMAINDER TRNS
PENETRATIONS	ELECTRICAL PENETRATION ASSY CONEX COSP 291-211	ELECTPICAL PERCTRATION ASSY CONCIN COSP 291.211	ELECTRICAL PENETRATION ASSY CONUX CORP 291.211	ELECTRICAL PENETRATION ASSY CONCA CORP 241.211	ELECTRICAL PENETRATION ASSY CONAX COPP 243.211	ELECTRICAL PENETRATION ASSY CONUX CORP 241.211	ELECTRICAL PENETRATION ASSY CCHAX CCPP 291.211	ELECTPICAL PENETRATION ASSY CONGX COPP 241.211	ELECTRICAL PENETRATION ASSY CONAX CORP 291.211	ELECTRICAL PENETRATION ASSY COLUX COSP
RCP ELECTRICAL PENETRATIONS	1909-4,00164	IRCP*LVC194	1909-4, VC204	1206*[VCC1	18CP+LVC21A	19CF*LVI0SA	IRCP+LVI06A	19CF*LV109C	18CF*LVI12	19CP+LV112A

04/13/84 FEVISION: 0-D ISSUE DATE: 04/23/84

PLAN NO	EQUIPMENT DESCRIPTION VENCOR PANEL/RACK SPEC.NO	HUNELMUNDFACTURER HUDEL/CATALOS ND. RENURNS	ENV. ZONE SUZHRG	ENTRE	SFRIZ	OP TIME OC BASIS	QRM1 QRM2 QRM3
PCP ELECTRICAL	ELECTRICAL PENETRATIONS						
16CP+LV113A	ELECTRICAL PENETRATION ASSY COMMX CCSP 291.211	CONK NOME, UNIQUE HLBI FOR INDOARD END.	CT-6 PEHAINDER	HLBI HARSH TRNS	PINT	100D A	
IRCP*LVI14	ELECTRICAL PENETRATION ASSY CONIX CORP 291.211	NCHE , UNIQUE RLBI FOR INCOMED END.	CT-6 HL REMAINDER TRNS	HLBI NARSH TRNG	TINA	100D A	
IRCP*LVI19A	ELECTRICAL PENETRATION ASSY CONAX CORP 291.211	COPIC NOSE, UNITALE HUBE FOR INCOME	CT-6 REMINDER	HLBI HARSH TRNS	PNIT	1000 A	
IPCP4[VI15	ELECTRICAL PENETRATION ASSY CONAX CORP 291.211	COMM NOME, UNITADE HLEI FOR INDOARD END,	CT-G REMAINDER	HLBI HARSH TRNS	PNIT	100D A	
IRCP*(VIISA	ELECTRICAL PENETRATION ASSY CONDX CORP 291.211	CCPCX NCNE,UNIQUE HLEI FOR INDOARD END,	CT-S REMEMBER	HLBI HARSH TRNS	PNIT	1005 A	
IRCP*LVII7	ELECTRICAL PENETRATION ASSY CCNUX CORP 291.211	CONS	9-13	HARSH		1000	
18CF4[V1178	ELECTRICAL PENETRATION ASSY CONIX CORP 241.211	COPY NOTE, UNITALE HEST FOR INDOARD END.	CT-6 REMAINDER	HLBI HARSH TRNS	PNIT	1000 A	
IRCP*LVII7C	ELECTRICAL PENETRATION ASSY CONUX CDR7 241.211	CCPKK NCNE, LYKKUE HLBI FOR INSCARD END,	CT-G REMAINDER	HLEI HARSH TRIS	PNIT	100D A	
IRCP*LVI26A	ELECTRICAL PENETRATION ASSY CONDIX CORP 291.211	CCDAK, INTEGUE NCHE, FLEE FOR INSOARD END.	CT-6 HLB HAR REMAINDER TRNS	HLBI HARSH TRNS	PNIT	100D A	
1RCP+LV1209	ELECTRICAL PENETRATION ASSY CONEX CORP 291.211	CCPIX NCNE,UNIQUE NLBI FOR INSOARD END,	CT-6 H H REMAINDER TRNS	HLBI H28SH TRNS	PNIT	100D	

# RES-ENVIRONMENTAL GUALIFICATION DATA MASTER LIST SORTED BY MARM NO - HARSH ENVIRONMENT CALY

64/23/64 REVISION: 6-0 ISSUE DATE: 04/23/64

KARN NO	EGUIPHENT D VENDOR PANEL/RACK	MUNES FRANCE SCTURER HODEL/CATALCS NO. REFERENCE	ENV. ZONE SUBING	ENSIGN	SFN1 SFN2 SFN3	OP TIME OC BASIS	OSN1 GSN2 CPN3
			***************************************	# # # # # # # # # # # # # # # # # # #	***************************************		* * * * * * * * * * * * * * * * * * *
RCP ELECTRICAL	ELECTRICAL PENETRATIONS						
19C9+LW03	ELECTRICAL PENETRATION ASSY CONAX CORP 241.211	CCPX NONE,UNIQUE HLEI FOR INSCRED END,	CT-6 REMINDER	HLBI HARSH TRNS	PHIT	1000 A -	
13CP-4_UP054	ELECTRICAL PENETRATION ASSY COMMX COMP 291.211	CONCE,UNIQUE HUBI FOR INSORPO END.	CT-6 REMAINDER	HL61 HARSH TRIS	PNIT	1000 A	
IRCPALUPOR	ELECTRICAL PENETRATION ASSY COMMX CORP 241.211	CONX NCME, LINIQUE HLSI FOR INCOMPO END,	CT-G HLE HAR REMAINDER TENS	HLBI HARSH TENS	PICIT	1000 A .	
18CP4LVP64A	ELECTRICAL PENETRATION ASSY CONC.N. CORP. 291,211	CDNX NONE,UNIQUE HLBI FOR INBOARD END,	CT-6 HZ HZ REMAINDER TRNS	HLBI HARSH TRNS	PNIT	1000 A	
18C9*LVP67	ELECTRICAL PENETRATION ASSY CONAX CORP 291.211	CONCE, UNIQUE NUMBER FUEL FOR INGORRO END.	CT-6 HLR HAR END, REMAINDER TRNS	HLBI HARSH TRNS	FNIT	100D A	
18CP+LVP67a	ELECTRICAL PENETRATION ASSY CONEX CORP 291.211	CONCY NONE LUMIQUE HLBI FOR INDOMRO END,	CT-6 HLE HAR REMAINDER TRNS	HLBI HARSH TRNS	PNIT	100D A	
18C9-LVP08	ELECTRICAL PENETRATION ASSY CONUX CONP 241.211	CCNCK CT-6 HLE HAN HLEI FOR INCOARD END, REMAINDER TRUS	CT-6 REHAINDER	HLBI HARSH TRNS	PNIT	1000	
19CP+LVP08A	ELECTRICAL PENETRATION ASSY COTAN CORP 291.211	CONX NAME , UNIQUE NAME NEW REMAINDER TRNS	CT-6 REMAINDER	HLBI HASSH TRNS	PNIT	1000 A -	
18CP+LVP09	CONAX CORP CALCAL PENETRATION ASSY	CONX NOWE, LANIQUE H. H.LEI FOR INDOARD END. REMAINDER TRNS	CT-6 REMAINDER	HLBI HARSH TRNS	PNIT	1000 A	

PNIT 1000

NOME, UNIQUE HABSH HABSH HABSH HABSH HABSH HABSH HABSH HABSH TRNG

ELECTRICAL PENETRATION ASSY CONSX CORP.

IRCP+LVP09A

241.211

04/23/64 REVISION: 0-0 ISSUE DATE: 04/23/84

MASK NO	EQUIPHENT DESCRIPTION VENDOR PANEL/RACK SPEC.NO	HESE/VENDFACTURER HODEL/CATALOS NO. REHGENS	ENV. ZOVE SUBHRG	ENSON	SFN1 SFR2 SFN3	OP TIME OC BASIS	GENE GENES GENES
ROP BLECTWICK	ELECTRICAL PERETRATIONS						
MONUM 16	ELECTRICAL PENETRATION ASSY CONUX COSP 291.211	CONG NCHE, UNIQUE HLSI FOR INSOARD END, REMAINDER TRNS	CT-G	HLRSH HLRSH TRNS	PNIT	1000 A	
ISCP-LIPIES	ELECTRICAL PENETRATION ASSY CONAX COSP 241.211	CONT. NCNE, UNIQUE HA HLBI FOR INCOAPD END, REMAINCER TRNS	CT-6	HLBI HARSH TRNS	PKIT	1000 A	
19CP+LVP22	ELECTPICAL PENETRATION ASSY CORUX COSP 241.211	CONX NONE, UNIQUE NA HLEI FOR INSOAPD END, REMAINJER TRNS	CT-6	HLBI HARSH TRNS	PNIT	100D A	
18CP+LVP224	ELECTRICAL PENETRATION ASSY COMMX CORP. 291.211	CCHEK NCNE, UNICUE HLBI FOR INSOARD END, REHAINDER TRNS	CT-G	HLBI HADSH RKS	PNIT	1000 A	
IRCP+HUP01	ELECTRICAL PENETRATION ASSY CONUX COSP 291.211	CCDNX NCNE, UNIQUE NAME HU.SI FOR INSOARD END, REMAINDER TRNS	CT-6	HLBI NARSH FRNS	PNIT	1000 A -	
1905+44602	ELECTRICAL PENETRATION ASSY CONUX CORP 241.211	CONX NOME, UNIQUE H.B.I FOR INBOARD END, REMAINDER TRIS	CT-6	HLBI HARSH TRYS	FINIT	100D A -	
1RCP+/NS18	ELECTRICAL PENETRATION ASSY CONUX CGRP 291.211	CONX NONE, UNIQUE HAS FOR INBOARD END, REMAINDER TRNS	CT-6	HLBI HZRSH TRNS	PNIT	1000 A	
IRCP+MISI3	ELECTRICAL PENETRATION ASSY COMMX CORP 241.211	CONC. UNIQUE NCNE. UNIQUE HUSI FOR INSOARD END.	CT-6 HU HAI REHAINDER TRNS	HLBI HARSH TRYS	PNIT	100D A	
1PCP+N619	ELECTRICAL PENETRATION ASSY CONAX CORP 241.211	CONX HCNE, LINITOJE HLSI FOR INGOARD END, REMAINDER TRNS	CT-G	NLBI NARSH IRNS	PNIT	1000 A	
1909*49528	ELECTRICAL PENETRATION ASSY CONUX CORP 241.211	CONX NONE, UNIQUE H. H. EL FOR INGOARD END. REMAINDER TENS	CT-G	HLBI HARSH RNS	PNIT	160D A	

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### RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY HARK NO - HARSH ENVIRONMENT ONLY

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HARK NO	EQUIPMENT DESCR	IPTION	HAKE/HAMMFACTURER	ENV. ZONE	EMRGCN	SFN1	OP TIME	QRN1
	VENDOR		MODEL/CATALOG NO.	SUBHRG	ENVTYP	SFN2	OC BASIS	QRN2
	PANEL/RACK	SPEC.NO	FINARHS			SFN3		GEN3

********	*************	*********	**********	********	*********	******	*****
RCP ELECTRICAL	L PENETRATIONS						
19CP+TCA01	TERHINAL CABINET PECP	242.491	N/A	AB-114-6	HLEO HARSH	RACK	-
19CP+TCA02	TERMINAL CABINET PECP	292.491	N/A	48-119-6	HLEO HARSH	RACH	1000 A -
19CP+TCA03	TERHINAL CABINET PECP	242.491	N/A	AB-114-6	HLEO HARSH	RACK	
1RCP+TCA04	TERHINAL CABINET	792.991		48-114-6	HLBO HARSH	RACK -	
1PCP+TCA05	TERMINAL CABINET PECP		N/A N/R FOR SAFETY	AB-114-6 FUNCTION	HLBO HARSH	RACK	N/R A -
IRCP+TCAR6	TERHINAL CABINET PECP		N/A N/R FOR SAFETY		HLBO HARSH	RACH	
IRCP+TCA97	TERHINAL CABINET PECP	242.491	N/A N/R FOR SAFETY	AB-114-5	HLEO HARSH	RACK	(B) (B) (C) (C) (C)
1RCP+TCA08	TERMINAL CABINET PECP	242.491	N/A	48-114-5	HLBO HARSH	RACH -	100D A -
1RCP+TCA09	TERMINAL CABINET PECP	292.491	N/A	A5-114-5	HLBO HARSH		1000 A -
1RCP*TCA10	TERMINAL CABINET PECP	242.491	N/A	AB-114-5	HLBO HARSH	RACK - -	100D A -

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HARN NO	EQUIPHENT DESCRIPT	TON .	MAKE/HANUFACTURER	ENV. ZONE	ENRECH	SFN1	OP TIME	QRN1
	VENDOR PANEL/RACK	SPEC.NO	MODEL/CATALOG NO. REMARKS	SUBTING	ENVITE	SFN3	OC BASIS	QRN3
************	*****************	*********	**************	********	**********	********	******	*********
RCP ELECTRICAL	L PENETRATIONS							
IPCP*TCA11	TERMINAL CABINET		N/A	A8-141-4	HLBO HARSH		N/R A -	
		242.491	N/R FOR SAFETY FUNC	TION				
IRCP+TCA12	TERHINAL CABINET		N/A	AB-141-4	HLBO HARSH		100D A -	
		242.491						
IRCP+TCA13	TERHINAL CABINET		N/A	AB-141-4	HLBO HARSH		N/R A -	
	2 (8.87)	242.491	N/R FOR SAETY FUNCT	ION				
1PCP+TCA14	TERNINAL CASINET		N/A	AB-141-3	HLBO HARSH		N/R A -	
		242.491	N/R FOR SAFETY FUNC	TION				
1RCP+TCA15	TERMINAL CABINET		N/A	AB-141-3	HLBO HARSH		1000 A -	
		242.491						
1RCP*TCA16	TERMINAL CABINET		N/A	FB-113-6	HLBO HARSH		N/R A -	
		242.491	N/R FOR SAFETY FUNC	TION				
1RCP*TCF01	TERMINAL CABINET		N/A	FB-113-G	FHA HARSH	CONTRACT.	1000 A -	
		242.491						
1RCP*TCF02	TERMINAL CABINET		N/A	FB-113-G	FHA HARSH	The state of the s	N/R A -	
		242.491	NAR FOR SAFETY FUNC	TION				
1RCP*TCF03	TERMINAL CABINET		N/A	FB-113-G	FHA HARSH		100D A -	
		242.491				-		
1RCP*TCF04	TERMINAL CABINET		N/A	FB-113-G	FHA HARSH	1 2000	100D A -	
		242.491						

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MARK NO	EQUIPMENT DESCR	IPTION	MAKE/HANUFACTURER	ENV. ZONE	EHRGCN	SFNI	OP TIME	QRNI	
	VENDOR		HODEL/CATALOS NO.	SUCHEG	ENVTYP	SFN2	OC BASIS	QRN2	
	PANEL/RACK	SPEC.NO	REMARKS			SFN3		ORN3	

RCP ELECTRICAL	PENETRATIONS							
1RCP+TCR01A	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACH	N/R	
		242.491	N/R FOR SAFETY	FUNCTION	11.31			
1RCP*TCR01F	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACH	N/R A	
		242.491	N/R FOR SAFETY	Y FUNCTION				
1RCP*TCR02A	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACK	N/R A	-
		242.491	N/R FOR SAFETY	Y FUNCTION		*		
1RCP+TCR02F	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACH -	N/R A	
		242.491	N/R FOR SAFET	Y FUNCTION				
1RCP+TCR03A	TERMINAL CABINET		N/A	CT-6	HLBI HARSH	RACK	N/R A	
		242.491	N/R FOR SAFET	Y FUNCTION				
1RCF+TCR03F	TERHINAL CABINET		N/A	CT-6	H! BI HARSH	RACK	N/R A	
		242.491	N/R FOR SAFET	Y FUNCTION		-		
1RCP*TCR04A	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACH	100	_
		242.491	N/R FOR SAFET	Y FUNCTION				
1RCP+TCR04F	TERMINAL CABINET		N/A	CT-S	HLBI HARSH	RACH	N/R A	
		242.491	N'R FOR SAFET	Y FUNCTION				
1RCP+TCR05A	TERMINAL CABINET		N/A	CT-G	HLBI HARSH	RACK	N/R A	
		242.491	N/R FOR SAFET	Y FUNCTION				
1RCP+TCR06A	TERNINAL CABINET		N/A	CT-G	HLBI HARSH	RACH	N/R A	
		292.491	N/R FOR SAFET	Y FUNCTION		*		

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		The same of the sa					***********		
ON XSEN	EQUIFYENT BY VENCOR PANFL/RACK	10N SPEC.NO	FINE/HANUFACTURER HUDEL/CATALOS NO. REMURNS	ENV. ZONE SLOVENS	DECN. BATH	SFN1 SFN2 SFN3	OP TIME OC BASIS	GENG GENG GENG	
	化环烷 医电子 医电子 医电子 医电子 医牙牙 医甲状腺素 医皮肤炎 医甲状腺素 医皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮皮								
SCP ELECTRICAL	ELECTRICAL PENETRATIONS								
1909+109034	TERNING CABINET		N/A	5-13	HLBI K105K	RACK	N A		
		165.292	N/R FOR SAFETY FUNCTION	ION		1			
19CP+TCB084	TERHINAL CABINET		N/A	9-13	HART MATERIAL	RACK	N/R		
		160.262	NAP FOR SAFETY FUNCTION	ICH					
1909-109094	TERNING, CARDET		N/A	6-13	H.BI HADOM	RACK	N/R		
	, and	242.491	N/R FOR SAFETY FUNCTION	ION	The same				
1909-102184	TERNITAL CARDIET		N/A	61.0	HLBI HADGU	RACH	N/R		
		242.491	N/R FOR SAFETY FUNCTION	TON	Hardward .				1
12CP+TCR11A	TERMINAL CABINET		N/A	5-T3	H.BI H.DEU	RACH	K.		
	è	242.491	HUP FOR SAFETY FUNCTION	TON					
1909+109124	TESHINAL CABINET		NA	9-13	H.BI Leona	RACK	N/R		
	- Land	242.491	NAP FOR SAFETY FUNCTION	TON					
19CP+TCR13A	TERHINAL CASINET		N/A	5-T3	N.BI uvocu	PACH	S ×		
	455	292.491	NVR FOR SAFETY FUNCTION	101	Bred and	,			
19CP+TCR144	TESHINAL CABINET		N/A	9-13	HLBI	RACK	N. N.		
	ACCA	242.491	N/R FOR SAFETY FUNCTION	TON	Beering				
1809*108154	TERMINAL CASINET		NYA	5-13	H_BI HADSH	RACK	N/R		
		242.491	NVR FOR SAFETY FUNCTION	TON		,			
1PCP+TCR16A	TERHTHAL CABINET		N/A	9-13	HEST	RACH	N/R		
	PECP	242.491	NVR FOR SAFETY FUNCTION	IICN	HARSH				
				Contract of the Contract of th					

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### RBS-ENVIRORENTAL QUALIFICATION DATA MASTER LIST SCRIED BY MARK NO - HARSH ENVIRONMENT ONLY

RCS REACTOR COO	LANT							
IRCS*MOV58A	MOTOR OPERATED VALVE VELAN	228.216	LHTQ SHB-000-2	CT-G	HARSH		1HR	
1RCS*HOV58B	HOTOR OPERATED VALVE	E 228.216	LHTQ	CT-G	HARSH		1HR	
1RCS+MOV59A	MCTOR OPERATED VALVE	E 228.216	LHTQ SMB-000-1	CT-S	HARSH		1HR	
1RCS*HOV59B	MOTOR OPERATED VALVE	E 228.216	LHTQ SH3-000-2	CT-G	HARSH		1HR	
1PCS*HOV60A	MOTOR OPERATED VALVIVELAN	E 220.216	LHTQ SI/B-000-2	CT-G	HLBI HARSH	CISL -	1HR A	
1RCS*MOV60B	MOTOR OPERATED VALV	E 228.216	LHTQ SMB-000-2	ст-б	HLBI HARSH	CISL.	1HR A	,
1RCS*MOV61A	MOTOR OPERATED VALV VELAN	E 228.216	L:1TQ SMB-000-2	CT-G	HLBI HARSH	CISL	1HR A	
1RCS*MOV61B	MOTOR OPERATED VALV VELAN	E 228.216	LHTQ SHB-000-2	CT-G	HLBI HARSH	CISL -	1HR A	
RHS RESIDUAL H	EAT REHOVAL SYSTEM							
1RHS*FT15B	PRESSURE TRANSMITTE ROSEHOUNT	247.481	RSHT 1153DB6FA N/R FOR POST ACCIDENT	AB-095-6	HARSH		N/R	

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### RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

MARK NO	VENDOR	PTION	MAKE/MANUFACTURER MCDEL/CATALOG NO.		ENRGCN	SFN1 OP TIME GRN1 SFN2 OC BASIS GRN2
	PANEL/RACK	SPEC.NO	REMARKS	o commo		SFN3 QRN3
**********	*******	*******	*****************	*******	*****	********************
RHS RESIDUAL H	EAT REHOVAL SYSTEM					
1RHS*FT15C	PRESSURE TRANSMI ROSEMOUNT	TTER 247.481	RSHT 11530B6PA N/R FOR POST ACCIDENT	AB-095-3	HARSH	N/R
IRHS*LT119	PRESSURE TRANSMI ROSEHOUNT	TTER 247.481	RSHT 1153DBGPA N/R FOR POST ACCIDENT	CT-G	HARSH	N/R
1RHS*RTD47A	RTD PYCO	247.461	PYCO 122-4030-04 REG.G.1.97	AB-070-2	HARSH	1000
1RHS*RTD47B	RTD PYCO	247.461	PYCO 122-4030-04 REG.G.1.97	AB-070-5	HARSH	100 D
RHS RADIATION	MONITORING					
1RHS*REX125	RADIOACTIVITY EL G A TECH	EHENT 247.250		AB-170-1	HARSH	1000
1RHS*REX5A	RADIOACTIVITY EL			FB-148-G	HARSH	1000
1RMS*RE11A	RADIOACTIVITY EL	247.250		AB-170-1		1000
	G A TECH	247.250		ND-170-1	HARSH	1000
1RHS*RE11B	RADIOACTIVITY EL G A TECH	EMENT 247.250		A9-170-1	HARSH	1000
1RMS*RE111	RADIOACTIVITY EL G A TECH			ст-б	HARSH	100 D
		247.250				

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EMOTI LIEUTE DESCRI	RIPTION	HAKE/MANUFACTURER	ENV. ZONE	EHRGCH	SFN1	OP TIME	QRNI
VENDOR		MODEL/CATALOG NO.	SUBHRG	ENVTYP	SFN2	OC BASIS	QRN2
PANEL/RACK	SPEC.NO	REMARKS			SENG		QRN3
PANEL/RACK	SPEC.NO	REMARKS			CENT		021

MS RADIATION	HONITORING					
IRHS*RE112	RADIOACTIVITY ELE	HENT		CT-4	HARSH	100 D
		247.250				
IRHS*RE125	RADIPACTIVITY ELE			AB-170-1	HARSH	1000
		247.250	REG.G.1.97			
IRMS*RE15A	RADIOACTIVITY ELE			AB-095-6	HARSH	1000
		247.250				
IRHS*RE15B	RADIOACTIVITY ELE			AB-095-6	HARSH	1000
		247.250				
IRMS*RE16A	RADIOACTIVITY ELE	EMENT		CT-G	HARSH	1000
		247.250	REG.G.1.97			
IRMS*RE16B	RADIOACTIVITY ELE	EHENT		CT-G	HARSH	1000
		247.250	REG.G.1.97			
IRHS*RE20A	RADIOACTIVITY ELE	EHENT		DH-1	HARSH	1000
		247.250	REG.G.1.97			
IRMS*RE20B	RADIOACTIVITY ELE	EMENT		DH-1	HARSH	1000
		247.250	REG.G.1.97			
IRHS*RE21A	RADIOACTIVITY ELE			CT-G	HARSH	1000
		247.250				
IRHS*RE21B	RADIOACTIVITY ELE	EHENT		CT-G	HARSH	1000
		247.250				

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HARK NO	EQUIPMENT DESCRIPTI VENDOR	ON SPEC.NO	HAKE/HANUFACTURER HODEL/CATALOG NO. REMARKS	ENV. ZONE SUBMRG	ENVTYP		OF TIME	QRN1 QRN2 QRN3
*****	PANEL/RACK			*******	*****		*****	****
RHS RADIATION H	ONITORING							
IRMS*RE5A	RADIOACTIVITY ELEME	NT		FB-148-G	HARSH		1000	
		247.250	REG.G.1.97					
IRMS*RE58	G A TECH			FB-148-G	HARSH		1000	
		247.250	REG.G.1.97					
IRMS*RI21A	RADIOACTIVITY INDIC			CT-G	HARSH		100D	
		247.250						
1RMS*RI21B	RADIOACTIVITY INDIC			CT-G	HARSH		1000	
		247.250						
SAS SERVICE AIR								
1SAS*HOV102	MOTOR OPERATED VALV	/E	LHTQ SHB-000-5	AB-114-6	HLBO HARSH	LCS	1HR A -	
		228.212						
1SAS*HOV103	HOTOR OPERATED VALV	/E	LMTQ	AB-114-6	HLEO	CISL	The state of the s	
	VELAN	228.212	5HB-000-5		HARSH	LCS	Α -	
SCV STA CONT BU	S (VITAL) - AC SUPPLY	INCL TENR &	TRANS SH					
1SCV*PNL2A1	STORY DIST PALEGARD	120 V AC	SQRD	CT-G	HLBO	PANL	1900	
	SQUARE D COMPANY	242.421	NQOB		HARSH	Ξ.,	Α -	
1SCV*PNL2A2	STORY DIST PHEBOARD	120 V AC	SQRD	AN-3	HLBO HARSH	PANL	100D A -	
	SQUARE D COMPANY	242.421	NQOB		ПАКЭП	9.1		
1SCV*PNL2B1	STORY DIST PHEBOARD	120 V AC	SQRD	CT-G	HLBO	PANL	1000	
THE REAL PROPERTY.	SQUARE D COMPANY	242.421	NQOB		HARSH		A -	

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### RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

	ENDOR		HODEL/CATALOG NO.	ENV. ZONE SUBNEG	ENVTYP		OF TIME	QRN1 QRN2
PAI	ANEL/RACH	SPEC.NO	REHARKS			SFN3		QRN3

1SCV*PNL2B2	STORY DIST PNLBOARD	120 V AC	SORD	AB-141-2	HLBO	PANL	100D
	SQUARE D COMPANY		NOOB		HARSH		A -
		242.421					
1SCV*PNL2C1	STORY DIST PHEBOARD	120 V AC	SORD	AB-141-4	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH	-	A -
		242.421					
1SCV*PNL2D1	STORY DIST PMLBOARD	120 V AC	SORD	AB-141-2	HLEO	PANL	1000
	SQUARE D COMPANY		NQOB		HARSH		Α -
		242.421					
1SCV*PNL2E1	STORY DIST PHLBOARD	120 V AC	SORD	AB-114-1	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH		A -
		242.421					
1SCV*PNL2F1	STDBY DIST PNLBOARD	120 V AC	SQRD	AB-114-3	HLBO	PANL	1000
	SQUARE D COMPANY		NQOB		HARSH	-	A -
		242.421					
1SCV*PNL2G1	STORY DIST PHLEGARD	120 V AC	SQRD	AB-114-1	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH		A -
		242.421					
1SCV*PNL2H1	STORY DIST PHLBOARD	120 V AC	SQRD	AB-114-3	HLBO	PANL	1000
	SQUARE D COMPANY		N908		HARSH	*01	A -
		242.421					
1SCV*PNL2J1	STORY DIST PMLBOARD	120 V AC	SQRD	AB-141-3	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH	-	A -
		242.421					
1SCV*PNL2K1	STORY DIST PALBOARD	120 V AC	SORD	AB-141-2	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH		A -
		242.421					
1SCV*PNL2L1	STORY DIST PNLBOARD	120 V AC	SQRD	AB-141-1	HLBO	PANL	1000
	SQUARE D COMPANY		NOOB		HARSH		A -
		242.421				-	

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MARK NO	EQUIPHENT DESCR: VENDOR		MAKE/HANUFACTURER	ENV. ZONE	EMRGEN	SFN1	OP TIME	
	PANEL/RACK	SPEC.NO	MODEL/CATALOG NO.	SUBHRG	ENVTYP	SFN2 SFN3	OC BASIS	
********			*******	******	*****		******	######################################
SCV STA CONT B	US (VITAL) - AC SUPE	PLY INCL THR &	TRANS SH					
ISCV*PNL8A1	STORY DIST PNEB		SQRD	FB-148-1	NORH	PANL	1000	
	SQUARE D COMPANY	242.421	ИЗОВ		HARSH	:	0 -	
SCV*PNL681	STORY DIST PALE	DARD 120 V AC	SORD	CB-098-1	NORH	PANL	N/A	
	SQUARE D COMPANY	242.421	NOOB		HARSH		0 -	
ISCV*XD2A1	SOUTHERN TRANSFO		SXFR 15 KVA	AB-141-4	HLEO HARSH	EHPW	100D A -	
		242.132			TIAN SIT			
SCV*XD2A2	HISC SHL DRY TRA	INSFORMER STORY	SXFR	AB-141-4	HLBO	EHPH	1000	
	SOUTHERN TRANSFO	242.132	15 KVA		HARSH		A -	
ISCV*XD2B1	MISC SHL DRY TRA SOUTHERN TRANSFO		SXFR 15 KVA	AB-141-3	HLBO HARSH	EMPW	100D A -	
		242.132				-		
ISCV*XD2B2	HISC SHL DRY TRE			AB-141-2	HLBO	EMPH	100D	
	SOUTHERN TRANSFO	242.132	15 KVA		HARSH		Α -	
ecu.,vpaci	HICE ELE DON TO		aven.					
ISCV*XD2C1	SOUTHERN TRANSFO	AND DESCRIPTION OF THE PROPERTY OF THE PROPERTY OF	15 KVA	AB-141-4	HLBO HARSH	EHPW	100D A -	
		242.132				-		
LSCV*XD2D1	HISC SML DRY TRA		SXFR	AB-141-2	HLEO	EHPW	1000	
	SOUTHERN TRANSFO	242.132	15 KVA		HARSH		Α -	
COLL VEGET	UTCC CIA DOV TO							
ISCV*XD2E1	MISC SML DRY TRA SOUTHERN TRANSFO		15 KVA	AB-114-1	HLBO HARSH	EMPW	1000 A -	
		242.132						
ISCV*XD2F1	HISC SHL DRY TRA	INSFORMER STORY	SXFR	AB-114-3	HLBO	EMPH	100D	
	SOUTHERN TRANSFO	RHER	15 KVA		HARSH		A -	

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ARK NO	EQUIPMENT DESCRIPTION VENDOR	MAKE/HANUFACTURER MODEL/CATALOG NO.				OP TIME	
	PANEL/RACK SPEC.NO	REMARKS	SUDNIKG	ENVITE	SFN3	OC BASIS	QRN3
*********	*******		*********	**********		*******	*********
CV STA CONT BU	S (VITAL) - AC SUPPLY INCL TEMP	& TRANS SH					
SCV*XD2G1	MISC SML DRY TRANSFORMER STOR SOUTHERN TRANSFORMER 242.132	15 KVA	AB-114-1	HLBO HARSH	EMPH -	100D A -	
SCV*XD2H1	MISC SML DRY TRANSFORMER STDE SOUTHERN TRANSFORMER 242.132	15 KVA	AB-114-3	HLEO HARSH	EMPW	100D A -	
SCV*XD2J1	MISC SML DRY TRANSFORMER STDE SOUTHERN TRANSFORMER 242.132	Y SXFR 15 HVA	AB-141-1	HLBO HARSH	EHPH - -	100D A -	
SCV*XD2K1	MISC SHL DRY TRANSFORMER STDE SOUTHERN TRANSFORMER 242.132	SY SXFR 15 HVA	AB-141-2	HLBO HARSH	EMPH - -	1000 A -	
SCV*XD2L1	MISC SHL DRY TRANSFORMER STDE SOUTHERN TRANSFORMER 242.132	SY SXFR 15 HVA	AB-141-1	HLBO HARSH	EHPW -	1000 A -	
SCV*XD8A1	HISC SHL DRY TRANSFORMER STDE SOUTHERN TRANSFORMER 242.132	SY SYFR 15 KVA	FB-148-1	NORM HARSH	EMPW - -	100D D -	
ISCV*XD8B1	HISC SHL DRY TRANSFORMER STD. SOUTHERN TRANSFORMER 242.132	LY SXFR 15 KVA	CB-098-1	NORM HARSH	EMPH	N/A D -	
SFC SPENT FUEL	POOL COOLING AND CLEAN-UP						
1SFC*LT11A	LEVEL TRANSM & REMOTE SEAL ROSEMOUNT 247.481	RSHT 1153DB4PG,1159C10A	CT-G	HARSH		1000	
1SFC*LT11B	LEVEL TRANSH & REMOTE SEAL ROSEHOUNT 247.481	RSMT 1153DB4PG,1159C10A	ст-в	HARSH		1000	

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HARK NO	EQUIPMENT DESCRIPTI VENDOR PANEL/RACK		MAKE/MANUFACTURER MCDEL/CATALOS NO. REMARKS	ENV. ZONE		SFNI	OF TIME	
******	*******	*****	*********	******	******	*****	******	*******
OF COENT FUEL	POOL COOLING AND CLEAN	110						
SIL SPENI FUEL	PUOL COULTRS AND CLEAR	-07						
ISFC+LT28A	LEVEL TRANSM & REHO	TE SEAL	RSMT	FB-113-1	HARSH		1000	
	ROSEMOUNT	247.481	1153DB4PG,1159C10A		пакэн			
			BOUT	ED 117 1			1000	
1SFC*LT28B	ROSEMOUNT & REMO	TE SEAL	RSMT 1153DB4PG,1159C10A	FB-113-1	HARSH		1005	
	negetion.	247.481						
1SFC×MOV119	MOTOR OPERATED VALV	-	LHTQ	FB-113-G	HLBO	SFC	1 H	
13. 04.101117	VELAN		SMB-0-15		HARSH	CISL	A -	
		228.216						
1SFC*HOV120	MOTOR OPERATED VALV	IE.	LHTQ	AN-3	HLBI		1 H	
	VELAN		SHB-0-25		HARSH		A -	
		228.216						
1SFC*HOV121	MOTOR OPERATED VALV	/E	LHTQ	FB-113-G	HLBO		1 H	
	VELAN	228.216	SMB-00-15		HARSH	CISL	Α -	
1SFC*MOV122	MOTOR OPERATED "AL	/E	LHTQ SHB-0-25	FB-113-G	HLBO HARSH		1 H	
	VELAN	228.216	2110-0-23		пакап	-		
					W F.		1 8	
1SFC×HOV139	MOTOR OPERATED VALV	/E	LHTQ 518-00-15	AN-3	HLBI HARSH		A -	
		228.216						
1SFC*P1A	MOTOR FOR FUEL POOL	COOL PUMP	RELI	FB-070-1	FHA	SFC	6.5 H	
201 021 21	GOULDS PUMPS, INC.		NONE, UNIQUE		HARSH		A -	
		223.311						
1SFC*P1B	HOTOR FOR FUEL POOR	COOL. PUMP	RELI	FB-070-1	FHA	SFC	6.5 H	
	GOULDS PUMPS, INC.		NONE, UNIQUE		HARSH	* 1	Α -	
		223.311						
1SFC*RTD7A	RTD		PYCO	FB-070-1	FHA	FLCL	1000	
	PYCO	247.461	122-4030-04		HARSH		A -	
		E41.401						

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HARK NO	EQUIPHENT DESCRI	PTION	MAKE/MANUFACTURER	ENV. ZONE	EMRGCN	SFN1	OP TIME QRN1	
	VENDOR PANEL/RACK	SPEC.NO	MODEL/CATALOG NO. REMARKS	SUBHIRG	ENVTYP	SFN2 SFN3	OC BASIS	QRN2 QRN3
*******			********	******	*******		*****	*****
SFC SPENT FUEL	POOL COOLING AND CL	EAN-UP						
1SFC*RTD7B	RTD		PYCO	FB-070-1	FHA	FLCL	1000	
	PYCO	247.461	122-4030-04		HARSH		A -	
		241.401						
SR REACTOR PL	ANT SAMPLING SYSTEM							
1SSR*SOV130	SOLENDID VALVE		TRCP	CT-G			1H	
	TARGET ROD	247.501	1011105		HARSH			
		247.301						
1SSR*SOV131	SOLENOID VALVE TARGET ROCK		TRCP 1011105	AB-141-4	HARSH		1H	
	TANCET NOCH	247.501	1011103		nanon			
1SSR*SOV133	SOLENOID VALVE		TRCP	AB-114-6			1H	
	TARGET ROCK		77KK-003	70-111-0	HARSH			
		247.501						
1SSR*SOV134	SOLENOID VALVE		TRCP	AB-114-6			1H	
	TARGET ROCK	247.501	77KK-003		HARSH			
		247.302						
1SSR*SOV139	TARGET ROCK		TRCP 10350:3-1	AB-095-8	HARSH		1H	
		247.501			HARSH			
1SSR*SOV140	SOLENOID VALVE		TRCP	AB-114-6			1H	
	TARGET ROCK		77KK-003		HARSH			
		247.501						
SVV STEAM VENT	S - SAFETY VALVES							
1SVV*HOV1A	HOTOR OPERATED V	ALVE	LHTQ	AB-114-6	HLBO	ADS	1000	
	VELAN		SHB-000-2		HARSH	BCNT	A -	
		228.216				•		
1SVV*HOV1B	MOTOR OPERATED V	ALVE	LMTQ	A9-114-5	HLBO		1000	
	VELAN	228.216	SHB-000-2		HARSH	BCNT	A -	

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### RBS-ENVIRONMENTAL QUALIFICATION DATA MASTER LIST SORTED BY MARK NO - HARSH ENVIRONMENT ONLY

MARK NO	EQUIPMENT DESCRIP VENDOR	TION	HODEL/CATALOG NO.	ENV. ZONE		SFN2	OP TIME	QRN2
	PANEL/RACK					SFN3		QRN3
************	*************	*********	******	******	*******	*********	******	*****
SVV STEAM VENTS	S - SAFETY VALVES							
1SVV*SOV20A	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-2	HARSH	1HR		
1SVV*SOV20B	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-3	HARSH	1HR		
1SVV*SOV21A	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-2	HARSH	1HR		
1SVV*S0V21B	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-3	HARSH	1HR		
1SVV*SOV22A	SOLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-2	HARSH	1HR		
1SVV×SOV22B	SGLENOID VALVE TARGET ROCK	247.501	TRCP 1021010-3	AB-141-3	HARSH	1HR		
1SVV*ZE10A	PRIMARY POSITION TECH FOR ENERGY C		REG.G.1.97	DH-1	HARSH		1000	
1SVV*ZE10B	PRIMARY POSITION TECH FOR ENERGY C		REG.G.1.97	DW-1	HARSH		1000	
1SVV*ZE10C	PRIMARY POSITION TECH FOR ENERGY C		REG.G.1.97	DW-1	HARSH		1000	
1SVV*ZE10D	PRIMARY POSITION TECH FOR ENERGY C		REG.G.1.97	DH-1	HARSH		1000	
		241.367	MCG. U. 1.77					

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HARK NO	EQUIPMENT DESCRIPTION VENDOR	HAKE/HANUFACTURER HODEL/CATALOG NO.	ENV. ZONE	EHRGCN	SFN1 OP TIME QRN1 SFN2 OC BASIS QRN2
	PANEL/RACK SPEC.NO	REMARKS			SFN3 QRN3
*******	**********************	*********	*****	******	**********************
SVV STEAM VENT	S - SAFETY VALVES				
1SVV*ZE10E	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1002
	247.529	REG.G.1.97			
1SVV*ZE10F	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP 247.529	DEC C 1 02	DH-1	HARSH	1000
	247.529	REG.G.1.97			
15VV*ZE10G	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP	255 5 3 63	DH-1	HARSH	1000
	247.529	REG.G.1.97			
1SVV*ZE10H	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529	REG.G.1.97			
1SVV*ZE10J	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.52°	REG.G.1.97			
1SVV*ZE10K	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529	REG.G.1.97			
1SVV*ZE10L	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529	REG.G.1.97			
1SVV*ZE10M	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529	REG.G.1.97			
1SVV*ZE10N	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529				
1SVV*ZE10P	PRIMARY POSITION ELEMENT TECH FOR ENERGY CORP		DH-1	HARSH	1000
	247.529	REG.G.1.97			

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HARK NO	EQUIPMENT DESCRIPT VENDOR PANEL/RACK		MAKE/MANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE SUDIERS		SFN1	OP TIME OC BASIS	QRN1
*********	***************	********	*******	*********	**********	********	******	******
SVV STEAM VENT	S - SAFETY VALVES							
1SVV×ZE10Q	PRIMARY POSITION E TECH FOR ENEPGY CO	THE RESERVE AND ADDRESS OF THE PARTY OF THE	REG.G.1.97	DH-1	HARSH		1000	
1SVV∗ZE10R	PRIMARY POSITION E TECH FOR ENERGY CO		REG.G.1.97	DH-1	HARSH		1000	
SHP SERVICE NA	ATER							
1SWP*AOV51A	AIR OPERATED VALVE FISHER CONTROLS	247.491	FCTL,NHCO EA180	AB-141-3	HLBO HARSH	DISP	100D A -	
1SNP*AOV51B	AIR OPERATED VALVE FISHER CONTROLS	247.491	FCTL,NHCO EA180	AB-141-3	HLBO HARSH	DISP - -	100D A -	
1SHP∗FT59A	FLOW TRANSHITTER ROSEHOUNT	247.481	RSHT 11530B4	FB-070-2	NORM HARSH	DISP	100D D -	
ISHP*FT59B	FLOH TRANSMITTER ROSEHOUNT	247.481	RSMT 1153084	FB-070-2	NORM HARSH	DISP	100D D -	
1SWP¥FT60A	FLOW TRANSMITTER ROSEMOUNT	247.481	RSHT 11530B4 REG.G.1.97	FB-070-2	NORM HARSH	DISP -	100D D -	
1SHP*FT60B	FLOH TRANSHITTER ROSEHOUNT	247.481	RSHT 1153054 REG.G.1.97	FB-070-2	NORH HARSH	DISP	100D D -	
1SHP#FT64A	FLOW TRANSMITTER ROSEMOUNT	247.481	RSHT 1153DB5	AB-095-2	HARSH		1000	

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### RBS-ENVIRONMENTAL QUALIFICATION DATA HASTER LIST SORTED BY HARK ND - HARSH ENVIRONMENT ONLY

HARK NO EQUIPHENT DESCRIPTION MAKE/MANUFACTURER ENV. ZONE EMRGCN SFN1 OP TIME QRN1
VENDOR MODEL/CATALOG NO. SUSHRG ENVTYP SFN2 OC BASIS QRN2
PANEL/RACK SPEC.NO REMARKS SFN3 QRN3

***********	************	********	**********	************	******	*******	******
SHP SERVICE MA	TER						
1SHP*FT64B	FLOW TRANSMITTER ROSEHOUNT	247.481	RSMT 1153DB5	AB-095-2	HARSH		1000
1SHP*HOV171	MOTOR OPERATED VALV	Z28.243	LHTQ SH3-000-2	PT-3	HLBO HARSH	SH ESA	100D A -
1SHP*MOV172	MOTOR OPERATED VALV	/E 228.243	LMTQ SHB-000-2	PT-3	HLBO HARSH	SH ESA	100D A -
1SHP#MOV173	HOTOR OPERATED VALV	Z26.243	LHTQ SHS-000-2	PT-3	HLBO HARSH	SH ESA	100D A -
1SHP*HOV174	HOTOR OPERATED VALV	Z28.243	LMTQ SMB-000-2	PT-3	HLBO HARSH	SH ESA	100D A -
15HP*MOV4A	MOTOR OPERATED VALV	Z26.212	LHTQ SMB-0-15	CT-6	HLBI HARSH	BCNT	100D A -
1SHP*MOV4B	MOTOR OPERATED VALV	Z28.212	LHTQ SMB-0-15	ст-в	HLBI HARSH		100D A -
1SHP*HOV5A	MOTOR OPERATED VALVELAN	Z28.212	LHTQ SMB-0-15	ст-6	HLBI HARSH		100D A -
1SHP*HOV5B	HOTOR OPERATED VALVELAN	VE 228.212	LHTQ SMB-0-15	CT-G	HLBI HARSH		100D A -
1SHP*HOV501A	HOTOR OPERATED VAL	VE 228.243	LHTQ 5HB-00-10	PT-2	HLBO HARSH	(400,000,000,000,000,000,000,000,000,000	100D A -

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MARK NO	EQUIPHENT DESCRIPT. VENDOR PANEL/RACK		MAKE/HANUFACTURER MODEL/CATALOG NO. REMARKS	ENV. ZONE SUBHRG	ENRGCN ENVTYP		OP TIME OC BASIS	GRN1 GRN2 GRN3
******			******	*******	********	******	******	*********
SHP SERVICE HA	TER							
1SHP*HOV501B	MOTOR OPERATED VAL		LHTQ SMB-00-10	PT-2	HLBO HARSH	BCNT	100D A -	
		228.243						
1SWP*HOV502A	MOTOR OPERATED VAL	VE	LHTQ SHB-00-10	CT-G	HLBI HARSH	HVR	100D A -	
		228.212						
1SWP*MOV502B	HOTOR OPERATED VAL	VĒ	LHTQ SMB-00-10	CT-G	HLBI HARSH	HVR	100D A -	
		228.212						
1SWP+MOV503A	MOTOR OPERATED VAL.	VE	LHTQ SHB-00-10	CT-G	HLBI HARSH	HVR -	100D A -	
		228.212				1.56		
1SHP*HOV503B	MOTOR OPERATED VAL	VE	LHTQ 5HB-00-10	CT-G	HLBI HARSH	HVR -	100D A -	
		228.312						
1SHP+HOV504A	MOTOR OPERATED VAL	VE	LMTQ SMB-0-15	AB-070-8	HLBO HARSH	SH ESA	1000 A -	
		228.212						
1SWP*HOV504B	MOTOR OPERATED VAL	VE	LHTQ SH3-0-15	AB-070-7	HLBO HARSH	SH ESA	100D A -	
		228.212				-		
1SHP*HOV506A	MOTOR OPERATED VAL	VE	LMTQ SMB-000-2	PT-4	ABNO HARSH	ESA	100D D -	
		228.243						
1SHP*HOV506B	HOTOR OPERATED VAL	VE	LHTQ SHB-000-2	PT-4	ABNO HARSH	ESA	1000 D -	
	JAHESBURY	228.243	31.0-000-2		Vinnoii.			
ISWP*HOV5074	MOTOR OPERATED VAL	VE	LHTQ	AB-114-6	HLBO HARSH	CISL	100D A -	
	VELAN	228.212	SMB-0-15		нскан	1,0		

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*******	***	*********	*********	******	*****	******	******	*****	**
HARK NO	EQUIPHENT DESCR	EQUIPMENT DESCRIPTION		ENV. ZONE	EHRGCN	SFN1	OP TIME	QRN1	
	VENDOR		FODEL/CATALOG NO.	SUBHRG	ENVTYP	SFN2	OC BASIS	QRN2	
	PANEL/RACH	SPEC.NO	RIMARKS			SFN3		QRN3	

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	VENDOR PANEL/RACH		FODEL/CATALOG NO. REMARKS			SFN3	OC BASIS	QRN3
***********	*************	********	****	******	******		****	***********
SHP SERVICE HAT	TER							
1SWP*HOV507B	MOTOR OPERATED VAL	VE 228.212	LHTQ SHB-0-15	AB-141-3	HLBO HARSH	CISL	100D A -	
1SHP*MOV510A	MOTOR OPERATED VAL	VE 228.212	LMTQ SHB-0-15	AB-070-8	HLBO HARSH	ESA -	100D A -	
1SHP*HOV510B	MOTOR OPERATED VAL	VE 228.212	LHTQ SHB-0-15	AB-070-7	HLBO HARSH	ESA -	100D A -	
1SHP*HOV511A	MOTOR OPERATED VAL	VE 228.243	LHTQ SHB-00-10	PT-2	HLBO HARSH	BCNT - -	100D A -	
15MP*MOV511B	HOTOR OPERATED VAL	.VE 228.243	LHTQ SMB-00-10	PT-2	HLBO HARSH	BCNT -	100D A -	
1SHP*HOV55A	HOTOR OPERATED VAL	.VE 228.243	LNTQ SHB-00-25	PT-1	NORM HARSH		1HR D -	
1SHP*HOV55B	HOTOR OPERATED VAL	.VE 228.243	LHTQ SHB-00-25	PT-1	NORM HARSH		1HR D -	
1SHP*HOV57A	HOTOR OPERATED VAL	LVE 228.243	LMTQ SI/B-00-25	PT-3	NORM HARSH	BCNT	1HR D -	
1SHP*MOV57B	HOTOR OPERATED VAI JAMESBURY	228.243	LHTQ SHB-00-25	PT-3	NORM HARSH	BCNT	1HR D -	
1SHP*MOV61A	HOTOR OPERATED VAI JAHESBURY	228.243	LHTQ SMB-00-25	PT-1	NORM HARSH		100D D -	

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### RBS-ENVIROIMENTAL QUALIFICATION DATA MASTER LIST SORTED BY HARK NO - HARSH ENVIRONMENT ONLY

MARK NO	EQUIPMENT DESCRIPTION VENDOR PANEL/RACK SPEC.	MAKE/MANUFACTURER MODEL/CATALOG NO.	ENV. ZONE	EHRGCN	SFN1	OP TIME QRN1 OC BASIS QRN2 QRN3
***********	************		*******	******	*******	*********
SHP SERVICE HA	TER					
1SWP*HOV61B	MOTOR OPERATED VALVE JAMESBURY 228.2	LHTQ 5113-00-25	PT-1	NORM HARSH		1000
1SHP*HOV73A	MOTOR OPERATED VALVE VELAN 228.2	LHTQ SHB-000-5	AB-114-5	HARSH		1000
1SKP*MOV73B	HOTOR OPERATED VALVE VELAN 228.2	SHB-000-5	AB-114-5	HARSH		1000
1SKP+HOV74A	MOTOR OPERATED VALVE VELAN 228.2	LNTQ SNB-000-5	AB-114-5	HARSH		1000
1SkP*MOV74B	MGTOR OPERATED VALVE VELAN 228.2	LHTQ SHB-000-5	AB-114-5	HARSH		1000
1SHP*HOV77A	HOTOR OPERATED VALVE JAMESBURY 228.2	LHT0 SHB-000-2	PT-4	ABNO HARSH		100D D -
1SHP*HOV77B	HOTOR OPERATED VALVE JAMESBURY 228.2	SH9-000-2	PT-4	ASNO HARSH		100D D -
1SWP*MOV81A	HOTOR OPERATED VALVE VELAN 228.	SNB-0-15	AB-114-6	HLEO HARSH		100D A -
1SHP*MOV81B	MOTOR OPERATED VALVE VELAN 228.	SMB-0-15	AB-141-3	HLBO HARSH		100D A -
1SHP*MOV96A	HOTOR OPERATED VALVE JAMESBURY 228.	SI/B-00-25	PT-3	NORM HARSH	The second second	1HR D -

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MARK NO	VENDOR PANEL/RACK	SPEC.NO	MAKE/MANUFACTURER HODEL/CATALOG NO. REMARKS	ENV. ZONE	EHRGCH ENVTYP	SFN1	OP TIME OC BASIS	QRN1
********	*********	******		*****	******	*******	********	********
SHP SERVICE WA	TER							
LSHP*HOV96B	HOTOR OPERATED VALVE		LHTQ	PT-3	NORM	BCNT	1HR	
	JAMESBURY	228.243	SIIB-00-25		HARSH	1.45	D -	
1SMP*PT21A	PRESSURE TRANSMITTER		RSHT	PT-3	NORM	SH	100D	
	ROSEHOUNT 1JPB*RAK2	247.481	1153GB7		HARSH		A -	
CIM BYOLD								
SKP*PT21B	PRESSURE TRANSHITTER ROSEMOUNT	2	RSHT 1153GB7	PT-3	NORH HARSH		100D A -	
	1JFB*RAK1	247.481						
1SHP*PT21C	PRESSURE TRANSMITTER	R	RSHT	PT-3	NORM	SH	100D	
	ROSEHOUNT 1JPB*RAK2	247.481	1153GB7		HARSH	BCNT	Α -	
1SWP*PT21D	PRESSURE TRANSHITTE	R	RSHT	PT-3	NORM	SW	100D	
	ROSEMOUNT 1JPB*RAK1	247.481	1153GB7		HARSH	BCNT	A -	
SWP*PT21E								
12MP*P151E	PRESSURE TRANSHITTE	H	RSMT 1153GB7	PT-3	NORM HARSH	BCNT	100D A -	
	1JPB*RAK2	247.481				-		
1SMP*PT21F	PRESSURE TRANSMITTE	R	RSHT	PT-3	NORM	SH	1000	
	ROSEMOUNT 1JPB*RAK1	247.481	1153GB7		HARSH	BCNT	Α -	
1SWP*PT21G	PRESSURE TRANSHITTE	R	RSMT	PT-3	NORM	SH	100D	
	ROSEHOUNT 1JPB*RAK2	297 481	1153GB7		HARSH	BCNT	Α -	
SWP*PT21H	PRESSURE TRANSMITTE		DOUT					
SAFEFELA	ROSEHOUNT	*	RSMT 1153GB7	PT-3	NORM HARSH	SW	100D A -	
	1JPB*RAK1	247.481						
SKP*SOV51A	SOLENOID VALVE		ASCO	AB-141-2	HLBO	SW	100D	
	FISHER CONTROLS	247.491	DBQ,NP8320		HARSH	BCNT LCS	Α -	

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HARK NO	EQUIPMENT DESCRIPTION VENDOR		HAKE/HANUFACTURER	ENV. ZONE	EHRGCH	SFN1	OP TIME	QRN1
			MODEL/CATALOG NO.	SUBHRG	ENVTYP	SFN2	OC BASI	S QRN2
	PANEL/RACK	SPEC.NO	REHARKS			SFN3		QRN3

						the comment was the first to
<b>6年光光明新光光光光光光光光光光光光</b>	******	******	<b>5. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.</b>	****	*****	******
SOLENOID VALVE FISHER CONTROLS	247.491	ASCO DBQ,NP8320	AB-141-3	HLBO HARSH	SH BCNT LCS	100D A -
CLEAN-UP						
MOTOR OPERATED VALVELAN	228.212	LHTQ SHB-0-75	AB-114-2	HLBO HARSH	CISL LCS	IHR A -
MOTOR OPERATED VALVELAN	228.212	LHTQ SHB-000-5	AB-114-2	HLBO HARSH	CISL	1HR A -
MOTOR OPERATED VA	228.212	LHTQ SHB-000-5	AB-114-2	HLBO HARSH	LCS -	IHR A -
MOTOR OPERATED VA	228.212	LHTQ 5:18-000-5	CT-7	HLBI HARSH	CISL	1HR A -
	SOLENOID VALVE FISHER CONTROLS  CLEAN-UP  HOTOR OPERATED VALVELAN  HOTOR OPERATED VALVELAN  HOTOR OPERATED VALVELAN  HOTOR OPERATED VALVELAN	SOLENOID VALVE FISHER CONTROLS  247.491  CLEAN-UP  MOTOR OPERATED VALVE VELAN  228.212  MOTOR OPERATED VALVE VELAN  226.212  MOTOR OPERATED VALVE VELAN  226.212	SOLENOID VALVE FISHER CONTROLS  247.491  CLEAN-UP  HOTOR OPERATED VALVE VELAN  MOTOR OPERATED VALVE VELAN  228.212  HOTOR OPERATED VALVE VELAN  228.212  HOTOR OPERATED VALVE VELAN  MOTOR OPERATED VALVE VELAN  228.212  HOTOR OPERATED VALVE VELAN  LHTQ SHB-000-5  228.212  HOTOR OPERATED VALVE VELAN  LHTQ SHB-000-5	SOLENOID VALVE FISHER CONTROLS  247.491  CLEAN-UP  MOTOR OPERATED VALVE LHTQ SHB-0-75  MOTOR OPERATED VALVE LHTQ SHB-000-5  MOTOR OPERATED VALVE LHTQ CT-7	SOLENOID VALVE FISHER CONTROLS  247.491  CLEAN-UP  MOTOR OPERATED VALVE LHTQ SMB-0-75  MOTOR OPERATED VALVE LHTQ SMB-000-5  MOTOR OPERATED VALVE LHTQ CT-7  MOTOR OPERATED VALVE LHTQ CT-7  VELAN  MOTOR OPERATED VALVE LHTQ CT-7  MOTOR OPERATED VALVE LHTQ CT-7  VELAN  MOTOR OPERATED VALVE LHTQ CT-7  MOTOR OPERATED VALVE LHTQ CT-7  VELAN  MOTOR OPERATED VALVE LHTQ CT-7  MARSH	SOLENOID VALVE FISHER CONTROLS 247.491  CLEAN-UP  MOTOR OPERATED VALVE VELAN 228.212  MOTOR OPERATED VALVE VELAN CISL HARSH CISL VELAN CISL HARSH CISL HARSH CISL HARSH CISL VELAN CISL VELAN CISL HARSH CISL VELAN CISL VELAN CISL VELAN CISL VELAN CISL HARSH CISL

APPENDIX A.2

SAFETY-RELATED ELECTRICAL EQUIPMENT - NSSS

(LATER)

### APPENDIX A.3 SAFETY-RELATED MECHANICAL EQUIPMENT - BOP (LATER)

APPENDIX A.4

SAFETY-RELATED MECHANICAL EQUIPMENT - NSSS

(LATER)

### APPENDIX B

SYSTEM COMPONENT EVALUATION WORK (SCEW) SHEETS

(LATER)