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MAINTENANCE ACCESS TIME ESTIMATES BWR/6 AUXILIARY AND FUEL BUILDINGS

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Approved:



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GENERAL  ELECTRIC

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	1-1
2. SCOPE OF STUDY	2-1
3. BACKGROUND AND BASIS OF MAINTENANCE AND OPERATIONAL TASK ESTIMATES	3-1
3.1 Maintenance Tasks	3-1
3.2 In-Service Inspection	3-2
4. EXPLANATION OF DATA FORMAT	4-1
4.1 Equipment Data Sheet Description	4-1
4.2 Task Code Descriptions	4-4
4.3 Preventive Maintenance	4-5
4.4 General Assumptions	4-5
5. SUMMARY OF RESULTS	5-1
5.1 Summary of Maintenance Tasks by Rooms and by Systems	5-1
5.2 Summary of Equipment Requiring the Most Maintenance	5-2
5.3 In-Service Inspection Requirements	5-2
6. REFERENCES	6-1

APPENDIX

A. EQUIPMENT DATA SHEETS	A-1
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DISTRIBUTION	1
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LIST OF ILLUSTRATIONS

<u>Figure</u>	<u>Title</u>	<u>Page</u>
4-1	Equipment Data Sheet Format	4-2

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
3-1	Generalized Requirements for In-Service Inspection ASME Class II & III Systems Pressure Boundary	3-3
3-2	Assumptions Applied to the Development of ISI Manpower Requirement (4-100% Inspections Over 40 Years)	3-4
4-1	Task Code Definitions for Pump/Compressor Maintenance	4-6
4-2	Task Code Definitions for Fan & Exhaust System Maintenance	4-7
4-3	Task Code Definitions for Heat Exchanger Maintenance	4-8
4-4	Task Code Definitions for Demineralizer Maintenance	4-9
4-5	Task Code Definitions for Sump Maintenance	4-10
4-6	Task Code Definitions for Motor Operated Valve Maintenance	4-11
4-7	Task Code Definitions for Air Operated Control Valve Maintenance	4-12
4-8	Task Code Definitions for Manual Valve Maintenance	4-13
4-9	Task Code Definitions for Electrical Motor Maintenance	4-14
5-1	Equipment Maintenance Task Estimates - Rooms in Radiation Areas Only	5-3
5-2	Equipment Maintenance Summary - Sort and Summary by Rooms	5-5
5-3	Equipment Maintenance Summary - Sort and Summary by Systems	5-21
5-4	Equipment with Maintenance Workloads Greater Than 50 Man-Hours/Year	5-33
5-5	ISI Manpower Requirements Summary By System	5-34

1. INTRODUCTION

This report is based on data provided by BMK Services, Inc., Campbell, California.*

The report provides an estimate of manpower and time requirements for the significant maintenance work tasks in the BWR/6 Auxiliary Building and Fuel Building which will be performed in areas expected to be greater than 10 mRem/hr. To that extent, maintenance required in low radiation areas of the Auxiliary and Fuel Buildings is not covered by this report.

The maintenance work tasks were estimated by BMK Services Inc. using a maintenance planning computer program designed to assist plant operators in maintenance work planning. The maintenance man-hour estimates are defined to be "on equipment and working" 100% labor productivity working times without full respiratory protection. This definition is required to provide a realistic maintenance man-hour estimate with the final objective of estimating the man-Rem exposure for the radiation work in those areas covered by this report. Associated work activities occurring in peripheral low or zero exposure areas have been excluded to provide a realistic basis for determination of yearly personnel exposure.

It is intended that the results of this report will be combined with estimated radiation levels for the equipment and locations considered in order to develop anticipated radiation exposures to maintenance and operations personnel. The results of this study can then be used to identify areas where changes could be made to reduce man-Rem exposure to BWR/6 utility personnel.

The results of this report may be used with those shown in a previous report which refers to the drywell and containment,¹ and in companion reports which refer to the Radwaste Building,² and to work at Power³ in order to provide a complete picture of the manpower and time requirements in BWR/6 radiation areas.

*"Maintenance and Work at Power Radiation Area Access Time Estimates for the BWR/6 Auxiliary Fuel and Radwaste Buildings," BMK Services, Inc., (Campbell, California), December 31, 1978.

2. SCOPE OF STUDY

The reference plant used in the estimates of this study was the BWR/6 238 size plant with the Mark III containment. Components for the auxiliary and fuel buildings were identified from GE P&ID's for the TVA X17-X22 units.⁴ Locations of components in these buildings were obtained from the C.F. Braun piping and equipment layout drawings. The drawings of Reference 4 used for identification of equipment are contained in Design Record File A-62-13.3.4.2.

Maintenance estimates were made for the major process equipment, such as pumps and heat exchangers and supporting equipment such as motors, valves, and instrumentation. Only the equipment which appears on the building arrangement drawings and other major support equipment (e.g., motor operated valves) has been addressed with respect to maintenance requirements. Each component is identified as to component master parts list (MPL) item number, system and room location. The maintenance estimates include minimum, maximum and average maintenance man-hours required to perform each general maintenance task on a particular component. The crew size required to perform these tasks and the task frequency were also estimated. The maintenance tasks include routine inspections for leaks, adequate lubricants and abnormal operation; light overhauls such as seal replacement, motor alignment and valve seat lapping; and major overhauls which include replacing all worn or defective parts to return the equipment to like new condition. Also included are tasks which are required by typical plant technical specifications and regulatory codes such as in-service inspection (ISI) requirements.

3. BACKGROUND AND BASIS OF MAINTENANCE AND OPERATIONAL TASK ESTIMATES

3.1 MAINTENANCE TASKS

The computer programs used to estimate the maintenance tasks in this report are part of the "ACES"-M maintenance program developed by Associated Project Services, Inc., a subsidiary of BMK Services Inc. The work task estimator used to generate the data for these maintenance tasks is designed within "ACES"-M to assist the power plant Manager and Supervisor in the estimation of maintenance workloads and manpower requirements on a near term emergency planning basis and long-term expectations of the plant performance.

The work task estimator is based on average maintenance times as published in various sources and modified by actual experience in nuclear power plants. The historical and engineering information used to design and test the program algorithms has been obtained from trade literature sources, magazine articles and actual work experience. Literature sources include References 5, 6 and 7 as well as extensive articles published by E.I du Pont de Nemours & Co. and the Dow Chemical Co., the Chemical Engineers Handbook by Perry, the Maintenance Engineering Handbook by Morrow, and the equipment data released by the Nuclear Plant Reliability Data System (NPRD) and the Edison Electric Institute.

It is recognized that maintenance policies vary from organization to organization and that the amount of effort required to achieve the same plant availability varies according to the equipment design, location, climatic conditions and the skill and tools available to the plant supervisors, technicians and maintenance personnel. The "ACES"-M work task estimator provides an unbiased estimate of the average conditions over the life of the plant. In the real case, maintenance effort values are high in the early years of plant life. These values then decrease to a minimum and again gradually increase to a maximum just prior to a major overhaul or the end of the useful life of the equipment.

The maintenance estimates generated by the "ACES"-M Work Task Estimator are subjected to an ongoing review by power plant engineers who are experienced and knowledgeable in power equipment maintenance requirements. The results of this review have shown that the estimates generated are realistic and representative of the average typical maintenance requirements.

3.2 IN-SERVICE INSPECTION

Estimates were also developed for yearly maintenance associated with ISI of portions of systems contained in the Auxiliary and Fuel Buildings. These ISI maintenance man-hour requirements were based on estimates of the time required to conduct ISI in the exposure areas. Estimates were developed for the following systems:

RHR	Residual Heat Removal
CRD	Control Rod Drive
RWCU	Reactor Water Cleanup
HPCS	High Pressure Core Spray
LPCS	Low Pressure Core Spray
RCIC	Reactor Core Isolation Cooling

The general criteria and inspection requirements for ISI are defined in Reference 8 for the pressure boundaries of ASME Class II and Class III piping systems. These are summarized in Table 3-1. Times for the operational testing of pumps and valves required by Section XI of the ASME code are included in the maintenance tasks section of this report, regarded as part of the routine inspection category (see subsections 4.1(16) and 4.2), as well as in Reference 3.

Manpower requirements for ISI have been separated from previous maintenance estimates because:

- a. Most operating reactors treat ISI as a separate category of maintenance.

- b. Lack of information on pipe routing and hanger/snubber placement required the development of various assumptions which result in a less precise analysis than is used in the other section of this report. These assumptions are tabulated in Table 3-2.
- c. The actual ISI manpower requirements will vary greatly from year to year depending on the ISI schedule selected by the plant. The ASME Code Section XI requires four 100% inspections over the 40-year life of the plant. This report has been averaged by assuming one 10% inspection every year.

Table 3-1
GENERALIZED REQUIREMENTS FOR IN-SERVICE INSPECTION
ASME CLASS II AND III SYSTEMS PRESSURE BOUNDARY

Criteria: Four 100% Inspections Over 40 Years

Inspection Requirements:

<u>Equipment Item</u>	<u>Piping</u>	<u>Pumps</u>	<u>Valves</u>	<u>Pressure Vessels</u>
Welds	PT,UT (1/2 in.)	PT	PT	PT
Welded Supports	PT	PT	PT	PT
Mechanical/ Hydraulic	Visual	Visual	Visual	Visual
Bolts and Studs	UT	UT	UT	UT
Branch Piping Connections	PT	NA	NA	NA

Note: These requirements are generalized for the purpose of estimating ISI access time requirements in radiation areas only. For specific requirements see Reference 8.

PT = Dye Penetrant Test
UT = Ultrasonic Testing
NA = Not Applicable

Table 3-2
 ASSUMPTIONS APPLIED TO THE DEVELOPMENT
 OF ISI MANPOWER REQUIREMENT
 (FOUR 100% INSPECTIONS OVER 40 YEARS)

	<u>Piping</u>	<u>Pumps</u>	<u>Valves</u>	<u>Pressure Vessels</u>
Welds	1 weld every 8 ft.	2 welds/pump* 2 welds/turbine 4 welds/Heat exchanger	2 welds/valve*	1/4 Man-hour/ ft (Height)
Welded Supports	1 support with 1 weld* every 20 ft.	2 supports with 2 welds*/pump 6 supports/tur- bine	1 support with 2 welds* for every 4 valves	4 supports with 2 welds* per vessel
Mechanical Hydraulic	1 hanger** every 8 ft.	2 snubbers per main pump, 1/4 man-hour per snubber	1 hanger ** for every 4 valves	NA
Bolts/ Studs	1 flange every 120 ft of Pipe ***	NA (welded con- nections only)	NA (welded con- nections only)	1 man-hour/ yr
Branch Piping Connections	1 connection every 40 ft	NA	NA	NA

*Total Maintenance Time = No. Welds x 1 man-hour/weld x 4/40
 (+ 1 hr/Weld if UT required)

**Total man-hour = No. Hangers x 1/4 man-hour/hanger x 4/40

***1 man-hour Per Flange x 4/40

4. EXPLANATION OF DATA FORMAT

4.1 EQUIPMENT DATA SHEET DESCRIPTION

The detailed estimates of maintenance on each component are presented on the equipment data sheets of Appendix A.

The equipment data sheet format is shown in Figure 4-1. Explanations for each item are as follows.

1. Room Number. The equipment data sheets are sorted alpha numerically by room number.
2. Equipment Type. There are four categories of equipment used in this report.
 - (a) Process Equipment - Equipment which performs work such as pumps, fans, compressors, heat exchangers.
 - (b) Process Equipment Auxiliaries - Supporting equipment such as tanks, sumps, filters, demineralizers.
 - (c) Valves - All valves including MOV's and AO's.
 - (d) Electrical Equipment - Motors, heaters, switchgear.
3. Equipment ID. The GE MPL number for the equipment.
4. System ID. The GE MPL number for the system and the system description.

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

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PAGE - 1

A-096-09 (1) Process Equipment. (2)

EQUIPMENT I.D. - (3)

SYSTEM I.D. - (4)

ROOM / LOCATION: (5) = (6)

C.F. Braun P & I D = (7)

EST. YEARLY MAINTENANCE MANHOURS: (8) AVERAGE;
Expected Manhour Range: (9) Minimum; (10) Maximum.

Ext. Yearly Run Hours (11) Max. Crew (12) Man.

Task Manhours Frequency Yearly Contribution

RI

RS

RO

MO

(16)

		D	Hrs
(13)	(14)	D	(15) Hrs
		D	Hrs
		Years	Hrs

NEDE-23996-1

Figure 4-1. Equipment Data Sheet Format

5. Room. The C.F. Braun room number for the TVA X17-X22 units.
Room ID = Bldg. - Elevation - Sequence.
A = Auxiliary Bldg., F = Fuel Bldg.
6. Location - The room description.
7. C.F. Braun P&ID. The P&ID number.
8. Estimated Yearly Maintenance Man-Hours. The average annual maintenance man-hours the equipment will require over the life of the plant, based on an average plant.

Note: The average amount of man-hours required is neither the arithmetic average of the minimum and maximum nor the sum of the yearly contribution of each task. The reason for this is that adjustments are made for the savings which occur in the maintenance learning curve and experience factor when there are many pieces of similar equipment at one plant.
9. Minimum Expected Man-Hours. The minimum average yearly contribution which can reasonably be expected from this equipment given ideal conditions.
10. Maximum Expected Man-Hours. The maximum average yearly contribution which can reasonably be expected from this equipment given worst conditions.
11. Estimated Yearly Run Hours. Yearly operating hours considering system requirements and number of redundant pieces of equipment in the system. This figure is one of the major factors contributing to maintenance frequencies.

12. Maximum Crew Size. The maximum number of men per crew that can efficiently perform work at the component (based on equipment size, location, etc).
13. Task Man-hours. Man-hours required to perform the task.
14. Frequency. How often the task is required to be performed.

Note: The task man-hours and frequency are taken from algorithms which are based on equipment size, generating frequency, equipment type, process media, operating conditions and equipment location. For the purposes of this report, average operating conditions and equipment accessibility (location) were used. All other required inputs were taken from design specifications or process flow diagrams if available or estimated from typical designs if detailed information was not available.

15. Yearly Contribution. The average yearly contribution for the type of maintenance being performed.
16. Maintenance Tasks. (Subsection 4.2)
RI = Routine Inspection
RS = Routine Semi-Overhaul
RO = Routine Overhaul
MO = Major Overhaul

4.2 TASK CODE DESCRIPTIONS

All Maintenance Tasks have been divided into the four maintenance categories tabulated in paragraph 4.1(16) above. These maintenance tasks for each

type of equipment considered in this report are described in Tables 4-1 through 4-9. These tables are arranged by Major Equipment Type as follows:

- a. Process Equipment (Tables 4-1 through 4-3).
- b. Process Equipment Auxiliaries (Tables 4-4, 4-5).
- c. Valves (Tables 4-6 through 4-8).
- d. Electrical Equipment (Table 4-9).

Note that the maintenance estimates for the category entitled Routine Inspection account for Equipment Testing required in the ASME code⁸ and in typical plant technical specifications.

4.3 PREVENTATIVE MAINTENANCE

Throughout this report it is assumed that an ongoing preventative maintenance (PM) program is in effect. If the utility does not have a PM program, the above maintenance tasks will still occur; however, they will occur at less rigorous intervals as a result of equipment breakdown. In general, it can be assumed that maintenance requirements without a preventative maintenance program will be 10% higher than with a PM program.

4.4 GENERAL ASSUMPTIONS

The actual maintenance man-hours for many of the work activities described herein are known to vary significantly from plant to plant. Depending upon the skills and experience of the craftsmen, the health physics (HP) protective clothing requirements, the level of radiation, availability of spare parts and tooling, the planning effort and other supporting services, significant man-hour differences have been found to occur in performance of the same activity. These differences in maintenance man-hours as compared to those contained herein can vary from a ratio of 1 to 6 and even higher. There has been no attempt to factor these types of variations into the man-hour

Table 4-1

TASK CODE DEFINITIONS FOR
PUMP/COMPRESSOR MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Suction Strainer & Suction Piping
2. Inspect Stuffing Box Lubrication
3. Inspect Bearing Lubrication
4. Inspect Stuffing Box For Defective Packing
5. Monitor Line Pressure (if local indication)
6. Monitor Vibration
7. Monitor Bearing Temperature

RS. ROUTINE SEMI OVERHAUL

1. Task RI Items Plus The Following:
2. Lubricate Bearings
3. Check Pump Alignment
4. Inspect Shaft For Wear At Bearings
5. Inspect Coupling Spacers

RO. ROUTINE OVERHAUL

1. Task RI and RS Items Plus The Following
2. Adjust Or Replace Packing
3. Inspect Impeller For Wear
4. Replace Shaft Seals As Required
5. Flush and Drain At Vent Connections
6. Partial Disassembly As Necessary

MO. MAJOR OVERHAUL

1. Task RI, RS, And RO Plus The Following
2. Replace Flexible Coupling
3. Replace Bearings
4. Replace Pump Impeller And Wear Rings
5. Replace Shaft Seals
6. Total Disassembly - Restore to "as-purchased" conditions.

Table 4-2

TASK CODE DEFINITIONS FOR
FAN & EXHAUST SYSTEM MAINTENANCERI. ROUTINE INSPECTION

1. General External Inspection
2. Inspect For Lubricant Spillage Or Leakage

RS. ROUTINE SEMI-OVERHAUL

1. Lubricate Bearings
2. Remove Dust, Moisture And Spillage
3. Adjust Drive Belts, Pulleys

RO. ROUTINE OVERHAUL

1. Same As Above
2. Check Bearing Alignment
3. Balance Fan Wheel

MO. MAJOR OVERHAUL

1. Disassemble, Clean, Replace Bearings
2. Replace Drive Motor As Required
3. Replace and Repair Gear Reducing Assemblies As Required

Table 4-3

TASK CODE DEFINITIONS FOR
HEAT EXCHANGER MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Heating Surfaces For Fouling
2. Monitor Heat Exchanger Performance

RS. ROUTINE SEMI OVERHAUL

1. Flush Tubes With Chemical Coil Cleaner
2. Inspect Connections for Cracking

RO. ROUTINE OVERHAUL

1. Flush And Ream Tubes And All Surfaces
2. Inspect Baffles

MO. MAJOR OVERHAUL

1. Replace Shell/Tubes As Required
2. Repair Tube Or Body Leakage

Table 4-4

TASK CODE DEFINITIONS
FOR DEMINERALIZER MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Under Drain For Leaks
2. Inspect Tank Flange For Leaks

RS. ROUTINE SEMI-OVERHAUL

1. Clean Discharge Strainer
2. Clean and Inspect Screens/Septums
3. Replace Gaskets

RO. ROUTINE OVERHAUL

1. Replace Screens/Septums
2. Clean Tank
3. Inspect Liner Coating

MO. MAJOR OVERHAUL

1. Replace Discharge Strainer/Strainer
2. Recoat Or Reline Tank
3. Replace Flange Bolts

Table 4-5
TASK CODE DEFINITIONS FOR
SUMP MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Bottom For Sediment and Miscellaneous Solids
2. Inspect Surface For Oil Pools

RS. ROUTINE SEMI OVERHAUL

1. Remove and Clean Pump and Cover Plates
2. Inspect Walls For Irregularities

RO. ROUTINE OVERHAUL

1. Drain and Clean Sump

MO. MAJOR OVERHAUL

1. Repair Sump Walls/Bottom
2. Recoat As Required

Table 4-6
TASK CODE DEFINITIONS FOR
MOTOR OPERATED VALVE MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Externally
2. Inspect Torque And Limit Switches
3. Inspect Valve Stroke

RS. ROUTINE SEMI OVERHAUL

1. Inspect And Lubricate As Required
2. Inspect Stem Packing
3. Adjust Packing
4. Adjust Torque Switches (Calibrate)
5. Adjust Limit Switches (Calibrate)

RO. ROUTINE OVERHAUL

1. Perform All Item S Activities Plus The Following:
2. Adjust Stem Packing
3. Inspect Seating Surfaces
4. Inspect Stem Drive Locking Nuts
5. Clean and Inspect Limit and Torque Switch Contacts
6. Verify "Hammer-Blow" Device Operation
7. Clean and Lubricate Gearing and Drive-Shaft
8. Monitor Motor Bearing Temperature

MO. MAJOR OVERHAUL

1. Perform All Item S and O Activities Plus The Following:
2. Adjust, Repair, Replace Seating Surfaces
3. Change Stem Packing, Rings, Seals
4. Inspect/Repair Valve Disc
5. Replace All Worn Parts

Table 4-7

TASK CODE DEFINITIONS FOR
AIR OPERATED CONTROL VALVE MAINTENANCERI. ROUTINE INSPECTION

1. Inspect Externally
2. Inspect Limit Switch Contacts And Limit Switch Alignment
3. Inspect Air Supply Operating Pressure

RS. ROUTINE SEMI OVERHAUL

1. Inspect And Lubricate As Required
2. Inspect Stem Packing
3. Inspect/Adjust Solenoid Valves
4. Calibrate Limit Switches

RO. ROUTINE OVERHAUL

1. Perform All Item S Activities Plus The Following:
2. Re-Calibrate Positioning Mechanism
3. Adjust Stem Packing
4. Inspect/Repair Seating Surfaces
5. Replenish Or Replace Gear Train Lubricants
6. Adjust Actuator/Valve Position Indicators
7. Adjust Air Operating Pressure

MO. MAJOR OVERHAUL

1. Perform All Item S And O Activities Plus The Following:
2. Adjust Valve Position Switches
3. Replace Actuator Seals
4. Change Stem Packing, Rings, Seals
5. Repair Or Replace Seating Surfaces
6. Repair Or Replace Air Operator

Table 4-8

TASK CODE DEFINITIONS FOR
MANUAL VALVE MAINTENANCE

RI. ROUTINE INSPECTION

1. Inspect Externally
2. Inspect Exposed Stem Threads For Fouling

RS. ROUTINE SEMI-OVERHAUL

1. Lubricate As Required
2. Adjust Packing
3. Inspect Seats, Packing, Rings

RO. ROUTINE OVERHAUL

1. Replace/Repair/Adjust Stem Packing
2. Inspect Seals, Rings, Gaskets

MO. MAJOR OVERHAUL

1. Repair Or Replace Seating Surfaces
2. Repair Or Replace Seals, Rings, Gaskets

Table 4-9

TASK CODE DEFINITIONS FOR
ELECTRICAL MOTOR MAINTENANCE

RI. ROUTINE INSPECTION

1. Check For Local Indications Of Excessive Bearing Temperature
2. Visual Inspection For Indication Of Excessive Motor Vibration

RS. ROUTINE SEMI-OVERHAUL

1. Replace Motor Oil As Required
2. Inspect and Clean Motor
3. Inspect Motor Actuator Brakes

RO. ROUTINE OVERHAUL

1. Inspect, Clean, Lubricate and Repair Motor Bearings
2. Adjust/Repair Motor Actuator Brakes

MO. MAJOR OVERHAUL

1. Replace Motor Bearings
2. Rewind Rotor/Stator Or Replace Drive Motor As Needed
3. Replace Motor Actuator Brakes

estimates contained in this report. The estimates provided herein assume that adequate planning has been done, spare parts and correct tooling are available, individuals performing the work are reasonably skilled and knowledgeable, and that other preparations and supporting activities have been done to support efficient work in radiation areas. Additionally the maintenance estimates are for on-job and working times only, and exclude access and egress time, standby time, break times, etc. These assumptions have been necessary to provide standard maintenance times and an unbiased approach toward estimating the total man-Rem exposure. For this reason the total man-hour estimates may be lower than those that would be used in estimating plant staffing or outage staffing requirements.

The task duration calculations are based on the assumption that similar tasks utilizing the same tools will be assigned to the maintenance man or the technician within the same area.

The frequency of preventative maintenance is based on the actual operating or running hours of the equipment with a minimum of 30 days for continuous service to a maximum interval of 98 days for infrequent service.

Valve operators are included in the working time allocated to the valves.

Maintenance estimates for major equipment such as pumps, tanks, heat exchangers and demineralizers include the maintenance of local, vendor supplied instrumentation such as pressure indicating thermocouples, sight glasses, etc.

In the case of maintenance of electric motors, standard plant maintenance procedures are assumed to require removal of the motor from the radiation area. For this reason, expected man-hour estimates for electrical motors account for only that time required to disconnect and remove the motor to a radiation free area.

5. SUMMARY OF RESULTS

The detailed work task estimates for each piece of equipment in the Auxiliary and Fuel Buildings are given in Appendix A. That information is summarized in this section.

Computer sorts were made to summarize yearly maintenance requirements for each piece of equipment by room and by system. Note that equipment maintenance was estimated for only those rooms wherein the expected radiation field is greater than 10 mRem/hr. Thus, maintenance of equipment in corridors and designated laydown areas are not included.

5.1 SUMMARY OF MAINTENANCE TASKS BY ROOMS AND BY SYSTEMS

Computer sorts were made to summarize yearly maintenance requirements for each room in the Auxiliary and Fuel Buildings. Assigned room numbers were specified corresponding to the C.F. Braun room numbering system of Reference 4-g. Minimum, maximum and average maintenance hours are tabulated by equipment, by room and by building.

The average yearly maintenance requirements for each room in the Auxiliary and Fuel Building are presented in Table 5-1. This table includes the total contributions of process equipment, valves, electrical equipment, and process equipment auxiliaries for each room.

A more detailed summary of the data, by giving yearly average minimum and maximum maintenance requirements for each piece of equipment in each room considered in the Auxiliary and Fuel Buildings, is presented in Table 5-2. Additionally, a summary by systems is provided in Table 5-3.

The average annual maintenance estimates for equipment (excluding instrumentation) in radiation areas greater than 10 mRem/hr in each building are as follows:

- | | |
|-----------------------|-----------------|
| a. Auxiliary Building | 1,638 man-hours |
| b. Fuel Building | 1,407 man-hours |

In regard to the instrumentation, an extrapolation was made from the instrumentation data for similar equipment in Reference 2 for the Radwaste Building. Specifically, it is assumed that the instrumentation maintenance requirements for pumps, heat exchangers, tanks, etc. are proportionately the same for system in the Auxiliary and Fuel Buildings as they are in the Radwaste Building. It is also assumed that the distribution of instruments in radiation and non-radiation zones is the same; thus the average instrumentation maintenance requirements for each equipment type (pump, heat exchanger, etc.) in the Radwaste Building are assumed to apply equally to similar equipment in the Auxiliary and Fuel Buildings.

As a result of this extrapolation, the annual average maintenance for instrumentation in the Auxiliary and Fuel Building in radiation areas greater than 10 mRem/Hr totals 736 man-hours or about 20% of the total.

5.2 SUMMARY OF EQUIPMENT REQUIRING THE MOST MAINTENANCE

A ranking of the equipment in the Auxiliary and Fuel Building radiation areas with highest total maintenance requirements is presented in Table 5-4. The data in Table 5-4 are derived from those given in Table 5-2 by combining like pieces of equipment and subcomponents such as pumps with pump motors.

5.3 IN-SERVICE INSPECTION REQUIREMENTS

A summary by system and room of the annualized maintenance requirements of the Class II and III equipment in the Auxiliary and Fuel Buildings is provided in Table 5-5. The total for all systems is 119 man-hours per year. Note that this is based on 10% of the required inspections per year. Actual practice may vary depending on a plant's administration of other parts of its ISI program.

Table 5-1

EQUIPMENT MAINTENANCE TASK ESTIMATES - ROOMS IN RADIATION AREAS ONLY

Prepared: December 22, 1978

SUMMARY OF INFORMATION

Room ID	Description of the Room	Estimated Average Equipment Maintenance Manhours			Room Total
		Process	Valves	Electrical	
A-006-09	CRD Maintenance Room	7.4	0.0	2.2	28.7
A-006-11	RWCJ Pump Room	60.5	0.0	7.1	67.7
A-006-12	RWCJ Valve Room	0.0	93.5	0.9	94.5
A-006-13	RWCJ Pump Room	62.7	0.0	8.7	71.4
A-009-12	Steam Tunnel Room	35.7	0.0	5.1	40.8
A-032-26	Temporary Work Area Room	4.6	0.0	3.2	7.7
A-037-04	Pipe Chase Room	0.0	20.7	0.2	20.9
A-037-06	Pipe Chase Room	2.9	0.0	0.5	3.4
A-037-08	Pipe Chase Room	0.0	13.5	0.2	13.7
A-037-09	HPCS Pump Room	64.8	71.2	17.9	164.5
A-037-10	RHR Heat Exchangers & Pump B Room	179.9	170.7	18.9	380.0
A-037-11	RHR Pumps Room	61.6	8.8	14.9	95.8
A-037-13	RCIC Pump Room	78.4	81.9	9.1	185.8
A-037-14	RHR Heat Exchangers & Pump A Room	176.3	155.6	17.3	359.8
A-037-15	LPCS Pump Room	52.3	29.5	15.0	102.7
AUXILIARY BUILDING TOTALS		787.1	645.6	121.2	1,637.5

Table 5-1 (Continued)

Room ID	Description of the Room	Estimated Average Equipment Maintenance Manhours				Room Total
		Process	Valves	Electrical	Aux.	
F-004-08	Standby Gas Treatment Room	5.1	6.4	4.5	0.0	16.1
F-004-09	Fan Room	2.6	0.7	2.2	0.0	5.4
F-004-10	Fan Room	16.7	4.4	7.6	0.0	28.6
F-007-12	FPCCU Filter Demineralizer B Room	30.9	104.6	6.3	30.2	172.3
F-007-17	FPCCU Filter Demineralizer A Room	15.4	111.4	2.7	30.2	159.6
F-015-23	Cask Pool Room	0.0	0.0	0.0	5.3	5.3
F-018-12	Standby Gas Treatment B Room	18.4	0.9	9.2	0.0	18.5
F-026-08	Fan 8 Room	11.7	0.0	4.1	0.0	15.8
F-026-09	Fan 9 Room	11.7	0.0	4.1	0.0	15.8
F-032-10	Standby Gas Treatment Service Room	16.0	0.0	3.5	26.6	46.1
F-032-11	Equipment Area Room	0.0	77.0	0.0	0.0	77.0
F-032-12	FPCCU Filter Demin. B Wash Tank Room	0.0	23.1	0.0	0.0	23.1
F-032-14	FPCCU Pump Room	28.3	0.0	8.9	0.0	37.1
F-032-15	FPCCU Pump Room	28.3	0.0	8.9	0.0	37.1
F-032-16	FPCCU Transfer Pump Room	11.0	0.0	2.8	0.0	13.8
F-032-18	Service Pool Room	0.0	0.0	0.0	65.4	65.4
F-032-19	Fuel Transfer Pool Room	0.0	0.0	0.0	57.5	57.5
F-032-20	Fuel Storage Pool Room	0.0	0.0	0.0	84.4	84.4
F-032-21	Cask Pool Room	0.0	0.0	0.0	55.5	55.5
F-032-22	SPCU Filter Demineralizer Room	0.0	21.6	0.0	39.6	61.2
F-032-25	Transfer Pump Room	51.4	0.0	4.5	26.6	82.5
F-032-26	CRD Drive Water Pump Room	126.3	93.5	28.8	0.0	248.6
F-032-27	Access Area Room	34.6	20.8	14.9	0.0	70.3
FUEL BUILDING TOTALS		408.3	464.6	112.9	421.3	1,407.0
GRAND TOTALS (Fuel & Aux. Bldgs.)		1,195.4	1,110.1	234.0	505.0	3,044.6

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 1

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D. = A-006-09 CRD Maintenance Room.				
Process Equipment.				
P46-CC001	LEAK TEST BOOSTER PUMP	1.3	7.2	4.8
X73-CC016	CRD MAINT AREA EXH FAN	1.0	5.5	2.6
Electrical Equipment.				
P46-CC001	LEAK TEST BOOSTER PUMP MOTOR	0.1	0.9	0.4
X73-CC016	CRD MAINT AREA EXH FAN MOTOR	0.7	4.0	1.8
Process Auxiliaries.				
P30-AA001	FLUSH TANK	5.0	27.4	18.6
X72-EE010	CRD MAINT ROOM CRANE	0.2	1.2	0.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-006-09	-
				28.7
ROOM / LOCATION I.D. = A-006-11 RWCU Pump Room.				
Process Equipment.				
G33-C001A	RWCU PUMP A	39.2	65.5	50.1
X73-BB016A	RWCU PUMP ROOM COOLER	4.5	14.8	8.3
X73-CC014A	RWCU PUMP ROOM FAN	0.9	4.7	2.2
Electrical Equipment.				
G33-C001A	RWCU PUMP A MOTOR	1.8	9.9	5.6
X73-CC014A	RWCU PUMP ROOM FAN MOTOR	0.6	3.4	1.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-006-11	-
				67.7
ROOM / LOCATION I.D. = A-006-12 RWCU Valve Room.				
Valves.				
G33-F004	RWCU SUCT O/B ISO Valve	25.5	43.8	33.2
G33-F039	RWCU RETURN O/B ISO Valve	25.5	43.8	33.2
G33-F034	RWCU DISCH TO MAIN COND Valve	18.4	38.1	27.2
Electrical Equipment.				
G33-F004	RWCU SUCT O/B ISO Valve Motor	0.1	0.6	0.3
G33-F039	RWCU RETURN O/B ISO Valve Motor	0.1	0.6	0.3
G33-F034	RWCU DISCH TO MAIN COND Valve Motor	0.2	0.9	0.4
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-006-12	-
				34.5
ROOM / LOCATION I.D. = A-006-13 RWCU Pump Room.				
Process Equipment.				
G33-C001B	RWCU PUMP	39.2	65.5	50.1
X73-CC014B	RWCU PUMP ROOM B FAN	0.9	4.7	2.2
X73-CC014B	RWCU PUMP ROOM FAN	0.9	4.7	2.2
X73-BB016B	RWCU PUMP ROOM A COOLER	4.5	14.8	8.3
Electrical Equipment.				
G33-C001B	RWCU PUMP MOTOR	1.8	9.9	5.6

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 2

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE	
X73-CC014B	RWCU PUMP ROOM B FAN MOTOR	0.6	3.4	1.5	
X73-CC014B	RWCU PUMP ROOM FAN MOTOR	0.6	3.4	1.5	
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-006-13	-	71.4
ROOM / LOCATION I.D. = A-009-12 Steam Tunnel Room.					
Process Equipment.					
X73-CC010A	FAN	1.5	6.5	3.3	
X73-CC010B	FAN	1.5	6.5	3.3	
X73-BE011A	COOLER	8.8	24.0	14.5	
X73-BE011B	COOLER	8.8	24.0	14.5	
Electrical Equipment.					
X73-CC010A	FAN MOTOR	1.0	5.3	2.5	
X73-CC010B	FAN MOTOR	1.0	5.3	2.5	
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-009-12	-	40.8
ROOM / LOCATION I.D. = A-032-26 Temporary Work Area Room.					
Process Equipment.					
X73-CC002A	AUX BLD PRESS CNTRL XHST FAN A	0.9	4.9	2.3	
X73-CC002B	AUX BLD PRESS CNTRL XHST FAN B	0.9	4.9	2.3	
Electrical Equipment.					
X73-CC002A	AUX BLD PRESS CNTRL XHST FAN A MOTOR	0.6	3.6	1.6	
X73-CC002B	AUX BLD PRESS CNTRL XHST FAN B MOTOR	0.6	3.6	1.6	
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-032-26	-	7.7
ROOM / LOCATION I.D. = A-037-04 Pipe Chase Room.					
Valves.					
E12-P004B	RHR SUCT Valve	17.2	26.0	20.7	
Electrical Equipment.					
E12-P004B	RHR SUCT Valve Motor	0.1	0.5	0.2	
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-037-04	-	20.9
ROOM / LOCATION I.D. = A-037-06 Pipe Chase Room.					
Process Equipment.					
E51-C002A	RCIC GLAND SEAL COMP.	1.1	5.0	2.9	
Electrical Equipment.					
E51-C002A	RCIC GLAND SEAL COMP. MOTOR	0.2	1.2	0.5	
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-037-06	-	3.4

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 3

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MINCE MAX	HRS AVE
ROOM / LOCATION I.D. = A-037-06 Pipe Chase Room.				
Valves.				
E12-FU04A	RHR SUCT Valve	5.9	21.2	15.5
Electrical Equipment.				
E12-FU04A	RHR SUCT Valve Motor	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		- A-037-08	-	13.7
ROOM / LOCATION I.D. = A-037-09 HPCS Pump Room.				
Process Equipment.				
E22-C003	HPCS LINE FILL PUMP	0.8	3.8	2.0
E22-C001	HPCS PUMP	15.0	31.0	22.0
P56-CC008A	HPCS RM FL DRAIN SUMP PUMP	1.4	8.6	4.6
P56-CC008B	HPCS RM FL DRAIN SUMP PUMP	1.4	8.6	4.6
X73-CC004	HPCS PUMP ROOM COOLING FAN	3.1	15.4	7.6
X73-BB002	HPCS PUMP ROOM COOLING UNIT	14.4	38.7	24.9
Valves.				
E22-FU11	HPCS BYPASS TO COND Valve	5.6	13.4	9.3
E22-FU10	HPCS BYPASS TO TANK Valve	5.6	13.4	9.3
E22-FU01	HPCS SUCT Valve	3.4	16.4	10.0
E22-FU12	HPCS MIN FLOW Valve	3.4	16.4	10.0
E22-FU23	HPCS BYPASS Valve	6.7	15.2	10.6
E22-FU04	HPCS DISCH Valve	6.1	14.3	10.0
E22-FU15	HPCS SUCT Valve	6.1	14.3	10.0
Electrical Equipment.				
E22-C003	HPCS LINE FILL PUMP MOTOR	0.2	1.1	0.5
E22-C001	HPCS PUMP MOTOR	1.3	10.3	7.5
P56-CC008A	HPCS RM FL DRAIN SUMP PUMP MOTOR	0.3	2.0	0.7
P56-CC008B	HPCS RM FL DRAIN SUMP PUMP MOTOR	0.3	2.0	0.7
X73-CC004	HPCS PUMP ROOM COOLING FAN MOTOR	2.1	11.6	6.5
E22-FU11	HPCS BYPASS TO COND Valve Motor	0.1	0.6	0.3
E22-FU10	HPCS BYPASS TO TANK Valve Motor	0.1	0.6	0.3
E22-FU01	HPCS SUCT Valve Motor	0.1	0.5	0.3
E22-FU12	HPCS MIN FLOW Valve Motor	0.1	0.5	0.3
E22-FU23	HPCS BYPASS Valve Motor	0.1	0.5	0.3
E22-FU04	HPCS DISCH Valve Motor	0.1	0.7	0.3
E22-FU15	HPCS SUCT Valve Motor	0.1	0.5	0.3
Process Auxiliaries.				
X72-EL007	HPCS MAINT TROLLEY	0.3	1.4	0.7
X71-XX004	HPCS RM DRAIN SUMP	3.7	17.4	9.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		- A-037-09	-	164.5

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.

Prepared: December 22, 1978

PAGE - 4

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D. = A-037-10 RHR Heat Exchangers & Pump B Room.				
Process Equipment.				
E12-C002B	RHR B PUMP	24.3	38.4	30.0
E12-B001D	RHR HEAT XCHGR D	43.8	70.1	58.6
E12-B001B	RHR HEAT XCHGR B	45.8	73.4	61.3
P56-CC006A	RHR B RM FL DRAIN SUMP PUMP A	1.4	6.6	3.6
P56-CC006B	RHR B RM FL DRAIN SUMP PUMP B	1.4	6.6	3.6
X73-BB007	RHR B PUMP RM COOL UNIT	10.4	28.0	17.8
X73-CC007	RHR B PUMP ROOM FAN	2.1	9.3	5.0
Valves.				
E12-F024B	RHR TO POOL Valve	9.9	16.9	12.3
E12-F026B	RHR EXCH TO RCIC Valve	1.6	13.0	8.8
E12-F006B	RHR SHUTDOWN COOLING Valve	1.6	18.5	13.8
E12-F053B	RHR INJ Valve	10.6	18.6	13.8
E12-F047B	RHR EXCH SHELL INLET Valve	11.2	18.5	13.8
E12-F027A	RHR INJ LINE Valve	9.9	16.9	12.3
E12-F027B	RHR INJ LINE Valve	9.9	16.9	12.3
E12-F024B	RHR TO POOL Valve	9.9	12.4	8.0
E12-F073B	RHR EXCH VENT Valve	9.9	9.0	5.4
E12-F074B	RHR EXCH VENT Valve	9.9	9.0	5.4
E12-F048B	RHR EXCH SHELL BYPASS Valve	11.2	18.5	13.8
E12-F003B	RHR EXCH SHELL OUTLET Valve	11.2	18.5	13.8
E12-F011B	RHR EXCH TO POOL Valve	9.9	8.6	5.1
E12-F087B	RHR STEAM ISO Valve	9.9	12.1	8.0
E12-F052B	MOV 10" CONTROL Valve	8.2	14.9	10.3
E12-F026B	RHR EXCH TO RCIC Valve	6.5	13.0	8.8
E12-F096	RHR SERVICE WATER Valve	2.9	8.2	5.0
Electrical Equipment.				
E12-C002B	RHR B PUMP MOTOR	1.8	12.6	8.6
P56-CC006A	RHR B RM FL DRAIN SUMP PUMP A MOTOR	0.5	2.0	0.9
P56-CC006B	RHR B RM FL DRAIN SUMP PUMP B MOTOR	0.5	2.0	0.9
X73-CC007	RHR B PUMP ROOM FAN MOTOR	1.4	7.0	4.1
E12-F024B	RHR TO POOL Valve Motor	0.1	0.9	0.2
E12-F026B	RHR EXCH TO RCIC Valve Motor	0.1	0.9	0.2
E12-F006B	RHR SHUTDOWN COOLING Valve Motor	0.1	0.9	0.2
E12-F053B	RHR INJ Valve Motor	0.1	0.9	0.2
E12-F047B	RHR EXCH SHELL INLET Valve Motor	0.1	0.9	0.2
E12-F027A	RHR INJ LINE Valve Motor	0.1	0.9	0.2
E12-F027B	RHR INJ LINE Valve Motor	0.1	0.9	0.2
E12-F024B	RHR TO POOL Valve Motor	0.1	0.9	0.2
E12-F073B	RHR EXCH VENT Valve Motor	0.1	0.9	0.2
E12-F074B	RHR EXCH VENT Valve Motor	0.1	0.9	0.2
E12-F048B	RHR EXCH SHELL BYPASS Valve Motor	0.1	0.9	0.2
E12-F003B	RHR EXCH SHELL OUTLET Valve Motor	0.2	0.9	0.2
E12-F011B	RHR EXCH TO POOL Valve Motor	0.1	0.9	0.2
E12-F087B	RHR STEAM ISO Valve Motor	0.1	0.9	0.2
E12-F052B	MOV 10" CONTROL Valve Motor	0.1	0.9	0.2
E12-F026B	RHR EXCH TO RCIC Valve Motor	0.1	0.9	0.2

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 5

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
Process Auxiliaries.				
X72-BE004	MONORAIL AND RHR B TROLLEY	0.2	1.2	0.6
X71-XX006	RHR FL DRAIN SUMP	3.7	17.4	9.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-037-10	- 380.0
ROOM / LOCATION I.D. = A-037-11 RHR Pumps Room.				
Process Equipment.				
E12-C002C	RHR C PUMP	24.3	38.4	30.0
E12-C003	RHR C LINE FILL PUMP	1.1	4.2	2.3
P56-CC007A	RHR C RM DRAIN SUMP PUMP A	1.4	6.6	3.6
P56-CC007B	RHR C RM DRAIN SUMP PUMP B	1.4	6.6	3.6
X73-CC008	RHR C PUMP ROOM FAN	1.9	8.3	4.4
X73-BE008	RHR C PUMP RM COOLER	10.4	28.0	17.8
Valves.				
E12-F064C	RECIRC Valve	6.5	13.0	8.3
Electrical Equipment.				
E12-C002C	RHR C PUMP MOTOR	1.8	12.6	8.6
E12-C003	RHR C LINE FILL PUMP MOTOR	0.2	1.4	0.6
P56-CC007A	RHR C RM DRAIN SUMP PUMP A MOTOR	0.3	2.0	0.9
P56-CC007B	RHR C RM DRAIN SUMP PUMP B MOTOR	0.3	2.0	0.9
X73-CC008	RHR C PUMP ROOM FAN MOTOR	1.2	6.7	3.5
E12-F064C	RECIRC Valve Motor	0.1	0.5	0.2
E12-F096	RHR SERVICE WATER Valve Motor	0.1	0.5	0.2
Process Auxiliaries.				
X72-BE005	MONORAIL & RHR C MAIN TROLLEY	0.2	1.2	0.6
X71-XX007	RHR C RM FL DRAIN SUMP	3.7	17.4	9.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-037-11	- 95.8
ROOM / LOCATION I.D. = A-037-13 RCIC Pump Room.				
Process Equipment.				
E31-C003	RCIC LINE FILL PUMP	1.1	4.2	2.3
E31-C001	RCIC PUMP	11.8	25.5	16.1
E31-C002	RCIC TURBINE	25.5	33.3	29.0
P56-CC004A	RCIC RM FLOOR DRAIN SUMP PUMP A	1.4	6.6	3.6
P56-CC004B	RCIC RM FLOOR DRAIN SUMP PUMP B	1.4	6.6	3.6
P55-CC013A	RCIC RM EQ DRAIN SUMP PUMP A	1.4	6.4	3.5
P55-CC013B	RCIC RM EQ DRAIN SUMP PUMP B	1.4	6.4	3.5
X73-BE003	RCIC PUMP ROOM COOLING UNIT	7.3	21.3	12.3
X73-CC005	RCIC PUMP ROOM FAN	1.0	5.5	2.6
Valves.				
E31-F045	RCIC STEAM TO TURBINE Valve	6.8	14.1	10.1
E31-F064	RCIC STEAM J/B ISO Valve	6.2	14.3	9.9

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 6

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
E51-F046	RCIC TURB CLG WATER Valve	1.5	7.7	5.1
E51-F059	RCIC TANK TEST BYPASS Valve	3.9	10.7	7.2
E51-F065	ADV CHECK Valve	5.1	12.5	8.8
E51-F019	RCIC MIN FLOW ISO Valve	3.1	9.7	6.4
E51-F013	RCIC DISCH Valve	4.4	11.5	7.6
E51-F078	VAC BREAKER ISO Valve	2.2	5.5	3.4
E51-F077	VAC BREAKER ISO Valve	1.1	4.3	2.4
E51-F010	RCIC COND TANK SUCT Valve	2.5	10.8	6.2
E51-F031	RCIC POOL SUCT ISO Valve	4.1	14.1	8.2
E51-F068	STEAM EXH LINE ISO Valve	4.7	9.7	6.6
Electrical Equipment.				
E51-C003	RCIC LINE FILL PUMP MOTOR	0.2	1.4	0.6
P56-CC004A	RCIC RM FLOOR DRAIN SUMP PUMP A MOTOR	0.3	2.0	0.9
P56-CC004B	RCIC RM FLOOR DRAIN SUMP PUMP B MOTOR	0.3	2.0	0.9
P55-CC013A	RCIC RM EQ DRAIN SUMP PUMP A MOTOR	0.3	2.0	0.9
P55-CC013B	RCIC RM EQ DRAIN SUMP PUMP B MOTOR	0.3	2.0	0.9
X73-CC005	RCIC PUMP ROOM FAN MOTOR	0.7	4.0	1.8
E51-F045	RCIC STEAM TO TURBINE Valve Motor	0.1	0.5	0.2
E51-F064	RCIC STEAM O/B ISO Valve Motor	0.1	0.5	0.2
E51-F046	RCIC TURB CLG WATER Valve Motor	0.1	0.5	0.2
E51-F059	RCIC TANK TEST BYPASS Valve Motor	0.1	0.5	0.2
E51-F019	RCIC MIN FLOW ISO Valve Motor	0.1	0.5	0.2
E51-F013	RCIC DISCH Valve Motor	0.1	0.5	0.2
E51-F078	VAC BREAKER ISO Valve Motor	0.1	0.5	0.2
E51-F077	VAC BREAKER ISO Valve Motor	0.1	0.5	0.2
E51-F010	RCIC COND TANK SUCT Valve Motor	0.2	1.2	0.5
E51-F031	RCIC POOL SUCT ISO Valve Motor	0.3	1.5	0.7
E51-F068	STEAM EXH LINE ISO Valve Motor	0.1	0.5	0.2
Process Auxiliaries.				
X71-YX005	RCIC RM FLOOR DRAIN SUMP	3.7	17.4	7.9
X71-YX003	RCIC RM EQ DRAIN SUMP	2.5	11.5	6.0
X72-BE006	RCIC MAINT TROLLEY	0.2	1.2	0.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - A-037-13 - 185.8				
ROOM / LOCATION I.D. = A-037-14 RHR Heat Exchangers & Pump A Room.				
Process Equipment.				
E12-B001C	RHR HEAT EXCHGR C	43.8	70.1	58.6
E12-B001A	RHR HEAT EXCHGR A	45.8	73.3	61.3
E12-C002A	RHR A PUMP	24.3	38.4	30.0
P56-CC005A	RHR A RM FL SUMP PUMP A	1.4	6.6	3.6
X73-BB006	RHR A PUMP COOL UNIT	10.4	28.0	17.8
X73-CC006	RHR A PUMP ROOM FAN	2.1	9.3	5.0
Valves.				
E12-F006A	RHR SHUTDOWN COOLING Valve	11.2	18.5	13.8
E12-F047A	RHR EXCH SHELL INLET Valve	11.2	18.5	13.8
E12-F073A	RHR EXCH VENT Valve	2.5	9.0	5.4
E12-F074A	RHR EXCH VENT Valve	2.5	9.0	5.4

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 7

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MDN	MTCE MAX	HRS AVE
E12-F048A	RHR EXCH SHELL BYPASS Valve	11.2	18.5	13.8
E12-F024A	RHR TO POOL Valve	6.5	16.5	11.5
E12-F040	RHR TO RADWASTE Valve	6.5	13.0	8.8
E12-F049	RHR TO RW O/B ISO Valve	6.5	13.0	8.8
E12-F052A	RHR STEAM ISO Valve	10.5	18.5	13.5
E12-F087A	RHR STEAM ISO Valve	6.5	16.5	11.5
E12-F026A	RHR EXCH TO RCIC Valve	6.5	13.0	8.8
E12-F011A	RHR EXCH TO POOL Valve	11.5	12.1	8.0
E12-F003A	RHR EXCH SHELL OUTLET Valve	11.5	18.5	13.5
E12-F064A	MOV 4" GATE Valve	6.5	13.0	8.8
E12-F064C	RECIRC Valve	6.5	13.0	8.8
Electrical Equipment.				
E12-C002A	RHR A PUMP MOTOR	1.8	12.6	8.6
P56-CC005A	RHR A RM FL SUMP PUMP A MOTOR	0.5	2.0	0.9
X73-CC000	RHR A PUMP ROOM FAN MOTOR	1.4	7.0	4.1
E12-F006A	RHR SHUTDOWN COOLING Valve Motor	0.1	0.5	0.2
E12-F047A	RHR EXCH SHELL INLET Valve Motor	0.1	0.5	0.2
E12-F073A	RHR EXCH VENT Valve Motor	0.1	0.8	0.4
E12-F074A	RHR EXCH VENT Valve Motor	0.1	0.8	0.4
E12-F048A	RHR EXCH SHELL BYPASS Valve Motor	0.1	0.8	0.4
E12-F024A	RHR TO POOL Valve Motor	0.1	0.8	0.4
E12-F040	RHR TO RADWASTE Valve Motor	0.1	0.5	0.2
E12-F049	RHR TO RW O/B ISO Valve Motor	0.1	0.5	0.2
E12-F052A	RHR STEAM ISO Valve Motor	0.1	0.5	0.2
E12-F087A	RHR STEAM ISO Valve Motor	0.1	0.7	0.3
E12-F026A	RHR EXCH TO RCIC Valve Motor	0.1	0.5	0.2
E12-F011A	RHR EXCH TO POOL Valve Motor	0.1	0.5	0.2
E12-F003A	RHR EXCH SHELL OUTLET Valve Motor	0.2	0.9	0.4
E12-F064A	MOV 4" GATE Valve Motor	0.1	0.5	0.2
Process Auxiliaries.				
X72-EE003	MONORAIL RHR A MAINT. TROLLEY	0.2	1.2	0.6
X71-KX025	RHR A FL DEMIN SUMP	3.9	17.7	10.0
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - A-037-14 - 359.8				
ROOM / LOCATION I.D. = A-037-15 LPCS Pump Room.				
Process Equipment.				
E21-C002	LPCS LINE FILL PUMP	1.1	4.2	2.5
E21-C001	LPCS PUMP	6.4	21.4	14.9
P56-CC003A	LPCS EQUIP DRAIN SUMP PUMP A	1.4	6.4	3.5
P56-CC003B	LPCS EQUIP DRAIN SUMP PUMP B	1.4	6.4	3.5
X73-BB004	LPCS PUMP ROOM COOLER	13.0	34.9	22.0
X73-CC003	LPCS PUMP ROOM FAN	2.7	12.0	6.5
Valves.				
E21-F001	LPCS SUCT Valve	5.9	21.2	13.5
E21-F011	LPCS RECIRC Valve	1.9	6.1	3.8
E21-F003	LPCS DISCH Valve	3.8	10.0	6.4
E21-F012	LPCS TEST Valve	3.4	9.1	5.6

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 8

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
Electrical Equipment.				
E21-C002	LPCS LINE FILL PUMP MOTOR	0.2	1.4	0.6
E21-C001	LPCS PUMP MOTOR	1.2	9.1	6.4
P56-CC003A	LPCS EQUIP DRAIN SUMP PUMP A MOTOR	0.3	2.0	0.6
P56-CC003B	LPCS EQUIP DRAIN SUMP PUMP B MOTOR	0.3	2.0	0.6
X73-CC003	LPCS PUMP ROOM FAN MOTOR	1.8	9.8	5.6
E21-F001	LPCS SUCT Valve Motor	0.1	0.5	0.2
E21-F011	LPCS RECIRC Valve Motor	0.1	0.5	0.2
E21-F005	LPCS DISCH Valve Motor	0.1	0.5	0.2
E21-F012	LPCS TEST Valve Motor	0.1	0.5	0.2
Process Auxiliaries.				
X71-XX099	LPCS EQUIP SUMP	2.5	11.5	6.0
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	A-037-15	- 102.7
TOTAL FOR BUILDING		1,638	MANHOURS YEARLY.	

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.

Prepared: December 22, 1978

PAGE - 9

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D. = F-004-06 Standby Gas Treatment Room.				
Process Equipment.				
P38-ZZ001A	STANDBY GAS TREATMENT UNIT	1.8	8.8	5.1
Valves.				
P38-PF003A	AOV 14" Valve	1.1	5.3	3.2
P38-PF003B	Valve	1.1	5.3	3.2
Electrical Equipment.				
P38-ZZ001A	STANDBY GAS TREATMENT UNIT MOTOR	1.3	7.7	4.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	F-004-08	-
				16.1
ROOM / LOCATION I.D. = F-004-09 Fan Room.				
Process Equipment.				
P38-CC003B	SGTS HEAT REMOVAL FAN	0.5	2.8	1.3
P38-CC003A	SGTS HEAT REMOVAL FAN	0.5	2.8	1.3
Valves.				
P38-PF007A	HEAT REMOVAL FAN INTAKE Valve	0.3	1.4	0.7
Electrical Equipment.				
P38-CC003B	SGTS HEAT REMOVAL FAN MOTOR	0.4	2.2	1.0
P38-CC003A	SGTS HEAT REMOVAL FAN MOTOR	0.4	2.2	1.0
P38-PF007A	HEAT REMOVAL FAN INTAKE Valve Motor	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	F-004-09	-
				5.4
ROOM / LOCATION I.D. = F-004-10 Fan Room.				
Process Equipment.				
P38-CC001A	EXHAUST FAN	1.4	6.3	3.4
P38-CC001B	EXHAUST FAN	1.4	6.3	3.4
X63-CC003A	ROOM FAN	0.9	4.6	2.3
X63-BB002A	ROOM COOLER	3.9	13.8	7.6
Valves.				
P38-PF006A	EXHAUST FAN INTAKE Valve	1.3	6.8	4.4
Electrical Equipment.				
P38-CC001A	EXHAUST FAN MOTOR	1.0	5.4	2.9
P38-CC001B	EXHAUST FAN MOTOR	1.0	5.4	2.9
X63-CC003A	ROOM FAN MOTOR	0.6	3.4	1.5
P38-PF006A	EXHAUST FAN INTAKE Valve Motor	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		-	F-004-10	-
				28.6

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

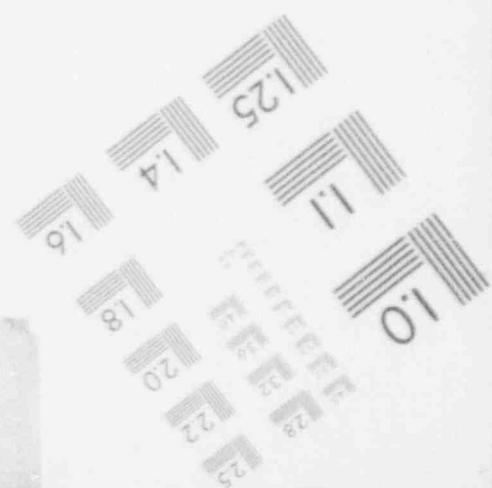
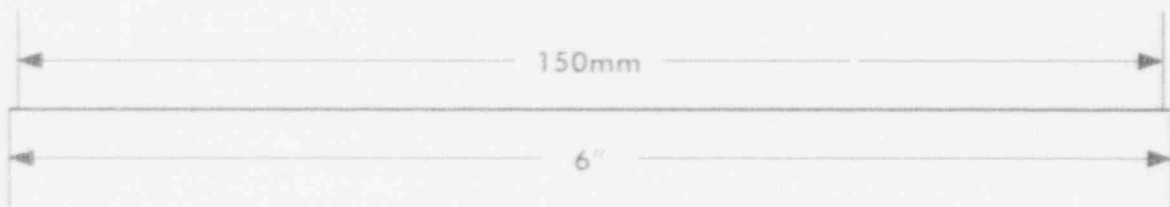
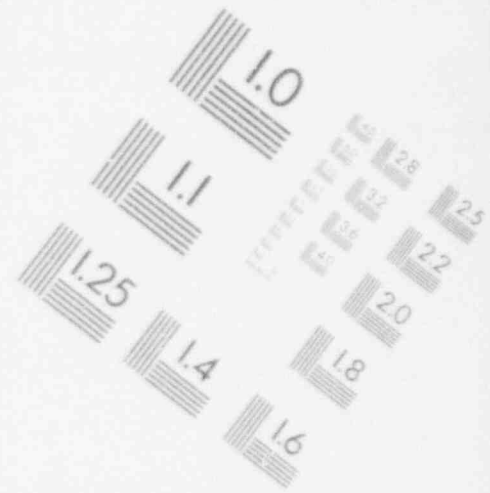
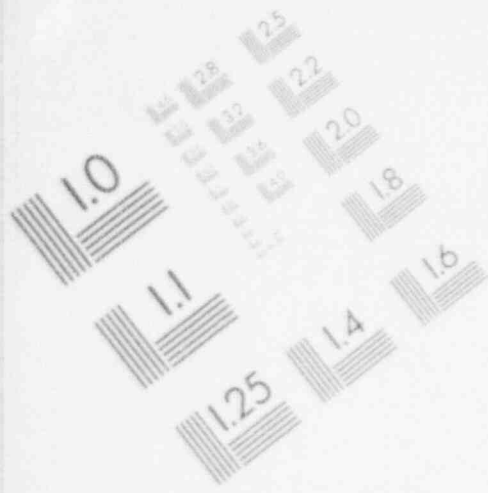
Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 10

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D. = F-007-12 FPCCU Filter Demineralizer B Room.				
Process Equipment.				
G46-C001B	HOLDING PUMP	7.7	25.1	15.4
G46-C002	FPCCU F/D PRECOAT PUMP	9.3	24.7	15.5
Valves.				
G46-F006B	AOV 8" CONTROL Valve	9.5	24.4	15.5
G46-F012B	AOV 3" CONTROL Valve	3.2	17.8	10.2
G46-F005B	AOV 3" CONTROL Valve	3.2	14.4	8.7
G46-F004B	AOV 1" CONTROL Valve	3.2	14.4	8.7
G46-F046B	AOV 10" CONTROL Valve	11.0	26.9	17.4
G46-F009B	AOV 4" GLOBE Valve	3.2	10.2	5.6
G46-F008B	AOV 4" CONTROL Valve	3.2	17.8	11.0
G46-F010B	AOV 3" CONTROL Valve	10.0	25.2	16.1
G46-F011B	AOV 4" CONTROL Valve	5.6	17.8	11.0
Electrical Equipment.				
G46-C001B	HOLDING PUMP MOTOR	1.0	5.5	2.7
G46-C002	FPCCU F/D PRECOAT PUMP MOTOR	1.2	6.8	3.7
Process Auxiliaries.				
G46-D001B	FPCCU FILTER DEMINERALIZER B	19.4	45.7	30.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		- F-007-12	-	172.3
ROOM / LOCATION I.D. = F-007-17 FPCCU Filter Demineralizer A Room.				
Process Equipment.				
G46-C001A	HOLDING PUMP	7.7	25.1	15.4
Valves.				
G46-F009A	AOV 4" CONTROL Valve	3.2	10.2	5.6
G46-F008A	AOV 8" CONTROL Valve	10.0	25.2	16.1
G46-F010A	AOV 8" CONTROL Valve	10.0	25.2	16.1
G46-F011A	AOV 8" CONTROL Valve	10.0	25.2	16.1
G46-F006A	AOV 3" CONTROL Valve	2.4	8.3	4.4
G46-F012A	AOV 12" CONTROL Valve	5.5	16.7	10.2
G46-F005A	AOV 1" CONTROL Valve	3.2	14.4	8.7
G46-F004A	AOV 10" CONTROL Valve	10.6	26.3	16.9
G46-F046A	RELIEF 1 1/2" Valve	11.0	26.9	17.4
Electrical Equipment.				
G46-C001A	HOLDING PUMP MOTOR	1.0	5.5	2.7
Process Auxiliaries.				
G46-D001A	FPCCU FILTER DEMINERALIZER A	19.4	45.7	30.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM		- F-007-17	-	159.6

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IMAGE EVALUATION
TEST TARGET (MT-3)



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IMAGE EVALUATION TEST TARGET (MT-3)

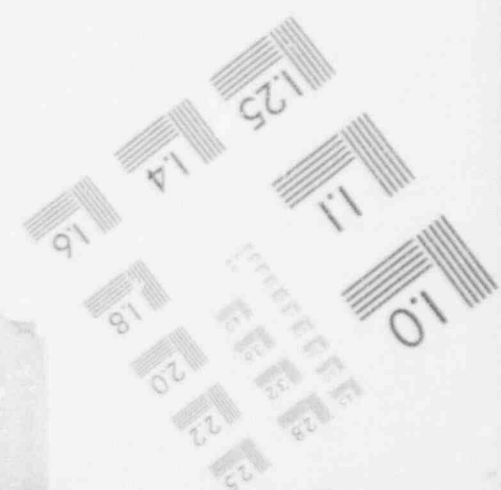
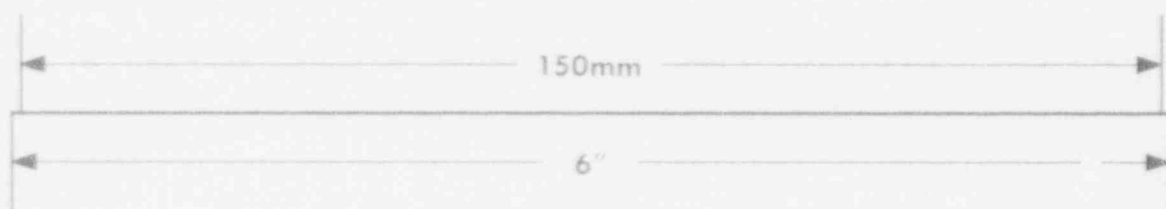
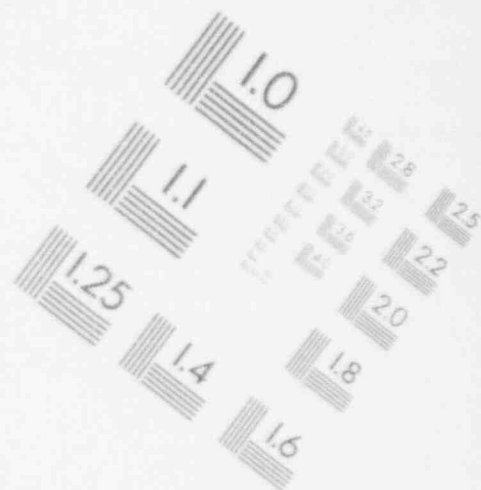
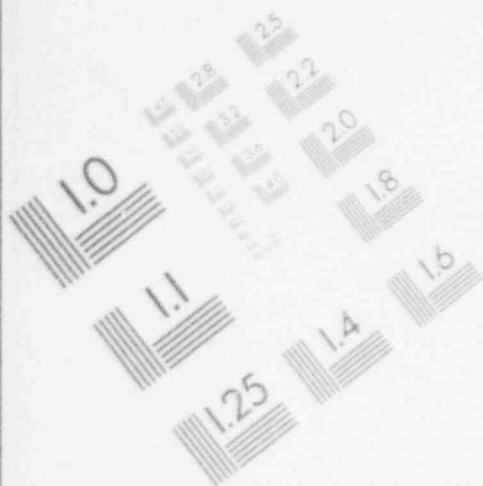


Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 11

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D. = F-015-23 Cask Pool Room.				
Process Auxiliaries.				
X62-BE004	FUEL INSPECTION JIB & TROLLEY HD	1.8	8.8	5.3
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-015-23 - 5.3				
ROOM / LOCATION I.D. = F-018-12 Standby Gas Treatment B Room.				
Process Equipment.				
P38-ZZ001B	STANDBY GAS TREATMENT UNIT B	1.8	8.8	5.1
P38-ZZ001B	SGTS EXHAUST FAN B	1.4	6.3	3.4
X63-CC003B	SGT ROOM FAN	0.6	4.6	2.3
X63-BB002B	SGTS COOLER B	3.9	13.8	7.6
Valves.				
P38-FF007B	HEAT REMOVAL FAN INTAKE Valve	0.4	1.8	0.9
Electrical Equipment.				
P38-ZZ001B	STANDBY GAS TREATMENT UNIT B MOTOR	1.3	7.7	4.5
P38-ZZ001B	SGTS EXHAUST FAN B MOTOR	1.0	5.4	2.9
X63-CC003B	SGT ROOM FAN MOTOR	0.6	3.4	1.6
P38-FF007B	HEAT REMOVAL FAN INTAKE Valve Motor	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-018-12 - 28.5				
ROOM / LOCATION I.D. = F-026-08 Fan 8 Room.				
Process Equipment.				
X63-CC007A	SA EXH FAN ROOM CLG FAN	0.9	4.8	2.3
X63-BB011A	SA EXH FAN RM UNIT COOLER	2.4	11.1	6.0
X05-CC001A	SHIELD ANNULUS VENT FAN	1.5	6.9	3.4
Electrical Equipment.				
X63-CC007A	SA EXH FAN ROOM CLG FAN MOTOR	0.6	3.4	1.5
X05-CC001A	SHIELD ANNULUS VENT FAN MOTOR	1.0	5.3	2.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-026-08 - 15.8				
ROOM / LOCATION I.D. = F-026-09 Fan 9 Room.				
Process Equipment.				
X63-CC007B	SA EXH FAN RM CLG FAN	0.9	4.8	2.3
X63-BB011B	SA EXH FAN RM UNIT COOLER	2.4	11.1	6.0
X05-CC001B	SHIELD ANNULUS VENT FAN	1.5	6.9	3.4
Electrical Equipment.				
X63-CC007B	SA FAN MOTOR	0.6	3.4	1.5
X05-CC001B	SHIELD ANNULUS VENT FAN MOTOR	1.0	5.3	2.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-026-09 - 15.8				

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 12

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MINCE MAX	HRS AVE
ROOM / LOCATION I.D. = F-032-10 Standby Gas Treatment Service Room.				
Process Equipment.				
P56-CC001A	FB201 DRAIN SUMP PUMP	1.4	6.4	3.5
P56-CC001B	FB201 DRAIN SUMP PUMP	1.4	6.4	3.5
P53-CC001A	PLENUM SYS. AIR COMPRESSOR	3.4	15.7	9.0
Electrical Equipment.				
P56-CC001A	FB201 DRAIN SUMP PUMP MOTOR	0.3	2.0	0.9
P56-CC001B	FB201 DRAIN SUMP PUMP MOTOR	0.3	2.0	0.9
P53-CC001A	PLENUM SYS. AIR COMPRESSOR MOTOR	0.7	4.0	1.6
Process Auxiliaries.				
X61-XX001	FB DEMIN SUMP	16.1	41.9	26.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-10 - 46.1				
ROOM / LOCATION I.D. = F-032-11 Equipment Area Room.				
Valves.				
G41-F019	Valve	13.2	31.1	20.5
G41-F021	Valve	13.2	31.1	20.5
G41-F043	Valve	11.4	27.8	18.0
G41-F045	Valve	11.4	27.8	18.0
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-11 - 77.0				
ROOM / LOCATION I.D. = F-032-12 FPCCU Filter Demin. B'wash Tank Room				
Valves.				
G46-FF201	Valve	3.0	8.2	5.0
G46-FF203	Valve	1.2	3.1	1.9
G46-FF204	Valve	3.2	8.2	5.0
G46-FF206	Valve	2.7	7.7	4.6
G46-FF202	Valve	2.7	7.7	4.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-12 - 23.1				
ROOM / LOCATION I.D. = F-032-14 FPCCU Pump Room.				
Process Equipment.				
G41-C001A	CIRCULATING PUMP	18.1	43.1	28.3
Electrical Equipment.				
G41-C001A	CIRCULATING PUMP MOTOR	2.4	14.5	8.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-14 - 37.1				

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
 Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
 Prepared: December 22, 1978

PAGE - 13

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
ROOM / LOCATION I.D.	= F-032-15 FPCCU Pump Room.			
	Process Equipment.			
G41-C001B	CIRCULATING PUMP	18.1	43.1	28.3
	Electrical Equipment.			
G41-C001B	CIRCULATING PUMP MOTOR	2.4	14.5	8.9
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-15	-	37.1
ROOM / LOCATION I.D.	= F-032-16 FPCCU Transfer Pump Room.			
	Process Equipment.			
G46-CC004	DRAIN PUMP	6.4	18.3	11.0
	Electrical Equipment.			
G46-CC004	DRAIN PUMP MOTOR	1.0	5.5	2.8
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-16	-	13.8
ROOM / LOCATION I.D.	= F-032-18 Service Pool Room.			
	Process Auxiliaries.			
G46-AA910	SERVICE POOL	35.1	93.1	65.4
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-18	-	65.4
ROOM / LOCATION I.D.	= F-032-19 Fuel Transfer Pool Room.			
	Process Auxiliaries.			
G46-AA920	FUEL TRANSFER POOL	33.6	82.3	57.5
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-19	-	57.5
ROOM / LOCATION I.D.	= F-032-20 Fuel Storage Pool Room.			
	Process Auxiliaries.			
G46-AA900	FUEL STORAGE POOL	44.9	115.4	84.4
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-20	-	84.4
ROOM / LOCATION I.D.	= F-032-21 Cask Pool Room.			
	Process Auxiliaries.			
G46-AA930	CASK POOL	31.0	80.8	55.5
	TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM	- F-032-21	-	55.5

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 14

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MTCE MAX	HRS AVE
ROOM / LOCATION I.D. = F-032-22 SPCU Filter Demineralizer Room.				
Valves.				
G38-PF006	Valve	1.7	5.3	2.9
G38-PF007	Valve	1.7	5.3	2.9
G38-PF024	AOV Valve	2.1	6.6	4.1
G38-PF021	AOV Valve	2.1	6.6	4.1
G38-PF016	AOV Valve	4.8	11.9	7.6
Process Auxiliaries.				
G38-DD001	SPCU DEMINERALIZER	20.4	56.7	39.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-22 - 61.2				
ROOM / LOCATION I.D. = F-032-25 Transfer Pump Room.				
Process Equipment.				
P56-CC018A	CASK DECON SUMP PUMP	1.4	6.4	3.5
P56-CC018B	CASK DECON SUMP PUMP	1.4	6.4	3.5
P48-CC002	BOOSTER PUMP	3.3	16.7	10.2
P48-CC003	DECON TRANSFER PUMP	3.2	13.0	7.5
Electrical Equipment.				
P56-CC018A	CASK DECON SUMP PUMP MOTOR	0.3	1.9	0.9
P56-CC018B	CASK DECON SUMP PUMP MOTOR	0.3	1.9	0.9
P48-CC002	BOOSTER PUMP MOTOR	0.5	2.6	1.2
P48-CC003	DECON TRANSFER PUMP MOTOR	0.6	3.4	1.5
Process Auxiliaries.				
X61-XX065	CASK DECON SUMP	16.1	41.9	26.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-25 - 55.9				
ROOM / LOCATION I.D. = F-032-26 CRD Drive Water Pump Room.				
Process Equipment.				
C11-C001A	CRD DRIVE WTR PUMP	37.1	78.1	56.1
C11-C001B	CRD DRIVE WTR PUMP	37.1	78.1	56.1
C11-C001A	CRD LUBE OIL PUMP	3.0	12.7	7.0
C11-C001B	CRD LUBE OIL PUMP	3.0	12.7	7.0
Valves.				
C11-P002A	SUPPLY H2O FLOW CONT Valve	25.5	43.8	33.2
C11-P002B	SUPPLY H2O FLOW CONT Valve	25.5	43.8	33.2
C11-P121	H2O TO RPV Valve	18.4	38.1	27.2
Electrical Equipment.				
C11-C001A	CRD DRIVE WTR PUMP MOTOR	3.0	19.6	12.8
C11-C001B	CRD DRIVE WTR PUMP MOTOR	3.0	19.6	12.8
C11-C001A	CRD LUBE OIL PUMP MOTOR	0.6	3.6	1.6
C11-C001B	CRD LUBE OIL PUMP MOTOR	0.6	3.6	1.6

Table 5-2

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY ROOMS (Continued)

Summary of BWR/6 Mark III Power Plant
 Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Rooms in Radiation Areas Only.
 Prepared: December 22, 1978

PAGE - 15

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	YEARLY MIN	MICE MAX	HRS AVE
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-26 - 248.6				
ROOM / LOCATION I.D. = F-032-27 Access Area Room.				
Process Equipment.				
G38-CC001A	SPCU PUMP	40.6	28.1	17.3
G38-CC001B	SPCU PUMP	10.6	28.1	17.3
Valves.				
G38-PF007	SPCU DISCH O/B ISO Valve	4.8	11.9	7.6
G38-PF003	SPCU SUCTION O/B ISO Valve	3.5	10.3	6.6
G38-PF004	SPCU SUCTION O/B ISO Valve	3.5	10.3	6.6
Electrical Equipment.				
G38-PF002	SPCU DISCH O/B ISO Valve Motor	0.1	0.5	0.2
G38-PF003	SPCU SUCTION O/B ISO Valve Motor	0.1	0.5	0.2
G38-PF004	SPCU SUCTION O/B ISO Valve Motor	0.1	0.5	0.2
G38-CC001A	SPCU PUMP MOTOR	2.1	12.0	7.1
G38-CC001B	SPCU PUMP MOTOR	2.1	12.0	7.1
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN ROOM - F-032-27 - 70.3				
TOTAL FOR BUILDING 1,380 MANHOURS YEARLY.				
GRAND TOTAL YEARLY MANHOURS FOR MAJOR EQUIPMENT IN RADIATION AREAS = 3,018				

Table 5-3
EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 1

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MTCE MAX	HRS AVE
GENERAL ELECTRIC SYSTEM I.D. = X05 GE SYSTEM - - NOT ON FILE					
Process Equipment.					
X05-CC001A	SHIELD ANNULUS VENT FAN	F-026-08	1.5	6.9	3.4
X05-CC001B	SHIELD ANNULUS VENT FAN	F-026-09	1.5	6.9	3.4
Electrical Equipment.					
X05-CC001A	SHIELD ANNULUS VENT FAN MOTOR	F-026-08	1.0	5.3	2.5
X05-CC001B	SHIELD ANNULUS VENT FAN MOTOR	F-026-09	1.0	5.3	2.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			X05	-	11.9
GENERAL ELECTRIC SYSTEM I.D. = C11 CRD HYDRAULIC CONTROL System					
Process Equipment.					
C11-C001A	CRD DRIVE WTR PUMP	F-032-26	37.1	78.1	56.1
C11-C001B	CRD DRIVE WTR PUMP	F-032-26	37.1	78.1	56.1
C11-C001A	CRD LUBE OIL PUMP	F-032-26	3.0	12.7	7.0
C11-C001B	CRD LUBE OIL PUMP	F-032-26	3.0	12.7	7.0
Valves.					
C11-F002A	SUPPLY H2O FLOW CONT Valve	F-032-26	25.5	43.8	33.2
C11-F002B	SUPPLY H2O FLOW CONT Valve	F-032-26	25.5	43.8	33.2
C11-F121	H2O TO RPV Valve	F-032-26	18.4	38.1	27.2
Electrical Equipment.					
C11-C001A	CRD DRIVE WTR PUMP MOTOR	F-032-26	3.0	19.6	12.8
C11-C001B	CRD DRIVE WTR PUMP MOTOR	F-032-26	3.0	19.6	12.8
C11-C001A	CRD LUBE OIL PUMP MOTOR	F-032-26	0.6	3.6	1.6
C11-C001B	CRD LUBE OIL PUMP MOTOR	F-032-26	0.6	3.6	1.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			C11	-	248.6
GENERAL ELECTRIC SYSTEM I.D. = E12 RESIDUAL HEAT REMOVAL System					
Process Equipment.					
E12-C002B	RHR B PUMP	A-037-10	24.3	38.4	30.0
E12-B001D	RHR HEAT XCHGR D	A-037-10	43.8	70.1	58.6
E12-B001B	RHR HEAT XCHGR B	A-037-10	45.8	73.3	61.3
E12-C002C	RHR C PUMP	A-037-11	24.3	38.4	30.0
E12-C003	RHR C LINE FILL PUMP	A-037-11	1.1	4.2	2.3
E12-B001C	RHR HEAT XCHGR C	A-037-14	43.8	70.1	58.6
E12-B001A	RHR HEAT XCHGR A	A-037-14	45.8	73.3	61.3
E12-C002A	RHR A PUMP	A-037-14	24.3	38.4	30.0
Valves.					
E12-F004B	RHR SUCT Valve	A-037-04	17.2	26.0	20.7
E12-F004A	RHR SUCT Valve	A-037-08	5.9	21.2	13.5
E12-F024B	RHR TO POOL Valve	A-037-10	3.9	16.9	12.3
E12-F026B	RHR EXCH TO RCIC Valve	A-037-10	6.5	13.0	8.8
E12-F006B	RHR SHUTDOWN COOLING Valve	A-037-10	11.2	18.5	13.8

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 2

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MTCE MAX	HRS AVE
E12-F053B	RHR INJ Valve	A-037-10	10.8	18.0	13.4
E12-F047B	RHR EXCH SHELL INLET Valve	A-037-10	11.2	18.5	13.8
E12-F027A	RHR INJ LINE Valve	A-037-10	9.9	16.9	12.3
E12-F047B	RHR INJ LINE Valve	A-037-10	9.9	16.9	12.3
E12-F024B	RHR TO POOL Valve	A-037-10	5.1	12.4	8.0
E12-F073B	RHR EXCH VENT Valve	A-037-10	2.5	9.0	5.4
E12-F074B	RHR EXCH VENT Valve	A-037-10	2.5	9.0	5.4
E12-F048B	RHR EXCH SHELL BYPASS Valve	A-037-10	11.2	18.5	13.8
E12-F003B	RHR EXCH SHELL OUTLET Valve	A-037-10	11.2	18.5	13.8
E12-F011B	RHR EXCH TO POOL Valve	A-037-10	2.9	6.5	5.1
E12-F087B	RHR STEAM ISO Valve	A-037-10	3.6	12.1	8.0
E12-F052B	MOV 10" CONTROL Valve	A-037-10	8.2	14.9	10.0
E12-F028B	RHR EXCH TO RCIC Valve	A-037-10	9.9	16.9	12.3
E12-F093	RHR SERVICE WATER Valve	A-037-10	2.9	6.5	5.1
E12-F064C	RECIRC Valve	A-037-11	6.5	13.0	8.8
E12-F006A	RHR SHUTDOWN COOLING Valve	A-037-14	11.2	18.5	13.8
E12-F047A	RHR EXCH SHELL INLET Valve	A-037-14	11.2	18.5	13.8
E12-F073A	RHR EXCH VENT Valve	A-037-14	2.5	9.0	5.4
E12-F074A	RHR EXCH VENT Valve	A-037-14	2.5	9.0	5.4
E12-F048A	RHR EXCH SHELL BYPASS Valve	A-037-14	11.2	18.5	13.8
E12-F024A	RHR TO POOL Valve	A-037-14	9.9	16.9	12.3
E12-F040	RHR TO RADWASTE Valve	A-037-14	6.5	13.0	8.8
E12-F049	RHR TO RW O/B ISO Valve	A-037-14	6.5	13.0	8.8
E12-F052A	RHR STEAM ISO Valve	A-037-14	10.8	18.0	13.4
E12-F087A	RHR STEAM ISO Valve	A-037-14	6.5	13.0	8.8
E12-F026A	RHR EXCH TO RCIC Valve	A-037-14	6.5	13.0	8.8
E12-F011A	RHR EXCH TO POOL Valve	A-037-14	5.1	12.4	8.0
E12-F003A	RHR EXCH SHELL OUTLET Valve	A-037-14	11.2	18.5	13.8
E12-F064A	MOV 4" GATE Valve	A-037-14	6.5	13.0	8.8
E12-F064C	RECIRC Valve	A-037-14	6.5	13.0	8.8
Electrical Equipment.					
E12-F004B	RHR SUCT Valve Motor	A-037-04	0.1	0.5	0.2
E12-F004A	RHR SUCT Valve Motor	A-037-08	0.1	0.5	0.2
E12-C002B	RHR A PUMP MOTOR	A-037-10	1.8	12.6	8.8
E12-F024B	RHR TO POOL Valve Motor	A-037-10	0.1	0.5	0.2
E12-F028B	RHR EXCH TO RCIC Valve Motor	A-037-10	0.1	0.5	0.2
E12-F006B	RHR SHUTDOWN COOLING Valve Motor	A-037-10	0.1	0.5	0.2
E12-F053B	RHR INJ Valve Motor	A-037-10	0.2	0.9	0.4
E12-F047B	RHR EXCH SHELL INLET Valve Motor	A-037-10	0.1	0.5	0.2
E12-F027A	RHR INJ LINE Valve Motor	A-037-10	0.1	0.5	0.2
E12-F027B	RHR INJ LINE Valve Motor	A-037-10	0.1	0.5	0.2
E12-F024B	RHR TO POOL Valve Motor	A-037-10	0.1	0.5	0.2
E12-F073B	RHR EXCH VENT Valve Motor	A-037-10	0.1	0.5	0.4
E12-F074B	RHR EXCH VENT Valve Motor	A-037-10	0.1	0.5	0.4
E12-F048B	RHR EXCH SHELL BYPASS Valve Moto	A-037-10	0.1	0.5	0.3
E12-F003B	RHR EXCH SHELL OUTLET Valve Moto	A-037-10	0.2	0.9	0.4
E12-F011B	RHR EXCH TO POOL Valve Motor	A-037-10	0.1	0.5	0.2
E12-F087B	RHR STEAM ISO Valve Motor	A-037-10	0.1	0.5	0.3
E12-F052B	MOV 10" CONTROL Valve Motor	A-037-10	0.1	0.5	0.2
E12-F028B	RHR EXCH TO RCIC Valve Motor	A-037-10	0.1	0.5	0.2
E12-C002C	RHR C PUMP MOTOR	A-037-11	1.8	12.6	8.8

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 3

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
E12-C003	RHR C LINE FILL PUMP MOTOR	A-037-14	0.2	1.4	0.6
E12-F004C	RECIRC Valve Motor	A-037-14	0.1	0.5	0.2
E12-F006	RHR SERVICE WATER Valve Motor	A-037-14	0.1	0.5	0.2
E12-C002A	RHR A PUMP MOTOR	A-037-14	0.8	1.6	0.6
E12-F006A	RHR SHUTDOWN COOLING Valve Motor	A-037-14	0.1	0.5	0.2
E12-F047A	RHR EXCH SHELL INLET Valve Motor	A-037-14	0.1	0.5	0.2
E12-F075A	RHR EXCH VENT Valve Motor	A-037-14	0.1	0.5	0.2
E12-F074A	RHR EXCH VENT Valve Motor	A-037-14	0.1	0.5	0.2
E12-F048A	RHR EXCH SHELL BYPASS Valve Moto	A-037-14	0.1	0.5	0.2
E12-F024A	RHR TO POOL Valve Motor	A-037-14	0.1	0.5	0.2
E12-F040	RHR TO RADWASTE Valve Motor	A-037-14	0.1	0.5	0.2
E12-F049	RHR TO RW O/B ISO Valve Motor	A-037-14	0.1	0.5	0.2
E12-F052A	RHR STEAM ISO Valve Motor	A-037-14	0.1	0.5	0.2
E12-F067A	RHR STEAM ISO Valve Motor	A-037-14	0.1	0.5	0.2
E12-F026A	RHR EXCH TO RCIC Valve Motor	A-037-14	0.1	0.5	0.2
E12-F011A	RHR EXCH TO POOL Valve Motor	A-037-14	0.1	0.5	0.2
E12-F003A	RHR EXCH SHELL OUTLET Valve Moto	A-037-14	0.2	0.5	0.2
E12-F064A	MOV 4" GATE Valve Motor	A-037-14	0.1	0.5	0.2

TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - E12 - 737.1

GENERAL ELECTRIC SYSTEM I.D. = E21 LOW PRESSURE CORE SPRAY System

Process Equipment.

E21-C002	LPCS LINE FILL PUMP	A-037-15	1.1	4.2	2.3
E21-C001	LPCS PUMP	A-037-15	8.4	21.4	14.6

Valves.

E21-F001	LPCS SUCT Valve	A-037-15	5.9	24.2	13.5
E21-F011	LPCS RECIRC Valve	A-037-15	1.8	6.1	3.8
E21-F003	LPCS DISCH Valve	A-037-15	3.8	10.0	6.4
E21-F012	LPCS TEST Valve	A-037-15	3.4	9.1	5.6

Electrical Equipment.

E21-C002	LPCS LINE FILL PUMP MOTOR	A-037-15	0.2	1.4	0.6
E21-C001	LPCS PUMP MOTOR	A-037-15	1.2	3.1	0.4
E21-F001	LPCS SUCT Valve Motor	A-037-15	0.1	0.5	0.2
E21-F011	LPCS RECIRC Valve Motor	A-037-15	0.1	0.5	0.2
E21-F003	LPCS DISCH Valve Motor	A-037-15	0.1	0.5	0.2
E21-F012	LPCS TEST Valve Motor	A-037-15	0.1	0.5	0.2

TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - E21 - 54.3

GENERAL ELECTRIC SYSTEM I.D. = E22 HIGH PRESSURE CORE SPRAY System

Process Equipment.

E22-C003	HPCS LINE FILL PUMP	A-037-09	0.8	3.8	2.0
E22-C001	HPCS PUMP	A-037-09	15.0	31.5	22.9

Valves.

E22-F011	HPCS BYPASS TO COND Valve	A-037-09	5.6	13.4	3.3
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Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 4

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MTCE MAX	HRS AVE
E22-F010	HPCS BYPASS TO TANK Valve	A-037-09	5.6	13.4	9.3
E22-F001	HPCS SUCT Valve	A-037-09	3.4	16.3	10.3
E22-F012	HPCS MIN FLOW Valve	A-037-09	3.3	10.2	7.9
E22-F023	HPCS BYPASS Valve	A-037-09	6.7	15.2	10.6
E22-F004	HPCS DISCH Valve	A-037-09	6.1	14.3	9.9
E22-F015	HPCS SUCT Valve	A-037-09	6.3	23.0	14.9
Electrical Equipment.					
E22-C003	HPCS LINE FILL PUMP MOTOR	A-037-09	0.2	1.1	0.5
E22-C001	HPCS PUMP MOTOR	A-037-09	1.3	10.3	7.4
E22-F011	HPCS BYPASS TO COND Valve Motor	A-037-09	0.1	0.6	0.3
E22-F010	HPCS BYPASS TO TANK Valve Motor	A-037-09	0.1	0.6	0.3
E22-F001	HPCS SUCT Valve Motor	A-037-09	0.1	0.5	0.2
E22-F012	HPCS MIN FLOW Valve Motor	A-037-09	0.1	0.5	0.2
E22-F013	HPCS BYPASS Valve Motor	A-037-09	0.1	0.5	0.2
E22-F004	HPCS DISCH Valve Motor	A-037-09	0.1	0.7	0.3
E22-F015	HPCS SUCT Valve Motor	A-037-09	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - E22			-	-	105.8
GENERAL ELECTRIC SYSTEM I.D. = E51 REACTOR CORE ISOLATION COOLING Syst					
Process Equipment.					
E51-C002A	RCIC GLAND SEAL COMP.	A-037-06	1.1	5.0	2.8
E51-C003	RCIC LINE FILL PUMP	A-037-13	1.1	4.2	2.3
E51-C001	RCIC PUMP	A-037-13	11.6	23.9	18.1
E51-C002	RCIC TURBINE	A-037-13	25.5	33.9	29.0
Valves.					
E51-F045	RCIC STEAM TO TURBINE Valve	A-037-13	6.8	14.1	10.1
E51-F064	RCIC STEAM O/B ISO Valve	A-037-13	6.2	14.3	9.9
E51-F046	RCIC TURB CLG WATER Valve	A-037-13	1.5	7.7	3.1
E51-F059	RCIC TANK TEST BYPASS Valve	A-037-13	3.9	10.7	6.9
E51-F065	AOV CHECK Valve	A-037-13	3.1	12.5	8.0
E51-F019	RCIC MIN FLOW ISO Valve	A-037-13	3.1	9.7	6.5
E51-F013	RCIC DISCH Valve	A-037-13	4.4	11.5	7.0
E51-F076	VAC BREAKER ISO Valve	A-037-13	2.2	5.6	3.4
E51-F077	VAC BREAKER ISO Valve	A-037-13	1.1	4.3	2.4
E51-F010	RCIC COND TANK SUCT Valve	A-037-13	2.5	10.8	6.2
E51-F031	RCIC POOL SUCT ISO Valve	A-037-13	4.1	14.4	8.2
E51-F068	STEAM EXH LINE ISO Valve	A-037-13	4.7	9.7	6.6
Electrical Equipment.					
E51-C002A	RCIC GLAND SEAL COMP. MOTOR	A-037-06	0.2	1.2	0.5
E51-C003	RCIC LINE FILL PUMP MOTOR	A-037-13	0.2	1.4	0.6
E51-F045	RCIC STEAM TO TURBINE Valve Moto	A-037-13	0.1	0.6	0.3
E51-F064	RCIC STEAM O/B ISO Valve Motor	A-037-13	0.1	0.6	0.3
E51-F046	RCIC TURB CLG WATER Valve Motor	A-037-13	0.1	0.5	0.2
E51-F059	RCIC TANK TEST BYPASS Valve Moto	A-037-13	0.1	0.5	0.2
E51-F019	RCIC MIN FLOW ISO Valve Motor	A-037-13	0.1	0.5	0.2
E51-F013	RCIC DISCH Valve Motor	A-037-13	0.1	0.5	0.2
E51-F076	VAC BREAKER ISO Valve Motor	A-037-13	0.1	0.5	0.2

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 5

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
E31-F077	VAC BREAKER ISO Valve Motor	A-037-14	0.1	0.5	0.2
E31-F010	RCIC COND TANK SUCT Valve Motor	A-037-13	0.2	1.4	0.3
E31-F031	RCIC POOL SUCT ISO Valve Motor	A-037-13	0.3	1.5	0.7
E31-F068	STEAM EXH LINE ISO Valve Motor	A-037-13	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - E31			-	-	138.6
GENERAL ELECTRIC SYSTEM I.D. = G33 REACTOR WATER CLEAN-UP System					
Process Equipment.					
G33-C001A	RWCU PUMP A	A-006-11	39.2	65.5	50.1
G33-C001B	RWCU PUMP	A-006-13	39.2	65.5	50.1
Valves.					
G33-F004	RWCU SUCT O/B ISO Valve	A-006-12	25.5	43.8	33.2
G33-F039	RWCU RETURN O/B ISO Valve	A-006-12	25.5	43.8	33.2
G33-F034	RWCU DISCH TO MAIN COND Valve	A-006-12	18.4	38.1	27.2
Electrical Equipment.					
G33-C001A	RWCU PUMP A MOTOR	A-006-11	1.8	9.9	5.6
G33-F004	RWCU SUCT O/B ISO Valve Motor	A-006-12	0.1	0.6	0.3
G33-F039	RWCU RETURN O/B ISO Valve Motor	A-006-12	0.1	0.6	0.3
G33-F034	RWCU DISCH TO MAIN COND Valve Mo	A-006-12	0.2	0.4	0.4
G33-C001B	RWCU PUMP MOTOR	A-006-13	1.8	9.9	5.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - G33			-	-	205.8
GENERAL ELECTRIC SYSTEM I.D. = G38 SUPPR. POOL CLEANUP System					
Process Equipment.					
G38-CC001A	SPCU PUMP	F-032-27	10.6	28.1	17.3
G38-CC001B	SPCU PUMP	F-032-27	10.6	28.1	17.3
Valves.					
G38-FF006	Valve	F-032-22	1.7	5.3	2.9
G38-FF007	Valve	F-032-22	1.7	5.3	2.9
G38-FF024	AOV Valve	F-032-22	2.1	6.8	4.1
G38-FF021	AOV Valve	F-032-22	2.1	6.8	4.1
G38-FF016	AOV Valve	F-032-22	4.8	11.9	7.6
G38-FF002	SPCU DISCH O/B ISO Valve	F-032-27	4.8	11.9	7.6
G38-FF003	SPCU SUCTION O/B ISO Valve	F-032-27	3.5	10.3	6.6
G38-FF004	SPCU SUCTION O/B ISO Valve	F-032-27	3.5	10.3	6.6
Electrical Equipment.					
G38-FF002	SPCU DISCH O/B ISO Valve Motor	F-032-27	0.1	0.5	0.2
G38-FF003	SPCU SUCTION O/B ISO Valve Motor	F-032-27	0.1	0.5	0.2
G38-FF004	SPCU SUCTION O/B ISO Valve Motor	F-032-27	0.1	0.5	0.2
G38-CC001A	SPCU PUMP MOTOR	F-032-27	2.1	12.0	7.1
G38-CC001B	SPCU PUMP MOTOR	F-032-27	2.1	12.0	7.1
Process Auxiliaries.					
G38-DD001	SPCU DEMINERALIZER	F-032-22	20.4	56.7	39.6

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 6

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- G38	-	131.5
GENERAL ELECTRIC SYSTEM I.D. = G41 FUEL POOL COOLING & CLEANUP System					
Process Equipment.					
G41-C001A	CIRCULATING PUMP	F-032-14	18.1	43.1	28.3
G41-C001B	CIRCULATING PUMP	F-032-15	18.1	43.1	28.3
Valves.					
G41-F019	Valve	F-032-11	13.2	31.1	20.5
G41-F021	Valve	F-032-11	13.2	31.1	20.5
G41-F043	Valve	F-032-11	11.4	27.8	18.0
G41-F045	Valve	F-032-11	11.4	27.8	18.0
Electrical Equipment.					
G41-C001A	CIRCULATING PUMP MOTOR	F-032-14	2.4	14.5	8.9
G41-C001B	CIRCULATING PUMP MOTOR	F-032-15	2.4	14.5	8.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- G41	-	151.3
GENERAL ELECTRIC SYSTEM I.D. = G46 FPC&CU FILTER DEMINERALIZER System					
Process Equipment.					
G46-C001B	HOLDING PUMP	F-007-12	7.7	25.1	15.4
G46-C002	FPC&CU F/D PRECOAT PUMP	F-007-12	9.2	24.7	15.5
G46-C001A	HOLDING PUMP	F-007-17	7.7	25.1	15.4
G46-C004	DRAIN PUMP	F-032-16	6.4	18.3	11.0
Valves.					
G46-F006B	AOV 8" CONTROL Valve	F-007-12	9.5	24.4	15.5
G46-F012B	AOV 3" CONTROL Valve	F-007-12	5.5	17.8	10.2
G46-F005B	AOV 3" CONTROL Valve	F-007-12	3.2	14.4	8.7
G46-F004B	AOV 1" CONTROL Valve	F-007-12	3.2	14.4	8.7
G46-F046B	AOV 10" CONTROL Valve	F-007-12	11.0	26.9	17.4
G46-F009B	AOV 4" GLOBE Valve	F-007-12	3.2	10.2	5.6
G46-F006B	AOV 4" CONTROL Valve	F-007-12	5.6	17.9	11.0
G46-F010B	AOV 8" CONTROL Valve	F-007-12	10.0	25.2	16.1
G46-F011B	AOV 4" CONTROL Valve	F-007-12	5.6	17.9	11.0
G46-F009A	AOV 4" CONTROL Valve	F-007-17	3.2	10.2	5.6
G46-F008A	AOV 8" CONTROL Valve	F-007-17	10.0	25.2	16.1
G46-F010A	AOV 8" CONTROL Valve	F-007-17	10.0	25.2	16.1
G46-F011A	AOV 3" CONTROL Valve	F-007-17	10.0	25.2	16.1
G46-F006A	AOV 3" CONTROL Valve	F-007-17	2.4	8.3	4.4
G46-F012A	AOV 12" CONTROL Valve	F-007-17	5.5	16.7	10.2
G46-F005A	AOV 1" CONTROL Valve	F-007-17	3.2	14.4	8.7
G46-F004A	AOV 10" CONTROL Valve	F-007-17	10.6	26.3	16.9
G46-F046A	RELIEF 1 1/2" Valve	F-007-17	11.0	26.9	17.4
G46-FF201	Valve	F-032-12	3.0	8.2	5.0
G46-FF205	Valve	F-032-12	1.2	5.1	2.9
G46-FF204	Valve	F-032-12	3.7	9.5	5.9

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
 Prepared: December 22, 1978

PAGE - 7

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
G46-PF200	Valve	F-032-12	2.7	7.7	4.6
G46-PF202	Valve	F-032-12	2.7	7.7	4.6
Electrical Equipment.					
G46-C001B	HOLDING PUMP MOTOR	F-007-12	1.0	5.5	2.7
G46-C002	FPO F/D PRECOAT PUMP MOTOR	F-007-12	1.2	6.6	3.7
G46-C001A	HOLDING PUMP MOTOR	F-007-17	1.0	5.5	2.7
G46-CC004	DRAIN PUMP MOTOR	F-032-16	1.0	5.5	2.6
Process Auxiliaries.					
G46-D001B	FPOCU FILTER DEMINERALIZER B	F-007-12	19.4	45.7	30.2
G46-D001A	FPOCU FILTER DEMINERALIZER A	F-007-17	19.4	45.7	30.2
G46-AA910	SERVICE POOL	F-032-18	35.1	93.1	65.4
G46-AA920	FUEL TRANSFER POOL	F-032-19	33.8	86.3	67.5
G46-AA900	FUEL STORAGE POOL	F-032-20	44.9	115.4	84.4
G46-AA930	CASK POOL	F-032-21	31.0	80.8	55.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			G46	-	631.5
GENERAL ELECTRIC SYSTEM I.D. = P38 STANDBY GAS TREATMENT System					
Process Equipment.					
P38-ZZ001A	STANDBY GAS TREATMENT UNIT	F-004-08	1.8	8.8	5.1
P38-CC003B	SGTS HEAT REMOVAL FAN	F-004-09	0.5	2.8	1.6
P38-CC003A	SGTS HEAT REMOVAL FAN	F-004-09	0.5	2.8	1.6
P38-CC001A	EXHAUST FAN	F-004-10	1.4	6.6	3.4
P38-CC001B	EXHAUST FAN	F-004-10	1.4	6.6	3.4
P38-ZZ001B	STANDBY GAS TREATMENT UNIT B	F-018-12	1.8	8.8	5.1
P38-ZZ001B	SGTS EXHAUST FAN B	F-018-12	1.4	6.6	3.4
Valves.					
P38-PF003A	AOV 14" Valve	F-004-08	1.1	5.3	3.2
P38-PF003B	Valve	F-004-08	1.1	5.3	3.2
P38-PF007A	HEAT REMOVAL FAN INTAKE Valve	F-004-09	0.3	1.4	0.7
P38-PF006A	EXHAUST FAN INTAKE Valve	F-004-10	1.3	6.6	4.4
P38-PF007B	HEAT REMOVAL FAN INTAKE Valve	F-018-12	0.4	1.8	0.9
Electrical Equipment.					
P38-ZZ001A	STANDBY GAS TREATMENT UNIT MOTOR	F-004-08	1.3	7.7	4.5
P38-CC003B	SGTS HEAT REMOVAL FAN MOTOR	F-004-09	0.4	2.2	1.0
P38-CC003A	SGTS HEAT REMOVAL FAN MOTOR	F-004-09	0.4	2.2	1.0
P38-PF007A	HEAT REMOVAL FAN INTAKE Valve Mo	F-004-09	0.1	0.5	0.2
P38-CC001A	EXHAUST FAN MOTOR	F-004-10	1.0	5.4	2.9
P38-CC001B	EXHAUST FAN MOTOR	F-004-10	1.0	5.4	2.9
P38-PF006A	EXHAUST FAN INTAKE Valve Motor	F-004-10	0.1	0.5	0.2
P38-ZZ001B	STANDBY GAS TREATMENT UNIT B MOT	F-018-12	1.3	7.7	4.5
P38-ZZ001B	SGTS EXHAUST FAN B MOTOR	F-018-12	1.0	5.4	2.9
P38-PF007B	HEAT REMOVAL FAN INTAKE Valve Mo	F-018-12	0.1	0.5	0.2
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			P38	-	55.7

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
Prepared: December 22, 1978

PAGE - 8

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
GENERAL ELECTRIC SYSTEM I.D. = P46 RI DEMIN. WATER BOOSTER System					
Process Equipment.					
P46-CC001	LEAK TEST BOOSTER PUMP	A-006-09	1.3	7.2	4.8
Electrical Equipment.					
P46-CC001	LEAK TEST BOOSTER PUMP MOTOR	A-006-09	0.1	0.9	0.4
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			P46	-	5.2
GENERAL ELECTRIC SYSTEM I.D. = P48 DECONTAMINATION WASTE System					
Process Equipment.					
P48-CC002	BOOSTER PUMP	F-032-25	3.3	16.7	10.4
P48-CC003	DECON TRANSFER PUMP	F-032-25	3.2	13.0	7.5
Electrical Equipment.					
P48-CC002	BOOSTER PUMP MOTOR	F-032-25	0.5	2.8	1.2
P48-CC003	DECON TRANSFER PUMP MOTOR	F-032-25	0.6	3.4	1.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			P48	-	20.7
GENERAL ELECTRIC SYSTEM I.D. = P53 PNEUMATIC System					
Process Equipment.					
P53-CC001A	PLENUM SYS. AIR COMPRESSOR	F-032-10	3.4	15.7	9.0
Electrical Equipment.					
P53-CC001A	PLENUM SYS. AIR COMPRESSOR MOTOR	F-032-10	0.7	4.0	1.8
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			P53	-	10.8
GENERAL ELECTRIC SYSTEM I.D. = P55 EQUIPMENT DRAIN SUMP System					
Process Equipment.					
P55-CC013A	RCIC RM EQ DRAIN SUMP PUMP A	A-037-13	1.4	6.4	3.5
P55-CC013B	RCIC RM EQ DRAIN SUMP PUMP B	A-037-13	1.4	6.4	3.5
Electrical Equipment.					
P55-CC013A	RCIC RM EQ DRAIN SUMP PUMP A MOT	A-037-13	0.3	2.0	0.9
P55-CC013B	RCIC RM EQ DRAIN SUMP PUMP B MOT	A-037-13	0.3	2.0	0.9
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			P55	-	8.7

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
 Prepared: December 22, 1978

PAGE - 9

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
GENERAL ELECTRIC SYSTEM I.D. = P56 FLOOR DRAIN SUMP System					
Process Equipment.					
P56-CC008A	HPCS RM FL DRAIN SUMP PUMP	A-037-09	1.4	6.6	3.3
P56-CC008B	HPCS RM FL DRAIN SUMP PUMP	A-037-09	1.4	6.6	3.3
P56-CC006A	RHR B RM FL DRAIN SUMP PUMP A	A-037-10	1.4	6.6	3.3
P56-CC006B	RHR B RM FL DRAIN SUMP PUMP B	A-037-10	1.4	6.6	3.3
P56-CC007A	RHR C RM DRAIN SUMP PUMP A	A-037-11	1.4	6.6	3.3
P56-CC007B	RHR C RM DRAIN SUMP PUMP B	A-037-11	1.4	6.6	3.3
P56-CC004A	RCIC RM FLOOR DRAIN SUMP PUMP A	A-037-13	1.4	6.6	3.3
P56-CC004B	RCIC RM FLOOR DRAIN SUMP PUMP B	A-037-13	1.4	6.6	3.3
P56-CC005A	RHR A RM FL SUMP PUMP A	A-037-14	1.4	6.6	3.3
P56-CC003A	LPCS EQUIP DRAIN SUMP PUMP A	A-037-15	1.4	6.4	3.2
P56-CC003B	LPCS EQUIP DRAIN SUMP PUMP B	A-037-15	1.4	6.4	3.2
P56-CC001A	FB201 DRAIN SUMP PUMP	F-032-10	1.4	6.4	3.2
P56-CC001B	FB201 DRAIN SUMP PUMP	F-032-10	1.4	6.4	3.2
P56-CC018A	CASK DECON SUMP PUMP	F-032-25	1.4	6.4	3.2
P56-CC018B	CASK DECON SUMP PUMP	F-032-25	1.4	6.4	3.2
Electrical Equipment.					
P56-CC008A	HPCS RM FL DRAIN SUMP PUMP MOTOR	A-037-09	0.3	2.0	0.6
P56-CC008B	HPCS RM FL DRAIN SUMP PUMP MOTOR	A-037-09	0.3	2.0	0.6
P56-CC006A	RHR B RM FL DRAIN SUMP PUMP A MD	A-037-10	0.3	2.0	0.6
P56-CC006B	RHR B RM FL DRAIN SUMP PUMP B MD	A-037-10	0.3	2.0	0.6
P56-CC007A	RHR C RM DRAIN SUMP PUMP A MOTOR	A-037-11	0.3	2.0	0.6
P56-CC007B	RHR C RM DRAIN SUMP PUMP B MOTOR	A-037-11	0.3	2.0	0.6
P56-CC004A	RCIC RM FLOOR DRAIN SUMP PUMP A	A-037-13	0.3	2.0	0.6
P56-CC004B	RCIC RM FLOOR DRAIN SUMP PUMP B	A-037-13	0.3	2.0	0.6
P56-CC005A	RHR A RM FL SUMP PUMP A MOTOR	A-037-14	0.3	2.0	0.6
P56-CC003A	LPCS EQUIP DRAIN SUMP PUMP A MOT	A-037-15	0.3	2.0	0.6
P56-CC003B	LPCS EQUIP DRAIN SUMP PUMP B MOT	A-037-15	0.3	2.0	0.6
P56-CC001A	FB201 DRAIN SUMP PUMP MOTOR	F-032-10	0.3	2.0	0.6
P56-CC001B	FB201 DRAIN SUMP PUMP MOTOR	F-032-10	0.3	2.0	0.6
P56-CC018A	CASK DECON SUMP PUMP MOTOR	F-032-25	0.3	1.9	0.6
P56-CC018B	CASK DECON SUMP PUMP MOTOR	F-032-25	0.3	1.9	0.6
Process Auxiliaries.					
P56-AA001	FLUSH TANK	A-006-09	5.0	27.4	18.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM -			P56	-	84.6
GENERAL ELECTRIC SYSTEM I.D. = X61 F8 FLOOR DRAIN SUMP System					
Process Auxiliaries.					
X61-XX001	F8 DEMIN SUMP	F-032-10	16.1	41.9	26.6
X61-XX005	CASK DECON SUMP	F-032-25	16.1	41.9	26.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM -			X61	-	53.2

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
 Prepared: December 22, 1978 PAGE - 10

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MLN	MICE MAX	HRS AVE
GENERAL ELECTRIC SYSTEM I.D. = X62 Pb CRANES-HOISTS-ELEVATORS System					
Process Auxiliaries.					
X62-EL004	FUEL INSPECTION JIB & TROLLEY HO	F-015-23	1.8	8.8	5.3
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- X62	-	5.3
GENERAL ELECTRIC SYSTEM I.D. = X63 Pb HEAT. VENT. AIR COND. System					
Process Equipment.					
X63-CC003A	ROOM FAN	F-004-10	0.9	4.8	2.3
X63-BB002A	ROOM COOLER	F-004-10	3.9	13.8	7.6
X63-CC003B	SGT ROOM FAN	F-018-12	0.9	4.8	2.3
X63-BB002B	SGTS COOLER B	F-018-12	3.9	13.8	7.6
X63-CC007A	SA EXH FAN ROOM CLG FAN	F-026-08	0.9	4.8	2.3
X63-BB011A	SA EXH FAN RM UNIT COOLER	F-026-08	2.4	11.1	6.0
X63-CC007B	SA EXH FAN RM CLG FAN	F-026-09	0.9	4.8	2.3
X63-BB011B	SA EXH FAN RM UNIT COOLER	F-026-09	2.4	11.1	6.0
Electrical Equipment.					
X63-CC003A	ROOM FAN MOTOR	F-004-10	0.6	3.4	1.5
X63-CC003B	SGT ROOM FAN MOTOR	F-018-12	0.6	3.4	1.5
X63-CC007A	SA EXH FAN ROOM CLG FAN MOTOR	F-026-08	0.6	3.4	1.5
X63-CC007B	SA FAN MOTOR	F-026-09	0.6	3.4	1.5
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- X63	-	42.5
GENERAL ELECTRIC SYSTEM I.D. = X71 AB FLOOR DRAIN SUMP System					
Process Auxiliaries.					
X71-XX004	HPCS RM DRAIN SUMP	A-037-09	3.7	17.4	9.6
X71-XX006	RHR FL DRAIN SUMP	A-037-10	3.7	17.4	9.6
X71-XX007	RHR C RM FL DRAIN SUMP	A-037-11	3.7	17.4	9.6
X71-XX005	RCIC RM FLOOR DRAIN SUMP	A-037-13	3.7	17.4	9.6
X71-XX003	RCIC RM EQ DRAIN SUMP	A-037-13	2.5	11.5	6.0
X71-XX025	RHR A FL DEMIN SUMP	A-037-14	3.4	17.7	10.0
X71-XX099	LPCS EQUIP SUMP	A-037-15	2.5	11.5	6.0
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- X71	-	61.6
GENERAL ELECTRIC SYSTEM I.D. = X72 AB CRANES-HOISTS-ELEVATORS System					
Process Auxiliaries.					
X72-EE010	CRD MAINT ROOM CRANE	A-006-09	0.2	1.2	0.6
X72-EE007	HPCS MAINT TROLLEY	A-037-09	0.2	1.2	0.6
X72-EE004	MONORAIL AND RHR B TROLLEY	A-037-10	0.2	1.2	0.6
X72-EE005	MONORAIL & RHR C MAIN TROLLEY	A-037-11	0.2	1.2	0.6
X72-EE006	RCIC MAINT TROLLEY	A-037-13	0.2	1.2	0.6
X72-EE003	MONORAIL RHR A MAINT. TROLLEY	A-037-14	0.2	1.2	0.6
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM			- X72	-	3.5

Table 5-3

EQUIPMENT MAINTENANCE SUMMARY SORT AND SUMMARY BY SYSTEMS (Continued)

Summary of BWR/6 Mark III Power Plant

Auxiliary and Fuel Buildings - Major Equipment Maintenance Workloads.

Sort and Summaries by Systems with Equipment in Estimated Radiation Areas Only.
 Prepared: December 22, 1978

PAGE - 11

EQUIPMENT IDENTITY	DESCRIPTION OF THE EQUIPMENT	ROOM I.D.	YEARLY MIN	MICE MAX	HRS AVE
GENERAL ELECTRIC SYSTEM I.D. = X73 AB HEAT. VENT. AIR COND. System					
Process Equipment.					
X73-CC016	CRD MAINT AREA EXH FAN	A-006-09	1.0	5.5	2.6
X73-BB016A	RWCU PUMP ROOM COOLER	A-006-11	4.5	14.8	8.6
X73-CC014A	RWCU PUMP ROOM FAN	A-006-11	0.4	4.7	2.2
X73-CC014B	RWCU PUMP ROOM B FAN	A-006-13	0.4	4.7	2.2
X73-CC014B	RWCU PUMP ROOM FAN	A-006-13	0.4	4.7	2.2
X73-BB016B	RWCU PUMP ROOM A COOLER	A-006-13	4.5	14.8	8.6
X73-CC010A	FAN	A-009-12	1.5	6.8	3.3
X73-CC010B	FAN	A-009-12	1.5	6.8	3.3
X73-BB011A	COOLER	A-009-12	8.6	24.0	14.0
X73-BB011B	COOLER	A-009-12	8.6	24.0	14.0
X73-CC002A	AUX BLD PRESS CNTRL XHST FAN A	A-032-26	0.9	4.9	2.3
X73-CC002B	AUX BLD PRESS CNTRL XHST FAN B	A-032-26	0.9	4.9	2.3
X73-CC004	HPCS PUMP ROOM COOLING FAN	A-037-09	3.1	13.9	7.6
X73-BB004	HPCS PUMP ROOM COOLING UNIT	A-037-09	14.4	38.7	24.6
X73-BB007	RHR B PUMP RM COOL UNIT	A-037-10	10.4	28.0	17.8
X73-CC007	RHR B PUMP ROOM FAN	A-037-10	2.1	9.3	5.0
X73-CC008	RHR C PUMP ROOM FAN	A-037-11	1.9	8.3	4.4
X73-BB008	RHR C PUMP RM COOLER	A-037-11	10.4	28.0	17.8
X73-BB003	RCIC PUMP ROOM COOLING UNIT	A-037-13	7.3	21.3	12.6
X73-CC005	RCIC PUMP ROOM FAN	A-037-13	1.0	5.5	2.6
X73-BB006	RHR A PUMP COOL UNIT	A-037-14	10.4	28.0	17.8
X73-CC006	RHR A PUMP ROOM FAN	A-037-14	2.1	9.3	5.0
X73-BB004	LPCS PUMP ROOM COOLER	A-037-15	13.0	34.9	22.0
X73-CC003	LPCS PUMP ROOM FAN	A-037-15	2.7	12.0	6.5
Electrical Equipment.					
X73-CC016	CRD MAINT AREA EXH FAN MOTOR	A-006-09	0.7	4.0	1.8
X73-CC014A	RWCU PUMP ROOM FAN MOTOR	A-006-11	0.6	3.4	1.6
X73-CC014B	RWCU PUMP ROOM B FAN MOTOR	A-006-13	0.6	3.4	1.6
X73-CC014B	RWCU PUMP ROOM FAN MOTOR	A-006-13	0.6	3.4	1.6
X73-CC010A	FAN MOTOR	A-009-12	1.0	5.3	2.5
X73-CC010B	FAN MOTOR	A-009-12	1.0	5.3	2.5
X73-CC002A	AUX BLD PRESS CNTRL XHST FAN A M	A-032-26	0.6	3.6	1.6
X73-CC002B	AUX BLD PRESS CNTRL XHST FAN B M	A-032-26	0.6	3.6	1.6
X73-CC004	HPCS PUMP ROOM COOLING FAN MOTOR	A-037-09	2.1	13.6	6.5
X73-CC007	RHR B PUMP ROOM FAN MOTOR	A-037-10	1.4	7.6	4.1
X73-CC008	RHR C PUMP ROOM FAN MOTOR	A-037-11	1.2	6.7	3.5
X73-CC005	RCIC PUMP ROOM FAN MOTOR	A-037-13	0.7	4.0	1.8
X73-CC006	RHR A PUMP ROOM FAN MOTOR	A-037-14	1.4	7.6	4.1
X73-CC003	LPCS PUMP ROOM FAN MOTOR	A-037-15	1.8	9.8	5.3
TOTAL MANHOURS YEARLY FOR EQUIPMENT ANALYZED IN SYSTEM - X73			-	-	249.7

TOTAL FOR BUILDINGS 3,018 MANHOURS YEARLY.

GRAND TOTAL YEARLY MANHOURS FOR MAJOR EQUIPMENT IN RADIATION AREAS = 3,018

Table 5-4
EQUIPMENT WITH MAINTENANCE WORKLOADS GREATER THAN
50 MAN-HOURS/YR*

<u>Equipment**</u>	<u>Number of Pieces of Equipment</u>	<u>Estimated Average Maintenance Workload (man-hour/yr)</u>
Miscellaneous RHR Valves & Motors	35	378
Service Cask and Fuel Pools	4	262.8
RHR Heat Exchangers	4	239.8
Miscellaneous FPCCU Filter Demin. System Valves	23	239.1
Miscellaneous RCIC Valves & Motors	12	152.4
CRD Drive Water Pumps and Motors	2	137.8
RHR Pumps and Motors	3	115.8
RWCU Pumps and Motors	2	111.4
Miscellaneous RWCU Valves & Motors	3	94.6
CRD HCU System Valves	3	93.6
RHR Pump Room Fan-Coolers & Motors	3	79.5
Miscellaneous FPCCU System Valves	4	77
FPCCU Circulating Pumps & Motors	2	74.4
Miscellaneous HPCS Valves & Motors	7	73
FPCCU Filter/Demineralizers	2	60.4
	Total	2189.6

*Represents more than 70% of total requirements.

**RHR Residual Heat Remover
FPCCU Fuel Pool Cooling and Cleanup
CRD Control Rod Drive
RWCU Reactor Water Cleanup
HCU Hydraulic Control Unit

Table 5-5
ISI MANPOWER REQUIREMENTS SUMMARY BY SYSTEM

<u>System</u>	<u>Room</u>	<u>Man-Hours</u>	
LPCS	A-037-15	<u>13</u>	Total = 13 man-hours
RCIC	A-037-06	11	Total = 28 man-hours
	A-037-13	<u>17</u>	
RWCU	A-006-12	7	Total = 16 man-hours
	A-006-11	5	
	A-006-13	<u>4</u>	
HPCS	A-037-09	<u>17</u>	Total = 17 man-hours
RHR	A-037-10	14	Total = 36 man-hours
	A-037-11	8	
	A-037-14	<u>14</u>	
CRD	F-032-26	<u>9</u>	Total = 9 man-hours

6. REFERENCES

1. P. D. Knecht, "BWR/6 Drywell and Containment Maintenance and Testing Access Time Estimates," May 1978 (NEDE-23819).
2. P. D. Knecht, "Maintenance Access Time Estimates BWR/6 Radwaste Building," May 1979 (NEDE-23996-2).
3. P. D. Knecht, "Work at Power Access Time Estimates BWR/6 Containment Auxiliary, Fuel, Radwaste and Turbine Buildings," May 1979 (NEDE-23996-3).
4. C. F. Braun & Company Specifications (contained in DRF A62-13.3.4.2)

(a) 110-21	Motor List
(b) 113-05	Air Pressure Vessels
(c) 131-02A,B	Sump Pumps
(d) 131-06	ASME III Centrifugal Pumps
(e) 200-02,03	Instrument List
(f) A-001 to 007 (inclusive)	Architectural Floor Plans
(g) K-001 to 007 (inclusive)	General Arrangement Drawings
(h) K-015 to 025 (inclusive)	Reactor Auxiliary & Fuel Bldg. Arrangement
(i) K-102 to 172 (inclusive)	P&ID's - all affected systems
5. "Pump Handbook," Karassik; Krutzsch; Fraser; Messine, McGraw Hill Book Company 1976, 1st Edition.
6. "Maintenance Engineering Handbook," Higgins & Morrow, McGraw Hill 1977, 3rd Edition.
7. T. F. Sack, "A Complete Guide to Building and Plant Maintenance," Prentice-Hall 1971, 2nd Edition.
8. American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, Subsection IWC and IWD, 1977 Edition with Addenda through Summer 1978.

APPENDIX A
EQUIPMENT DATA SHEETS

BWR/6 Mark III Power Plant - AUXILIARY AND FUEL BUILDINGS - Maintenance Workloads.

Equipment Maintenance Task Estimates - Rooms in Radiation Areas Only.

PAGE - 1

SUMMARY OF INFORMATION AND INDEX BY ROOMS.

ROOM I.D.	DESCRIPTION OF THE ROOM	ESTIMATED Process	AVERAGE Valves	EQUIPMENT Electrical	MAINTENANCE AUX.	ROOM TOTAL	DETAIL PAGE START *
A-009-04	CRD Maintenance Room	7.4	0.0	2.2	19.2	28.7	1
A-006-11	RWCU Pump Room	60.5	0.0	7.1	0.0	67.7	2
A-009-12	RWCU Valve Room	0.0	93.5	0.9	0.0	94.5	3
A-006-13	RWCU Pump Room	62.7	0.0	8.7	0.0	71.4	5
A-009-12	Stream Tunnel Room	35.7	0.0	5.1	0.0	40.8	7
A-032-26	Temporary Work Area Room	4.6	0.0	3.2	0.0	7.7	8
A-037-04	Pipe Chase Room	0.0	20.7	0.2	0.0	20.9	9
A-037-06	Pipe Chase Room	2.9	0.0	0.5	0.0	3.4	10
A-037-08	Pipe Chase Room	0.0	13.5	0.2	0.0	13.7	10
A-037-09	HPCS Pump Room	64.8	71.2	17.9	10.6	164.5	11
A-037-10	Heat Exchangers & Pump B Room	172.9	170.7	18.9	10.5	380.0	17
A-037-11	RHR Jumps Room	61.6	8.8	14.9	10.5	95.8	29
A-037-13	RWCU Pump Room	78.4	81.9	9.1	16.4	185.8	31
A-037-14	Heat Exchangers & Pump A Room	176.3	155.6	17.3	10.5	359.8	43
A-037-15	LPCS Pump Room	52.3	29.5	15.0	6.0	102.7	53
AUXILIARY BUILDING TOTALS						1,637.5	

*These page numbers refer to the table page numbers, above, and not the document page numbers.

BWR/6 Mark III Power Plant - AUXILIARY AND FUEL BUILDINGS - Maintenance Workloads.

Prepared: December 22, 1978
Equipment Maintenance Task Estimates - Rooms in Radiation Areas Only.

PAGE - 2

SUMMARY OF INFORMATION AND INDEX BY ROOMS.

ROOM I.D.	DESCRIPTION OF THE ROOM	ESTIMATED Process	AVERAGE Valves	EQUIPMENT Electr	MAINTENANCE Cal	MANEUVERS Aux.	ROOM TOTAL	DETAIL PAGE START
F-004-0d	Standby Gas Treatment Room	5.1	6.4	4.5	0.0	0.0	16.1	59
F-004-09	Fan Room	2.6	0.7	2.2	0.0	0.0	5.4	60
F-004-10	Fan Room	16.7	4.4	7.6	0.0	0.0	28.6	61
F-007-12	FPOCU Filter Demineralizer B Room	30.9	104.8	6.3	30.2	0.0	172.3	63
F-007-17	FPOCU Filter Demineralizer A Room	15.4	111.4	2.7	30.2	0.0	159.6	67
F-015-23	Cask Pool Room	0.0	0.0	0.0	5.3	0.0	5.3	70
F-018-12	Standby Gas Treatment B Room	19.4	0.9	9.2	0.0	0.0	18.3	70
F-026-08	Fan 8 Room	11.7	0.0	4.1	0.0	0.0	15.8	72
F-026-09	Fan 9 Room	11.7	0.0	4.1	0.0	0.0	15.8	74
F-032-10	Standby Gas Treatment Service Room	16.0	0.0	3.5	26.6	0.0	46.1	75
F-032-11	Equipment Area Room	0.0	77.0	0.0	0.0	0.0	77.0	77
F-032-12	FPOCU Filter Demin. B'wash Tank Room	0.0	23.1	0.0	0.0	0.0	23.1	78
F-032-14	FPOCU Pump Room	28.3	0.0	8.9	0.0	0.0	37.1	79
F-032-15	FPOCU Pump Room	28.3	0.0	8.9	0.0	0.0	37.1	79
F-032-16	FPOCU Transfer Pump Room	11.0	0.0	2.8	0.0	0.0	13.8	80
F-032-18	Service Pool Room	0.0	0.0	0.0	65.4	0.0	65.4	80
F-032-19	Fuel Transfer Pool Room	0.0	0.0	0.0	57.5	0.0	57.5	81
F-032-20	Fuel Storage Pool Room	0.0	0.0	0.0	84.4	0.0	84.4	81
F-032-21	Cask Pool Room	0.0	0.0	0.0	55.5	0.0	55.5	81
F-032-22	SPCU Filter Demineralizer Room	0.0	21.6	0.0	39.6	0.0	61.2	81
F-032-25	Transfer Pump Room	51.4	0.0	4.5	26.6	0.0	82.5	83
F-032-26	CRD Drive Water Pump Room	126.3	93.5	28.8	0.0	0.0	248.6	85
F-032-27	Access Area Room	34.6	20.8	14.9	0.0	0.0	70.3	86
FUEL BUILDING TOTALS		408.3	464.6	112.9	421.3		1,407.0	
GRAND TOTALS		1,199.4	1,110.1	234.0	505.0		3,044.6	

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 1

A-006-09

Process Equipment.

EQUIPMENT I.D. - P46-CC001 LEAK TEST BOOSTER PUMP
SYSTEM I.D. - P46 RI DEMIN. WATER BOOSTER System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.8 AVERAGE;
Expected Manhour Range: 1.3 Minimum; 7.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.6	98 D	2.0 Hrs
RS	2.7	588 D	0.9 Hrs
RO	5.5	1,176 D	1.7 Hrs
MD	43.8	20-40 Years	1.0 Hrs

EQUIPMENT I.D. - X73-CC016 CRD MAINT AREA EXH FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D = K-164

EST. YEARLY MAINTENANCE MANHOURS: 2.6 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.5 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.1	37 D	1.4 Hrs
RS	0.6	222 D	0.5 Hrs
RO	1.3	444 D	1.0 Hrs
MD	5.8	7-14 Years	0.3 Hrs

A-006-09

Electrical Equipment.

EQUIPMENT I.D. - P46-CC001 LEAK TEST BOOSTER PUMP MOTOR
SYSTEM I.D. - P46 RI DEMIN. WATER BOOSTER System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.9 Maximum.

Est. Yearly Run Hours 158 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.1	98 D	0.2 Hrs
RS	0.3	588 D	0.1 Hrs
RO	0.5	1,176 D	0.2 Hrs
MD	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC016 CRD MAINT AREA EXH FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D = I-164

EST. YEARLY MAINTENANCE MANHOURS: 1.8 AVERAGE;
Expected Manhour Range: 0.7 Minimum; 4.0 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.1	37 D	0.9 Hrs
RS	0.4	222 D	0.4 Hrs
RO	0.9	444 D	0.7 Hrs
MD	4.0	7-14 Years	0.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 2

A-006-09 Process Auxiliaries.

EQUIPMENT I.D. - P56-AA001 FLUSH TANK
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 18.6 AVERAGE;
Expected Manhour Range: 5.0 Minimum; 27.4 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 7 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.4	98 D	7.8 Hrs
10.6	588 D	3.3 Hrs
21.2	1,176 D	6.6 Hrs
53.5	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - X72-EE010 CRD MAINT ROOM CRANE
SYSTEM I.D. - X72 AB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: A-006-09 = CRD Maintenance Room
C.F. Braun P & I D = K-016

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.7	1,176 D	0.2 Hrs
5.7	20-40 Years	0.1 Hrs

A-006-11 Process Equipment.

EQUIPMENT I.D. - G33-C001A RWCU PUMP A
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-11 = RWCU Pump Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 50.1 AVERAGE;
Expected Manhour Range: 39.2 Minimum; 65.5 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
4.9	75 D	20.3 Hrs
21.7	450 D	8.8 Hrs
43.4	900 D	17.6 Hrs
116.1	13-26 Years	2.8 Hrs

EQUIPMENT I.D. - X73-BB016A RWCU PUMP ROOM COOLER
SYSTEM I.D. - X73 AB HEAT, VENT, AIR COND. System
ROOM / LOCATION: A-006-11 = RWCU Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 8.3 AVERAGE;
Expected Manhour Range: 4.5 Minimum; 14.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.6 Hrs
3.8	450 D	1.5 Hrs
7.5	900 D	3.0 Hrs
20.1	14-28 Years	0.4 Hrs

A-6

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 3

EQUIPMENT I.D. - X73-CC014A RWCU PUMP ROOM FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-11 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.2 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.7 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	1.0 Hrs
1.1	450 D	0.4 Hrs
2.1	900 D	0.9 Hrs
5.7	15-30 Years	0.1 Hrs

A-006-11 Electrical Equipment.

EQUIPMENT I.D. - G33-C001A RWCU PUMP A MOTOR
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-11 = RWCU Pump Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 5.6 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 9.9 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	75 D	2.6 Hrs
2.7	450 D	1.1 Hrs
5.5	900 D	2.2 Hrs
14.7	15-30 Years	0.3 Hrs

EQUIPMENT I.D. - X73-CC014A RWCU PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-11 = RWCU Pump Room
C.F. Braun P & I D = K-153

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

A-006-12 Valves.

EQUIPMENT I.D. - G33-P004 RWCU SUCT O/B ISO Valve
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-12 = RWCU Valve Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 33.2 AVERAGE;
Expected Manhour Range: 25.5 Minimum; 43.8 Maximum.

Valve Size 6 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	37 D	14.0 Hrs
7.2	222 D	5.9 Hrs
14.4	444 D	11.8 Hrs
56.0	6-12 Years	3.5 Hrs

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 4

EQUIPMENT I.D. - G33-F039 RWCU RETURN O/B ISO Valve
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-12 = RWCU Valve Room
C.F. Braun P & I D = K-112B

EST. YEARLY MAINTENANCE MANHOURS: 33.2 AVERAGE;
Expected Manhour Range: 25.5 Minimum; 43.8 Maximum.

Valve Size 6 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	37 D	14.0 Hrs
7.2	222 D	5.9 Hrs
14.4	444 D	11.8 Hrs
56.0	6-12 Years	3.5 Hrs

EQUIPMENT I.D. - G33-F034 RWCU DISCH TO MAIN COND Valve
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-12 = RWCU Valve Room
C.F. Braun P & I D = K-112B

EST. YEARLY MAINTENANCE MANHOURS: 27.2 AVERAGE;
Expected Manhour Range: 18.4 Minimum; 38.1 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.3	37 D	11.5 Hrs
5.9	222 D	4.9 Hrs
11.8	444 D	9.7 Hrs
46.0	6-12 Years	2.8 Hrs

A-006-12 Electric 1 Equipment.

EQUIPMENT I.D. - G33-F004 RWCU SUCT O/B ISO Valve Motor
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-12 = RWCU Valve Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.6 Maximum.

Est. Yearly Run Hours 111 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.2	588 D	0.1 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - G33-F039 RWCU RETURN O/B ISO Valve Motor
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-12 = RWCU Valve Room
C.F. Braun P & I D = K-112B

EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.6 Maximum.

Est. Yearly Run Hours 111 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.2	588 D	0.1 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-1-B

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 5

EQUIPMENT I.D. - G33-F014 RWCU DISCH TO MAIN COND Valve Mo
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-1c = RWCU Valve Room
C.F. Braun P & I D = K-112B

EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 0.9 Maximum.

Est. Yearly Run Hours 169 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.3	588 D	0.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.5	1,176 D	0.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-006-13 Process Equipment.

EQUIPMENT I.D. - G33-C001B RWCU PUMP
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 50.1 AVERAGE;
Expected Manhour Range: 39.2 Minimum; 65.5 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	4.9	75 D	20.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	21.7	450 D	8.8 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	43.4	900 D	17.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	116.1	13-26 Years	2.8 Hrs

EQUIPMENT I.D. - X73-CC014B RWCU PUMP ROOM B FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.2 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.7 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	75 D	1.0 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.1	450 D	0.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.1	900 D	0.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	5.7	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC014B RWCU PUMP ROOM FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.2 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.7 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	75 D	1.0 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.1	450 D	0.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.1	900 D	0.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	5.7	15-30 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 6

EQUIPMENT I.D. - X73-BB016B RWCU PUMP ROOM A COOLER
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 8.3 AVERAGE;
Expected Manhour Range: 4.5 Minimum; 14.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.6 Hrs
3.8	450 D	1.5 Hrs
7.5	900 D	3.0 Hrs
20.1	14-28 Years	0.4 Hrs

A-006-13 Electrical Equipment.

EQUIPMENT I.D. - G33-C001B RWCU PUMP MOTOR
SYSTEM I.D. - G33 REACTOR WATER CLEAN-UP System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-112A

EST. YEARLY MAINTENANCE MANHOURS: 5.6 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 9.9 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	75 D	2.6 Hrs
2.7	450 D	1.1 Hrs
5.5	900 D	2.2 Hrs
14.7	15-30 Years	0.3 Hrs

EQUIPMENT I.D. - X73-CC014B RWCU PUMP ROOM B FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC014B RWCU PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-006-13 = RWCU Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 7

A-009-12 Process Equipment.

EQUIPMENT I.D. - X73-CC010A FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D = K-164

EST. YEARLY MAINTENANCE MANHOURS: 3.3 AVERAGE;
Expected Manhour Range: 1.5 Minimum; 6.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	75 D	1.6 Hrs
1.6	450 D	0.7 Hrs
3.3	900 D	1.3 Hrs
8.7	15-30 Years	0.2 Hrs

EQUIPMENT I.D. - X73-CC010B FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D = K-164

EST. YEARLY MAINTENANCE MANHOURS: 3.3 AVERAGE;
Expected Manhour Range: 1.5 Minimum; 6.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	75 D	1.6 Hrs
1.6	450 D	0.7 Hrs
3.3	900 D	1.3 Hrs
8.7	15-30 Years	0.2 Hrs

EQUIPMENT I.D. - X73-BB011A COOLER
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 14.5 AVERAGE;
Expected Manhour Range: 8.8 Minimum; 24.0 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.5	75 D	9.4 Hrs
6.6	450 D	2.7 Hrs
13.2	900 D	5.4 Hrs
35.3	14-28 Years	0.8 Hrs

EQUIPMENT I.D. - X73-BB011B COOLER
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 14.5 AVERAGE;
Expected Manhour Range: 8.8 Minimum; 24.0 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.5	75 D	9.4 Hrs
6.6	450 D	2.7 Hrs
13.2	900 D	5.4 Hrs
35.3	14-28 Years	0.8 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 8

A-009-12

Electrical Equipment.

EQUIPMENT I.D. - X73-CC010A FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D = K-164

EST. YEARLY MAINTENANCE MANHOURS: 2.5 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.3 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.3	75 D	1.2 Hrs
RS	1.2	450 D	0.5 Hrs
RO	2.5	900 D	1.0 Hrs
MD	6.6	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC010B FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-009-12 = Steam Tunnel Room
C.F. Braun P & I D = K-164

EST. YEARLY MAINTENANCE MANHOURS: 2.5 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.3 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.3	75 D	1.2 Hrs
RS	1.2	450 D	0.5 Hrs
RO	2.5	900 D	1.0 Hrs
MD	6.6	15-30 Years	0.1 Hrs

A-032-26

Process Equipment.

EQUIPMENT I.D. - X73-CC002A AUX BLD PRESS CNTRL XHST FAN A
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-032-26 = Temporary Work Area Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.9 Maximum.

Est. Yearly Run Hours 3,986 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.2	66 D	1.1 Hrs
RS	1.0	396 D	0.5 Hrs
RO	2.0	792 D	0.9 Hrs
MD	5.8	13-26 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC002B AUX BLD PRESS CNTRL XHST FAN B
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-032-26 = Temporary Work Area Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.9 Maximum.

Est. Yearly Run Hours 3,986 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.2	66 D	1.1 Hrs
RS	1.0	396 D	0.5 Hrs
RO	2.0	792 D	0.9 Hrs
MD	5.8	13-26 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1970

PAGE - 9

A-032-26 Electrical Equipment.

EQUIPMENT I.D. - X73-OC002A AUX BLD PRESS CNTRL XHST FAN A M EST. YEARLY MAINTENANCE MANHOURS: 1.6 AVERAGE;
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System Expected Manhour Range: 0.6 Minimum; 3.6 Maximum.
ROOM / LOCATION: A-032-26 = Temporary Work Area Room
C.F. Braun P & I D = K-163

Est. Yearly Run Hours 3,986 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	66 D	0.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.7	396 D	0.3 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.4	792 D	0.6 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	4.0	13-26 Years	0.1 Hrs

EQUIPMENT I.D. - X73-OC002B AUX BLD PRESS CNTRL XHST FAN B M EST. YEARLY MAINTENANCE MANHOURS: 1.6 AVERAGE;
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System Expected Manhour Range: 0.6 Minimum; 3.6 Maximum.
ROOM / LOCATION: A-032-26 = Temporary Work Area Room
C.F. Braun P & I D = K-163

Est. Yearly Run Hours 3,986 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	66 D	0.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.7	396 D	0.3 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.4	792 D	0.6 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	4.0	13-26 Years	0.1 Hrs

A-037-04 Valves.

EQUIPMENT I.D. - E12-F004B RHR SUCT Valve EST. YEARLY MAINTENANCE MANHOURS: 20.7 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 17.2 Minimum; 26.0 Maximum.
ROOM / LOCATION: A-037-04 = Pipe Chase Room
C.F. Braun P & I D = K-107B

Valve Size 24 inches Max. Crew 3 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.5	98 D	8.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	11.3	588 D	3.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	22.6	1,176 D	7.0 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	70.2	20-40 Years	1.2 Hrs

A-037-04 Electrical Equipment.

EQUIPMENT I.D. - E12-F004B RHR SUCT Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-04 = Pipe Chase Room
C.F. Braun P & I D = K-107B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-13

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 10

A-037-06 Process Equipment.

EQUIPMENT I.D. - E51-C002A RCIC GLAND SEAL COMP.
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-06 = Pipe Chase Room
C.F. Braun P & I D = K-110

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 5.0 Maximum.
Est. Yearly Run Hours 219 Max. Crew 2 Men.

	Task Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.9	588 D	0.6 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.7	1,176 D	1.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	22.6	20-40 Years	0.5 Hrs

A-037-06 Electrical Equipment.

EQUIPMENT I.D. - E51-C002A RCIC GLAND SEAL COMP. MOTOR
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-06 = Pipe Chase Room
C.F. Braun P & I D = K-110

EST. YEARLY MAINTENANCE MANHOURS: 0.5 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.
Est. Yearly Run Hours 219 Max. Crew 1 Man.

	Task Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.3	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.7	1,176 D	0.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-037-08 Valves.

EQUIPMENT I.D. - E12-P004A RHR SUCT Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-08 = Pipe Chase Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 13.5 AVERAGE;
Expected Manhour Range: 5.9 Minimum; 21.2 Maximum.
Valve Size 24 inches Max. Crew 3 Men

	Task Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.5	30 D	5.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.4	180 D	2.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.7	360 D	4.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	21.2	5-10 Years	1.6 Hrs

A-037-08 Electrical Equipment.

EQUIPMENT I.D. - E12-P004A RHR SUCT Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-08 = Pipe Chase Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
Est. Yearly Run Hours 100 Max. Crew 1 Man.

	Task Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

MEDE-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 11

A-037-09 Process Equipment.

EQUIPMENT I.D. - E22-C003 HPCS LINE FILL PUMP
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 2.0 AVERAGE;
Expected Manhour Range: 0.8 Minimum; 3.8 Maximum.
Est. Yearly Run Hours 219 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	98 D	0.9 Hrs
1.2	588 D	0.4 Hrs
2.3	1,176 D	0.7 Hrs
14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E22-C001 HPCS PUMP
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 22.9 AVERAGE;
Expected Manhour Range: 15.0 Minimum; 31.5 Maximum.
Est. Yearly Run Hours 219 Max. Crew 8 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.9	98 D	9.6 Hrs
13.1	588 D	4.1 Hrs
26.2	1,176 D	8.1 Hrs
159.8	20-40 Years	3.3 Hrs

EQUIPMENT I.D. - P56-CC008A HPCS RM FL DRAIN SUMP PUMP
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.
Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.5 Hrs
2.0	588 D	0.6 Hrs
4.0	1,176 D	1.2 Hrs
14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P56-CC008B HPCS RM FL DRAIN SUMP PUMP
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.
Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.5 Hrs
2.0	588 D	0.6 Hrs
4.0	1,176 D	1.2 Hrs
14.3	20-40 Years	0.3 Hrs

A-15

MEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 12

EQUIPMENT I.D. - X73-CC004 HPCS PUMP ROOM COOLING FAN
SYSTEM I.D. - X73 AB HEAT, VENT. AIR COND. System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 7.8 AVERAGE;
Expected Manhour Range: 3.1 Minimum; 13.9 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	0.4	37 D	3.7 Hrs
	1.9	222 D	1.6 Hrs
	3.8	444 D	3.1 Hrs
	17.5	7-14 Years	1.0 Hrs

EQUIPMENT I.D. - X73-BB002 HPCS PUMP ROOM COOLING UNIT
SYSTEM I.D. - X73 AB HEAT, VENT. AIR COND. System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 24.9 AVERAGE;
Expected Manhour Range: 14.4 Minimum; 38.7 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	1.3	37 D	11.1 Hrs
	5.7	222 D	4.7 Hrs
	11.3	444 D	9.3 Hrs
	52.0	7-14 Years	2.9 Hrs

A-037-09 Valves.

EQUIPMENT I.D. - E22-F011 HPCS BYPASS TO COND Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 9.3 AVERAGE;
Expected Manhour Range: 5.6 Minimum; 13.4 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	1.2	98 D	3.9 Hrs
	5.3	588 D	1.6 Hrs
	10.6	1,176 D	3.3 Hrs
	44.9	20-40 Years	0.9 Hrs

EQUIPMENT I.D. - E22-F010 HPCS BYPASS TO TANK Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 9.3 AVERAGE;
Expected Manhour Range: 5.6 Minimum; 13.4 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	1.2	98 D	3.9 Hrs
	5.3	588 D	1.6 Hrs
	10.6	1,176 D	3.3 Hrs
	44.9	20-40 Years	0.9 Hrs

BAR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms,
Prepared: December 20, 1978

PAGE - 13

EQUIPMENT I.D. - E22-F001 HPCS SUCT Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 10.3 AVERAGE;
Expected Manhour Range: 3.4 Minimum; 16.3 Maximum.

Valve Size 16 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.5	37 D	4.4 Hrs
2.2	222 D	1.8 Hrs
4.5	444 D	3.7 Hrs
17.4	6-12 Years	1.1 Hrs

EQUIPMENT I.D. - E22-F012 HPCS MIN FLOW Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 6.9 AVERAGE;
Expected Manhour Range: 3.3 Minimum; 10.2 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.9	98 D	2.9 Hrs
3.9	588 D	1.2 Hrs
7.8	1,176 D	2.4 Hrs
33.3	20-40 Years	0.6 Hrs

EQUIPMENT I.D. - E22-F023 HPCS BYPASS Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 10.6 AVERAGE;
Expected Manhour Range: 6.7 Minimum; 15.2 Maximum.

Valve Size 12 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.4	98 D	4.5 Hrs
6.0	588 D	1.9 Hrs
12.1	1,176 D	3.8 Hrs
51.3	20-40 Years	1.0 Hrs

EQUIPMENT I.D. - E22-F004 HPCS DISCH Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
Expected Manhour Range: 6.1 Minimum; 14.3 Maximum.

Valve Size 12 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.3	98 D	4.2 Hrs
5.7	588 D	1.8 Hrs
11.3	1,176 D	3.5 Hrs
48.1	20-40 Years	0.9 Hrs

4-17

MEAS 130906-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 14

EQUIPMENT I.D. - E22-F015 HPCS SUCT Valve
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 14.9 AVERAGE;
Expected Manhour Range: 6.3 Minimum; 23.0 Maximum.

Valve Size 24 inches Max. Crew 3 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	30 D	6.2 Hrs
2.6	180 D	2.7 Hrs
5.2	360 D	5.3 Hrs
23.5	5-10 Years	1.8 Hrs

A-037-09 Electrical Equipment.

EQUIPMENT I.D. - E22-C003 HPCS LINE FILL PUMP MOTOR
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 0.5 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.1 Maximum.

Est. Yearly Run Hours 219 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.2 Hrs
0.3	588 D	0.1 Hrs
0.7	1,176 D	0.2 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E22-C001 HPCS PUMP MOTOR
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 7.4 AVERAGE;
Expected Manhour Range: 1.3 Minimum; 10.3 Maximum.

Est. Yearly Run Hours 219 Max. Crew 7 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	98 D	3.5 Hrs
4.8	588 D	1.5 Hrs
9.5	1,176 D	3.0 Hrs
58.1	20-40 Years	1.2 Hrs

EQUIPMENT I.D. - P56-CC008A HPCS RM FL DRAIN SUMP PUMP MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 15

EQUIPMENT I.D. - P56-CC008B HPCS RM FL DRAIN SUMP PUMP MOTOR EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-119B

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC004 HPCS PUMP ROOM COOLING FAN MOTOR EST. YEARLY MAINTENANCE MANHOURS: 6.5 AVERAGE;
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System Expected Manhour Range: 2.1 Minimum; 11.5 Maximum.
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-163

Est. Yearly Run Hours 7,096 Max. Crew 3 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	37 D	3.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.6	222 D	1.3 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.2	444 D	2.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	14.7	7-14 Years	0.8 Hrs

EQUIPMENT I.D. - E22-F011 HPCS BYPASS TO COND Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System Expected Manhour Range: 0.1 Minimum; 0.6 Maximum.
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.8	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E22-F010 HPCS BYPASS TO TANK Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System Expected Manhour Range: 0.1 Minimum; 0.6 Maximum.
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.8	20-40 Years	0.1 Hrs

A-19

MEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 16

EQUIPMENT I.D. - E22-F001 HPCS SUCT Valve Motor
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E22-F012 HPCS MIN FLOW Valve Motor
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E22-F023 HPCS BYPASS Valve Motor
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E22-F004 HPCS DISCH Valve Motor
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.7 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.4	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	6.0	20-40 Years	0.1 Hrs

A-20

NEDE-2396-1

BNR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 17

EQUIPMENT I.D. - E22-F015 HPCS SUCT Valve Motor
SYSTEM I.D. - E22 HIGH PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-109B

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-037-09 Process Auxiliaries.

EQUIPMENT I.D. - X72-BE007 HPCS MAINT TROLLEY
SYSTEM I.D. - X72 AB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D = K-015

EST. YEARLY MAINTENANCE MANHOURS: 0.7 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 1.4 Maximum.

Est. Yearly Run Hours 158 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.9	1,176 D	0.3 Hrs
6.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - X71-XX004 HPCS RM DRAIN SUMP
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-09 = HPCS Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
Expected Manhour Range: 3.7 Minimum; 17.4 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	30 D	4.1 Hrs
1.7	180 D	1.7 Hrs
3.4	360 D	3.4 Hrs
18.4	5-10 Years	1.5 Hrs

A-037-10 Process Equipment.

EQUIPMENT I.D. - E12-C002B RHR B PUMP
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 30.0 AVERAGE;
Expected Manhour Range: 24.3 Minimum; 38.4 Maximum.

Est. Yearly Run Hours 701 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
3.8	98 D	12.6 Hrs
17.1	588 D	5.3 Hrs
34.2	1,176 D	10.6 Hrs
128.2	20-40 Years	2.3 Hrs

A-21

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 18

EQUIPMENT I.D. - E12-8001D RHR HEAT XCHGR D
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 58.6 AVERAGE;
Expected Manhour Range: 43.8 Minimum; 70.1 Maximum.

Est. Yearly Run Hours 701 Max. Crew 10 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	7.5	98 D	24.7 Hrs
RS	33.5	588 D	10.4 Hrs
RO	66.9	1,176 D	20.8 Hrs
MD	222.4	20-40 Years	3.9 Hrs

EQUIPMENT I.D. - E12-8001B RHR HEAT XCHGR B
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 61.3 AVERAGE;
Expected Manhour Range: 45.8 Minimum; 73.3 Maximum.

Est. Yearly Run Hours 701 Max. Crew 10 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	7.9	98 D	25.8 Hrs
RS	35.0	588 D	10.9 Hrs
RO	70.0	1,176 D	21.7 Hrs
MD	222.4	20-40 Years	3.9 Hrs

EQUIPMENT I.D. - P56-CC006A RHR B RM FL DRAIN SUMP PUMP A
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P56-CC006B RHR B RM FL DRAIN SUMP PUMP B
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

A-22

WED-23906-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 19

EQUIPMENT I.D. - X73-BB007 RHR B PUMP RM COOL UNIT
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 17.8 AVERAGE;
Expected Manhour Range: 10.4 Minimum; 28.0 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 5 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.4	98 D	7.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	10.7	588 D	3.3 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	21.3	1,176 D	6.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.0	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - X73-CC007 RHR B PUMP ROOM FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 5.0 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 9.3 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 3 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	98 D	2.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.2	588 D	1.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.4	1,176 D	2.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	14.5	20-40 Years	0.2 Hrs

A-037-10 Valves.

EQUIPMENT I.D. - E12-F024B RHR TO POOL Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107

EST. YEARLY MAINTENANCE MANHOURS: 12.3 AVERAGE;
Expected Manhour Range: 9.9 Minimum; 16.9 Maximum.

Valve Size 14 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.6	98 D	2.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.0	588 D	2.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	14.1	1,176 D	4.4 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	43.8	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - E12-F026B RHR EXCH TO RCIC Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.1	98 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	5.0	588 D	1.6 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	10.1	1,176 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	31.4	20-40 Years	0.5 Hrs

A-23

MEDE-23996-1

BNR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 20

EQUIPMENT I.D. - E12-F006B RHR SHUTDOWN COOLING Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.

Valve Size 18 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.8	98 D	5.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.9	588 D	2.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.7	1,176 D	4.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F053B RHR INJ Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 13.4 AVERAGE;
Expected Manhour Range: 10.8 Minimum; 18.0 Maximum.

Valve Size 14 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.7	98 D	5.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.6	588 D	2.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.3	1,176 D	4.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	47.5	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F047B RHR EXCH SHELL INLET Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.

Valve Size 18 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.8	98 D	5.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.9	588 D	2.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.7	1,176 D	4.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F027A RHR INJ LINE Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 12.3 AVERAGE;
Expected Manhour Range: 9.9 Minimum; 16.9 Maximum.

Valve Size 14 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.6	98 D	5.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.0	588 D	2.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	14.1	1,176 D	4.4 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	43.8	20-40 Years	0.7 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 21

EQUIPMENT I.D. - E12-F027B	RHR INJ LINE Valve	EST. YEARLY MAINTENANCE MANHOURS: 12.3	AVERAGE;
SYSTEM I.D. - E12	RESIDUAL HEAT REMOVAL System	Expected Manhour Range: 9.9 Minimum; 16.9 Maximum.	
ROOM / LOCATION: A-037-10	RHR Heat Exchangers & Pump B Room		
C.F. Braun P & I D = K-107B		Valve Size 14 inches	Max. Crew 2 Men
RI Inspect, Minor Adjustments, Replace Consumables -		Task Manhours 1.6	Frequency 98 D
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -		7.0	588 D
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies		14.1	1,176 D
MD Complete Disassembly and Rework to Restore to Design Specs -		43.8	20-40 Years
			Yearly Contribution 5.2 Hrs
			2.2 Hrs
			4.4 Hrs
			0.7 Hrs
EQUIPMENT I.D. - E12-F024B	RHR TO POOL Valve	EST. YEARLY MAINTENANCE MANHOURS: 8.0	AVERAGE;
SYSTEM I.D. - E12	RESIDUAL HEAT REMOVAL System	Expected Manhour Range: 5.1 Minimum; 12.4 Maximum.	
ROOM / LOCATION: A-037-10	RHR Heat Exchangers & Pump B Room		
C.F. Braun P & I D = K-107C		Valve Size 14 inches	Max. Crew 2 Men
RI Inspect, Minor Adjustments, Replace Consumables -		Task Manhours 1.0	Frequency 98 D
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -		4.6	588 D
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies		9.2	1,176 D
MD Complete Disassembly and Rework to Restore to Design Specs -		28.6	20-40 Years
			Yearly Contribution 3.4 Hrs
			1.4 Hrs
			2.8 Hrs
			0.5 Hrs
EQUIPMENT I.D. - E12-F073B	RHR EXCH VENT Valve	EST. YEARLY MAINTENANCE MANHOURS: 5.4	AVERAGE;
SYSTEM I.D. - E12	RESIDUAL HEAT REMOVAL System	Expected Manhour Range: 2.5 Minimum; 9.0 Maximum.	
ROOM / LOCATION: A-037-10	RHR Heat Exchangers & Pump B Room		
C.F. Braun P & I D = K-107C		Valve Size 1 inches	Max. Crew 1 Man
RI Inspect, Minor Adjustments, Replace Consumables -		Task Manhours 0.7	Frequency 98 D
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -		3.1	588 D
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies		6.2	1,176 D
MD Complete Disassembly and Rework to Restore to Design Specs -		19.1	20-40 Years
			Yearly Contribution 2.3 Hrs
			1.0 Hrs
			1.9 Hrs
			0.3 Hrs
EQUIPMENT I.D. - E12-F074B	RHR EXCH VENT Valve	EST. YEARLY MAINTENANCE MANHOURS: 5.4	AVERAGE;
SYSTEM I.D. - E12	RESIDUAL HEAT REMOVAL System	Expected Manhour Range: 2.5 Minimum; 9.0 Maximum.	
ROOM / LOCATION: A-037-10	RHR Heat Exchangers & Pump B Room		
C.F. Braun P & I D = K-107C		Valve Size 1 inches	Max. Crew 1 Man
RI Inspect, Minor Adjustments, Replace Consumables -		Task Manhours 0.7	Frequency 98 D
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -		3.1	588 D
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies		6.2	1,176 D
MD Complete Disassembly and Rework to Restore to Design Specs -		19.1	20-40 Years
			Yearly Contribution 2.3 Hrs
			1.0 Hrs
			1.9 Hrs
			0.3 Hrs

A-25

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 22

EQUIPMENT I.D. - E12-F048B RHR EXCH SHELL BYPASS Valve EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Valve Size 18 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.8	98 D	5.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.9	588 D	2.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.7	1,176 D	4.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F003B RHR EXCH SHELL OUTLET Valve EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Valve Size 18 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.8	98 D	5.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.9	588 D	2.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.7	1,176 D	4.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F011B RHR EXCH TO POOL Valve EST. YEARLY MAINTENANCE MANHOURS: 5.1 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 2.9 Minimum; 8.3 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	98 D	2.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.9	588 D	0.9 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.8	1,176 D	1.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	18.1	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E12-F087B RHR STEAM ISO Valve EST. YEARLY MAINTENANCE MANHOURS: 8.0 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 5.6 Minimum; 12.1 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.0	98 D	3.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	4.6	588 D	1.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	9.2	1,176 D	2.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	28.5	20-40 Years	0.5 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 23

EQUIPMENT I.D. - E12-F052B MOV 10" CONTROL Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 10.5 AVERAGE;
Expected Manhour Range: 8.2 Minimum; 14.9 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.4	98 D	4.4 Hrs
6.0	588 D	1.9 Hrs
12.0	1,176 D	3.7 Hrs
37.4	20-40 Years	0.6 Hrs

EQUIPMENT I.D. - E12-F026B RHR EXCH TO RCIC Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 6 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	98 D	3.7 Hrs
5.0	588 D	1.6 Hrs
10.1	1,176 D	3.1 Hrs
31.4	20-40 Years	0.5 Hrs

EQUIPMENT I.D. - E12-F096 RHR SERVICE WATER Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 5.0 AVERAGE;
Expected Manhour Range: 2.9 Minimum; 8.2 Maximum.

Valve Size 8 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	98 D	2.2 Hrs
3.0	588 D	0.9 Hrs
6.0	1,176 D	1.9 Hrs
18.6	20-40 Years	0.3 Hrs

A-037-10

Electrical Equipment.

EQUIPMENT I.D. - E12-C002B RHR B PUMP MOTOR
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 8.6 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 12.6 Maximum.

Est. Yearly Run Hours 526 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.2	98 D	4.1 Hrs
5.5	588 D	1.7 Hrs
11.1	1,176 D	3.4 Hrs
41.5	20-40 Years	0.8 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 24

EQUIPMENT I.D. - P56-CC006A RHR B RM FL DRAIN SUMP PUMP A MD EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-119B Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC006B RHR B RM FL DRAIN SUMP PUMP B MD EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-119B Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC007 RHR B PUMP ROOM FAN MOTOR EST. YEARLY MAINTENANCE MANHOURS: 4.1 AVERAGE;
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System Expected Manhour Range: 1.4 Minimum; 7.6 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-163 Est. Yearly Run Hours 2,365 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	98 D	2.0 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.6	588 D	0.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.3	1,176 D	1.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	11.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - E12-F024B RHR TO POOL Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107 Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 25

EQUIPMENT I.D. - E12-F026B RHR EXCH TO RCIC Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F006B RHR SHUTDOWN COOLING Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F053B RHR INJ Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 0.9 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.3	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.6	1,176 D	0.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	7.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - E12-F047B RHR EXCH SHELL INLET Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-29

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 26

EQUIPMENT I.D. - E12-F027A RHR INJ LINE Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F027B RHR INJ LINE Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F024B RHR TO POOL Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F073B RHR EXCH VENT Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.8 Maximum.
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

Est. Yearly Run Hours 150 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.5	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

ISIR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 27

EQUIPMENT I.D. - E12-F074B RHR EXCH VALVE Motor		EST. YEARLY MAINTENANCE MANHOURS;		0.4 AVERAGE;	
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System		Expected Manhour Range:		0.1 Minimum; 0.8 Maximum.	
ROOM / LOCATION: - A-037-10 = RHR Heat Exchangers & Pump B Room		Est. Yearly Run Hours		150 Max. Crew 1 Man.	
C.F. Braun P & I D = K-107C					
RI Inspect, Minor Adjustments, Replace Consumables -	Task Manhours	Frequency	Yearly Contribution		
	0.1	98 D	0.2 Hrs		
	0.2	588 D	0.1 Hrs		
	0.5	1,176 D	0.1 Hrs		
	4.0	20-40 Years	0.1 Hrs		
RS RI, RS, and Some Disassembly to Replace Minor Worn/Defective Parts -					
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies					
MD Complete Disassembly and Rework to Restore to Design Specs -					
EQUIPMENT I.D. - E12-F048B RHR EXCH SHELL BYPASS Valve Motor		EST. YEARLY MAINTENANCE MANHOURS;		0.3 AVERAGE;	
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System		Expected Manhour Range:		0.1 Minimum; 0.6 Maximum.	
ROOM / LOCATION: - A-037-10 = RHR Heat Exchangers & Pump B Room		Est. Yearly Run Hours		100 Max. Crew 1 Man.	
C.F. Braun P & I D = K-107C					
RI Inspect, Minor Adjustments, Replace Consumables -	Task Manhours	Frequency	Yearly Contribution		
	0.0	98 D	0.1 Hrs		
	0.2	588 D	0.1 Hrs		
	0.4	1,176 D	0.1 Hrs		
	4.9	20-40 Years	0.1 Hrs		
RS RI, RS, and Some Disassembly to Replace Minor Worn/Defective Parts -					
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies					
MD Complete Disassembly and Rework to Restore to Design Specs -					
EQUIPMENT I.D. - E12-F003B RHR EXCH SHELL OUTLET Valve Motor		EST. YEARLY MAINTENANCE MANHOURS;		0.4 AVERAGE;	
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System		Expected Manhour Range:		0.2 Minimum; 0.9 Maximum.	
ROOM / LOCATION: - A-037-10 = RHR Heat Exchangers & Pump B Room		Est. Yearly Run Hours		100 Max. Crew 1 Man.	
C.F. Braun P & I D = K-107C					
RI Inspect, Minor Adjustments, Replace Consumables -	Task Manhours	Frequency	Yearly Contribution		
	0.1	98 D	0.2 Hrs		
	0.3	588 D	0.1 Hrs		
	0.6	1,176 D	0.2 Hrs		
	7.9	20-40 Years	0.2 Hrs		
RS RI, RS, and Some Disassembly to Replace Minor Worn/Defective Parts -					
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies					
MD Complete Disassembly and Rework to Restore to Design Specs -					
EQUIPMENT I.D. - E12-F011B RHR EXCH TO POOL Valve Motor		EST. YEARLY MAINTENANCE MANHOURS;		0.2 AVERAGE;	
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System		Expected Manhour Range:		0.1 Minimum; 0.5 Maximum.	
ROOM / LOCATION: - A-037-10 = RHR Heat Exchangers & Pump B Room		Est. Yearly Run Hours		100 Max. Crew 1 Man.	
C.F. Braun P & I D = K-107C					
RI Inspect, Minor Adjustments, Replace Consumables -	Task Manhours	Frequency	Yearly Contribution		
	0.0	98 D	0.1 Hrs		
	0.1	588 D	0.0 Hrs		
	0.3	1,176 D	0.1 Hrs		
	4.0	20-40 Years	0.1 Hrs		
RS RI, RS, and Some Disassembly to Replace Minor Worn/Defective Parts -					
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies					
MD Complete Disassembly and Rework to Restore to Design Specs -					

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 28

EQUIPMENT I.D. - E12-F087B RHR STEAM ISO Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.7 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.4	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	5.7	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F052B MOV 10" CONTROL Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F026B RHR EXCH TO RCIC Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-037-10 Process Auxiliaries.

EQUIPMENT I.D. - X72-EE004 MONORAIL AND RHR B TROLLEY
SYSTEM I.D. - X72 AB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-015

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.4	588 D	0.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.7	1,176 D	0.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	5.8	20-40 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 29

EQUIPMENT I.D. - X71-XX006 RHR FL DRAIN SUMP
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-10 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
Expected Manhour Range: 3.7 Minimum; 17.4 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.4 40 D 4.1 Hrs
1.7 180 D 1.7 Hrs
3.4 360 D 3.4 Hrs
18.4 5-10 Years 1.5 Hrs

A-037-11 Process Equipment.

EQUIPMENT I.D. - E12-C002C RHP C PUMP
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 30.0 AVERAGE;
Expected Manhour Range: 24.3 Minimum; 38.4 Maximum.

Est. Yearly Run Hours 526 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
3.2 98 D 12.6 Hrs
17.1 588 D 5.3 Hrs
34.2 1,176 D 10.6 Hrs
128.2 20-40 Years 2.3 Hrs

EQUIPMENT I.D. - E12-C003 RHR C LINE FILL PUMP
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 4.2 Maximum.

Est. Yearly Run Hours 219 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.3 98 D 1.0 Hrs
1.3 588 D 0.4 Hrs
2.6 1,176 D 0.8 Hrs
16.1 20-40 Years 0.3 Hrs

EQUIPMENT I.D. - P56-CC007A RHR C RM DRAIN SUMP PUMP A
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.4 98 D 1.5 Hrs
2.0 588 D 0.6 Hrs
4.0 1,176 D 1.2 Hrs
14.3 20-40 Years 0.3 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 30

EQUIPMENT I.D. - P56-CC007B RHR C RM DRAIN SUMP PUMP B
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-1190

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.5 Hrs
2.0	588 D	0.6 Hrs
4.0	1,176 D	1.2 Hrs
14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - X73-CC008 RHR C PUMP ROOM FWH
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 4.4 AVERAGE;
Expected Manhour Range: 1.9 Minimum; 8.3 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	98 D	2.1 Hrs
2.8	588 D	0.9 Hrs
5.6	1,176 D	1.7 Hrs
12.6	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - X73-BB009 RHR C PUMP RM COOLER
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 17.8 AVERAGE;
Expected Manhour Range: 10.4 Minimum; 28.0 Maximum.

Est. Yearly Run Hours 2,356 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.4	98 D	7.9 Hrs
10.7	588 D	3.3 Hrs
21.3	1,176 D	6.6 Hrs
48.0	20-40 Years	0.7 Hrs

A-037-11 Valves.

EQUIPMENT I.D. - E12-F064C RECIRC Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	98 D	3.7 Hrs
5.0	588 D	1.6 Hrs
10.1	1,176 D	3.1 Hrs
31.4	20-40 Years	0.5 Hrs

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 31

A-037-11 Electrical Equipment.

EQUIPMENT I.D. - E12-C002C RHR C PUMP MOTOR
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 8.6 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 12.6 Maximum.

Est. Yearly Run Hours 526 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.2	98 D	0.1 Hrs
5.5	588 D	1.7 Hrs
11.1	1,176 D	3.4 Hrs
41.5	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-C003 RHR C LINE FILL PUMP MOTOR
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.4 Maximum.

Est. Yearly Run Hours 219 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.8	1,176 D	0.3 Hrs
5.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC007A RHR C PM DRAIN SUMP PUMP A MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC007B RHR C RM DRAIN SUMP PUMP B MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

A-35

WED-2396-1

ENR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 32

EQUIPMENT I.D. - X73-CC008 RHR C PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AD HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
Expected Manhour Range: 1.2 Minimum; 6.7 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.5	98 D	1.7 Hrs
2.3	588 D	0.7 Hrs
4.5	1,176 D	1.4 Hrs
10.2	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F064C RECIRC Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F096 RHR SERVICE WATER Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-11 = RHR Heat Exchangers & Pump B Room
C.F. Braun P & I D = K-107C

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-037-11

Process Auxiliaries.

EQUIPMENT I.D. - X72-ES005 MONORAIL & RHR C MAIN TROLLEY
SYSTEM I.D. - X72 AD CRANES-HOLSTS-ELEVATORS System
ROOM / LOCATION: A-037-11 = RHR Pumps Room
C.F. Braun P & I D = K-105

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.7	1,176 D	0.2 Hrs
5.8	20-40 Years	0.1 Hrs

A-36

NEDE-23096-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 33

EQUIPMENT I.D. - X71-XX007 RIR C RM FL DRAIN SUMP
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-11 = RIR Pumps Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
Expected Manhour Range: 3.7 Minimum; 17.4 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	0.4	30 D	4.1 Hrs
	1.7	180 D	1.7 Hrs
	3.4	360 D	3.4 Hrs
	18.4	5-10 Years	1.5 Hrs

A-037-13 Process Equipment.

EQUIPMENT I.D. - E51-C003 RCIC LINE FILL PUMP
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 4.2 Maximum.

Est. Yearly Run Hours 219 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
PS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	0.3	98 D	1.0 Hrs
	1.3	583 D	0.4 Hrs
	2.6	1,176 D	0.8 Hrs
	16.1	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E51-C001 RCIC PUMP
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110

EST. YEARLY MAINTENANCE MANHOURS: 18.1 AVERAGE;
Expected Manhour Range: 11.8 Minimum; 25.5 Maximum.

Est. Yearly Run Hours 219 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	2.3	98 D	7.6 Hrs
	10.3	583 D	3.2 Hrs
	20.7	1,176 D	6.4 Hrs
	126.3	20-40 Years	2.6 Hrs

EQUIPMENT I.D. - E51-C002 RCIC TURBINE
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110

EST. YEARLY MAINTENANCE MANHOURS: 29.0 AVERAGE;
Expected Manhour Range: 25.5 Minimum; 33.9 Maximum.

Est. Yearly Run Hours 219 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
	3.6	98 D	11.6 Hrs
	15.8	583 D	4.9 Hrs
	31.6	1,176 D	9.8 Hrs
	192.7	20-40 Years	4.0 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 34

EQUIPMENT I.D. - P56-CC004A RCIC RM FLOOR DRAIN SUMP PUMP A EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-119B

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P56-CC004B RCIC RM FLOOR DRAIN SUMP PUMP B EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-119B

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P55-CC013A RCIC RM EQ DRAIN SUMP PUMP A EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P55 EQUIPMENT DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-118A

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P55-CC013B RCIC RM EQ DRAIN SUMP PUMP B EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P55 EQUIPMENT DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-118A

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RO	4.0	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 35

EQUIPMENT I.D. - X73-BB003 RCIC PUMP ROOM COOLING UNIT
SYSTEM I.D. - X73 AB HEAT, VENT, AIR COND. System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 12.3 AVERAGE;
Expected Manhour Range: 7.3 Minimum; 21.3 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	37 D	5.5 Hrs
2.8	222 D	2.3 Hrs
5.6	444 D	4.6 Hrs
25.7	7-14 Years	1.4 Hrs

EQUIPMENT I.D. - X73-CC003 RCIC PUMP ROOM FAN
SYSTEM I.D. - X73 AB HEAT, VENT, AIR COND. System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 2.6 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.5 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	37 D	4.2 Hrs
0.6	222 D	0.5 Hrs
1.3	444 D	1.0 Hrs
5.7	7-14 Years	0.3 Hrs

A-037-13 Valves.

EQUIPMENT I.D. - E51-F045 RCIC STEAM TO TURBINE Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110

EST. YEARLY MAINTENANCE MANHOURS: 10.1 AVERAGE;
Expected Manhour Range: 6.8 Minimum; 14.1 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.2	90 D	4.1 Hrs
5.5	580 D	1.7 Hrs
11.0	1,176 D	3.4 Hrs
46.7	20-40 Years	0.9 Hrs

EQUIPMENT I.D. - E51-F064 RCIC STEAM O/B ISO Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110B

EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
Expected Manhour Range: 6.2 Minimum; 14.3 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.3	90 D	4.2 Hrs
5.7	580 D	1.8 Hrs
11.3	1,176 D	3.5 Hrs
47.9	20-40 Years	0.9 Hrs

WED-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 36

EQUIPMENT I.D. - E51-F046 RCIC TURB CLG WATER Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-1108

EST. YEARLY MAINTENANCE MANHOURS: 5.1 AVERAGE;
Expected Manhour Range: 1.5 Minimum; 7.7 Maximum.

Valve Size 2 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.7 98 D 2.1 Hrs
2.9 508 D 0.9 Hrs
5.8 1,176 D 1.8 Hrs
24.6 20-40 Years 0.5 Hrs

EQUIPMENT I.D. - E51-F059 RCIC TANK TEST BYPASS Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 7.2 AVERAGE;
Expected Manhour Range: 3.9 Minimum; 10.7 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.9 98 D 3.0 Hrs
4.1 508 D 1.3 Hrs
8.3 1,176 D 2.6 Hrs
35.1 20-40 Years 0.7 Hrs

EQUIPMENT I.D. - E51-F065 AOV CHECK Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 8.5 AVERAGE;
Expected Manhour Range: 5.1 Minimum; 12.5 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

1.1 98 D 3.6 Hrs
4.9 508 D 1.5 Hrs
9.7 1,176 D 3.0 Hrs
41.3 20-40 Years 0.8 Hrs

EQUIPMENT I.D. - E51-F019 RCIC MIN FLOW ISO Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-100A

EST. YEARLY MAINTENANCE MANHOURS: 6.5 AVERAGE;
Expected Manhour Range: 3.1 Minimum; 9.7 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.8 98 D 2.7 Hrs
3.7 508 D 1.2 Hrs
7.4 1,176 D 2.3 Hrs
31.6 20-40 Years 0.6 Hrs

A-40

WED-2306-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 37

EQUIPMENT I.D. - E51-F013 RCIC DISCH Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 7.8 AVERAGE;
Expected Manhour Range: 4.4 Minimum; 11.5 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.0	98 D	3.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	4.4	588 D	1.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	8.9	1,176 D	2.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	37.7	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - E51-F07d VAC BREAKER ISO Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 3.4 AVERAGE;
Expected Manhour Range: 2.2 Minimum; 5.6 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.8	588 D	0.6 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.6	1,176 D	1.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	15.5	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E51-F077 VAC BREAKER ISO Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 2.4 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 4.3 Maximum.

Valve Size 1 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	98 D	0.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.3	588 D	0.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.6	1,176 D	0.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	10.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - E51-F010 RCIC COND TANK SUCT Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 6.2 AVERAGE;
Expected Manhour Range: 2.5 Minimum; 10.8 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	37 D	2.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.1	222 D	1.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.7	444 D	2.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	10.5	6-12 Years	0.7 Hrs

A-41

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 38

EQUIPMENT I.D. - E51-F031 RCIC POOL SUCT ISO Valve EST. YEARLY MAINTENANCE MANHOURS: 8.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 4.1 Minimum; 14.1 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

Valve Size 8 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.3 30 D 3.5 Hrs
1.4 180 D 1.5 Hrs
2.9 360 D 2.9 Hrs
13.0 5-10 Years 1.0 Hrs

EQUIPMENT I.D. - E51-F068 STEAM EGH LINE ISO Valve
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 6.6 AVERAGE;
Expected Manhour Range: 4.7 Minimum; 9.7 Maximum.

Valve Size 16 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.8 98 D 2.6 Hrs
3.6 588 D 1.1 Hrs
7.1 1,176 D 2.2 Hrs
30.3 20-40 Years 0.6 Hrs

A-037-13 Electrical Equipment.

EQUIPMENT I.D. - E51-C003 RCIC LINE FILL PUMP MOTOR
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.4 Maximum.

Est. Yearly Run Hours 219 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.1 98 D 0.3 Hrs
0.4 588 D 0.1 Hrs
0.8 1,176 D 0.3 Hrs
5.0 20-40 Years 0.1 Hrs

EQUIPMENT I.D. - P56-CC004A RCIC FM FLOOR DRAIN SUMP PUMP A
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.1 98 D 0.4 Hrs
0.6 588 D 0.2 Hrs
1.1 1,176 D 0.3 Hrs
4.0 20-40 Years 0.1 Hrs

A-112

NEDE-23996-1

BNR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 39

EQUIPMENT I.D. - P56-CC004B RCIC RM FLOOR DRAIN SUMP PUMP B
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P55-CC013A RCIC RM EQ DRAIN SUMP PUMP A MOT
SYSTEM I.D. - P55 EQUIPMENT DRAIN SUMP System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-118A

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P55-CC013B RCIC RM EQ DRAIN SUMP PUMP B MOT
SYSTEM I.D. - P55 EQUIPMENT DRAIN SUMP System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-118A

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC005 RCIC PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 1.8 AVERAGE;
Expected Manhour Range: 0.7 Minimum; 4.0 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	37 D	0.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.4	222 D	0.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.9	444 D	0.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	7-14 Years	0.2 Hrs

K-119B

MEDE-23996-1

RWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 40

EQUIPMENT I.D. - E51-F045 RCIC STEAM TO TURBINE Valve Moto EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies -
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E51-F064 RCIC STEAM O/B ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies -
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E51-F046 RCIC TURB CLG WATER Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110B

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies -
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E51-F059 RCIC TANK TEST BYPASS Valve Moto EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies -
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-44

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 41

EQUIPMENT I.D. - E51-F019 RCIC MIN FLOW ISO Valve Motor
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-100A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.0 98 D 0.1 Hrs
0.1 588 D 0.0 Hrs
0.3 1,176 D 0.1 Hrs
4.0 20-40 Years 0.1 Hrs

EQUIPMENT I.D. - E51-F013 RCIC DISCH Valve Motor
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.0 98 D 0.1 Hrs
0.1 588 D 0.0 Hrs
0.3 1,176 D 0.1 Hrs
4.0 20-40 Years 0.1 Hrs

EQUIPMENT I.D. - E51-F078 VAC BREAKER ISO Valve Motor
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.0 98 D 0.1 Hrs
0.1 588 D 0.0 Hrs
0.3 1,176 D 0.1 Hrs
4.0 20-40 Years 0.1 Hrs

EQUIPMENT I.D. - E51-F077 VAC BREAKER ISO Valve Motor
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours Frequency Yearly Contribution
0.0 98 D 0.1 Hrs
0.1 588 D 0.0 Hrs
0.3 1,176 D 0.1 Hrs
4.0 20-40 Years 0.1 Hrs

WED-2396-1

B&W/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 42

EQUIPMENT I.D. - E51-F010 RCIC COND TANK SUCT Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.5 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

Est. Yearly Run Hours 221 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.2 Hrs
0.3	588 D	0.1 Hrs
0.7	1,176 D	0.2 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E51-F031 RCIC POOL SUCT ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.7 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.3 Minimum; 1.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

Est. Yearly Run Hours 348 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.9	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E51-F068 STEAM EXH LINE ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E51 REACTOR CORE ISOLATION COOLING System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-110A

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-037-13 Process Auxiliaries.

EQUIPMENT I.D. - X71-XX005 RCIC RM FLOOR DRAIN SUMP EST. YEARLY MAINTENANCE MANHOURS: 9.9 AVERAGE;
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System Expected Manhour Range: 3.7 Minimum; 17.4 Maximum.
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D =

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	30 D	4.1 Hrs
1.7	180 D	1.7 Hrs
3.4	360 D	3.4 Hrs
18.4	5-10 Years	1.5 Hrs

A-116

MEDE 23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 43

EQUIPMENT I.D. - X71-XX003 RCIC RM EQ DRAIN SUMP
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 6.0 AVERAGE;
Expected Manhour Range: 2.5 Minimum; 11.5 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	30 D	2.5 Hrs
1.0	180 D	1.1 Hrs
2.1	360 D	2.1 Hrs
11.4	5-10 Years	0.9 Hrs

EQUIPMENT I.D. - X72-EE006 RCIC MAINT TROLLEY
SYSTEM I.D. - X72 AB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: A-037-13 = RCIC Pump Room
C.F. Braun P & I D = K-105

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.7	1,176 D	0.2 Hrs
5.8	20-40 Years	0.1 Hrs

A-037-14

Process Equipment.

EQUIPMENT I.D. - E12-B001C RHR HEAT EXCHGR C
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 58.6 AVERAGE;
Expected Manhour Range: 43.8 Minimum; 70.1 Maximum.

Est. Yearly Run Hours 701 Max. Crew 10 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
7.5	98 D	24.7 Hrs
33.5	588 D	10.4 Hrs
66.9	1,176 D	20.8 Hrs
222.4	20-40 Years	3.9 Hrs

EQUIPMENT I.D. - E12-B001A RHR HEAT EXCHGR A
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107

EST. YEARLY MAINTENANCE MANHOURS: 61.3 AVERAGE;
Expected Manhour Range: 45.8 Minimum; 73.3 Maximum.

Est. Yearly Run Hours 701 Max. Crew 10 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
7.9	98 D	25.8 Hrs
35.0	588 D	10.9 Hrs
70.0	1,176 D	21.7 Hrs
222.4	20-40 Years	3.8 Hrs

A-47

NEDE-23996-1

BAR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 44

EQUIPMENT I.D. - E12-C002A RHR A PUMP
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 30.0 AVERAGE;
Expected Manhour Range: 24.3 Minimum; 38.4 Maximum.

Est. Yearly Run Hours 701 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
3.8	98 D	12.6 Hrs
17.1	588 D	5.3 Hrs
34.2	1,176 D	10.6 Hrs
128.2	20-40 Years	2.3 Hrs

EQUIPMENT I.D. - P56-CC005A RHR A RM FL SUMP PUMP A
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 3.6 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.6 Maximum.

Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.5 Hrs
2.0	588 D	0.6 Hrs
4.0	1,176 D	1.2 Hrs
14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - X73-BB006 RHR A PUMP COOL UNIT
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 17.8 AVERAGE;
Expected Manhour Range: 10.4 Minimum; 28.0 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.4	98 D	7.9 Hrs
10.7	588 D	3.3 Hrs
21.3	1,176 D	6.6 Hrs
48.0	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - X73-CC006 RHR A PUMP ROOM FAN
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 5.0 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 9.3 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	98 D	2.4 Hrs
3.2	588 D	1.0 Hrs
6.4	1,176 D	2.0 Hrs
14.5	20-40 Years	0.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 45

A-037-14

Valves.

EQUIPMENT I.D. - E12-F006A RHR SHUTDOWN COOLING Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.

Valve Size 18 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.8	98 D	5.8 Hrs
7.9	588 D	2.4 Hrs
15.7	1,176 D	4.9 Hrs
48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F047A RHR EXCH SHELL INLET Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.

Valve Size 18 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.8	98 D	5.8 Hrs
7.9	588 D	2.4 Hrs
15.7	1,176 D	4.9 Hrs
48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F073A RHR EXCH VENT Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 5.4 AVERAGE;
Expected Manhour Range: 2.5 Minimum; 9.0 Maximum.

Valve Size 1 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	98 D	2.3 Hrs
3.1	588 D	1.0 Hrs
6.2	1,176 D	1.9 Hrs
19.1	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E12-F074A RHR EXCH VENT Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 5.4 AVERAGE;
Expected Manhour Range: 2.5 Minimum; 9.0 Maximum.

Valve Size 1 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	98 D	2.3 Hrs
3.1	588 D	1.0 Hrs
6.2	1,176 D	1.9 Hrs
19.1	20-40 Years	0.3 Hrs

NEDE-2396-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 46

EQUIPMENT I.D. - E12-F048A RHR EXCH SHELL BYPASS Valve EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

Valve Size 18 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.8	98 D	5.8 Hrs
7.9	588 D	2.4 Hrs
15.7	1,176 D	4.9 Hrs
48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F024A RHR TO POOL Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 12.3 AVERAGE;
Expected Manhour Range: 9.9 Minimum; 16.9 Maximum.

Valve Size 14 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	98 D	5.2 Hrs
7.0	588 D	2.2 Hrs
14.1	1,176 D	4.4 Hrs
43.8	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - E12-F040 RHR TO RADWASTE Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 8.0 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 6 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	98 D	3.7 Hrs
5.0	588 D	1.6 Hrs
10.1	1,176 D	3.1 Hrs
31.4	20-40 Years	0.5 Hrs

EQUIPMENT I.D. - E12-F049 RHR TO RW O/B ISO Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107

EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 6 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	98 D	3.7 Hrs
5.0	588 D	1.6 Hrs
10.1	1,176 D	3.1 Hrs
31.4	20-40 Years	0.5 Hrs

A-50

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 47

EQUIPMENT I.D. - E12-F052A RHR STEAM ISO Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 13.5 AVERAGE;
Expected Manhour Range: 10.5 Minimum; 18.5 Maximum.

Valve Size 10 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.7	98 D	2.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.4	588 D	2.3 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	14.8	1,176 D	4.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	45.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F087A RHR STEAM ISO Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 11.5 AVERAGE;
Expected Manhour Range: 8.3 Minimum; 16.3 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.4	98 D	4.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	6.3	588 D	1.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	12.5	1,176 D	3.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	39.0	20-40 Years	0.7 Hrs

EQUIPMENT I.D. - E12-F026A RHR EXCH TO RCIC Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.1	98 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	5.0	588 D	1.6 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	10.1	1,176 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	31.4	20-40 Years	0.5 Hrs

EQUIPMENT I.D. - E12-F011A RHR EXCH TO POOL Valve
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 8.0 AVERAGE;
Expected Manhour Range: 5.6 Minimum; 12.1 Maximum.

Valve Size 6 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments Replace Consumables -	1.0	98 D	3.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	4.6	588 D	1.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	9.2	1,176 D	2.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	28.5	20-40 Years	0.5 Hrs

A-51

NEE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 43

EQUIPMENT I.D. - E12-F003A RHR EXCH SHELL OUTLET Valve EST. YEARLY MAINTENANCE MANHOURS: 13.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 11.2 Minimum; 18.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room Valve Size 18 inches Max. Crew 2 Men
C.F. Braun P & I D = K-107A

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.8	98 D	5.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	7.9	588 D	2.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15.7	1,176 D	4.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	48.9	20-40 Years	0.8 Hrs

EQUIPMENT I.D. - E12-F064A MOV 4" GATE Valve EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room Valve Size 4 inches Max. Crew 1 Man
C.F. Braun P & I D =

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.1	98 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	5.0	588 D	1.6 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	10.1	1,176 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	31.4	20-40 Years	0.5 Hrs

EQUIPMENT I.D. - E12-F064C RECIRC Valve EST. YEARLY MAINTENANCE MANHOURS: 8.8 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 6.5 Minimum; 13.0 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room Valve Size 4 inches Max. Crew 1 Man
C.F. Braun P & I D = K-107C

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.1	98 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	5.0	588 D	1.6 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	10.1	1,176 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	31.4	20-40 Years	0.5 Hrs

A-037-14 Electrical Equipment.

EQUIPMENT I.D. - E12-C002A RHR A PUMP MOTOR EST. YEARLY MAINTENANCE MANHOURS: 8.6 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 1.8 Minimum; 12.6 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room Est. Yearly Run Hours 526 Max. Crew 5 Men
C.F. Braun P & I D = K-107A

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.2	98 D	4.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	5.5	588 D	1.7 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	11.1	1,176 D	3.4 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	41.5	20-40 Years	0.8 Hrs

4-52

NEDE-23996-1

BBR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 49

EQUIPMENT I.D. - P56-CC005A RHR A RM FL SUMP PUMP A MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - X73-CC006 RHR A PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-163

EST. YEARLY MAINTENANCE MANHOURS: 4.1 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 7.6 Maximum.

Est. Yearly Run Hours 2,365 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	98 D	2.0 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.6	588 D	0.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.3	1,176 D	1.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	11.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - E12-F006A RHR SHUTDOWN COOLING Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107B

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F047A RHR EXCH SHELL INLET Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-53

MEDE-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 50

EQUIPMENT I.D. - E12-F073A RHR EXCH VENT Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.8 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A Est. Yearly Run Hours 150 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.5	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F074A RHR EXCH VENT Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.8 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A Est. Yearly Run Hours 150 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.5	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F048A RHR EXCH SHELL BYPASS Valve Moto EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.6 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.2	588 D	0.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.4	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.9	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F024A RHR TO POOL Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-54

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 51

EQUIPMENT I.D. - E12-F040 RHR TO RADWASTE Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F049 RHR TO RW O/B ISO Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F052A RHR STEAM ISO Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F087A RHR STEAM ISO Valve Motor
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A

EST. YEARLY MAINTENANCE MANHOURS: 0.3 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.7 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.2	588 D	0.1 Hrs
0.4	1,176 D	0.1 Hrs
5.7	20-40 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 52

EQUIPMENT I.D. - E12-F026A RHR EXCH TO ICIC Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A
Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F011A RHR EXCH TO POOL Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A
Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E12-F003A RHR EXCH SHELL OUTLET Valve Moto EST. YEARLY MAINTENANCE MANHOURS: 0.4 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.2 Minimum; 0.9 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A
Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.3	588 D	0.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.6	1,176 D	0.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	7.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - E12-F064A MOV 4" GATE Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - E12 RESIDUAL HEAT REMOVAL System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D = K-107A
Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-55

NEDE-23996-1

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

A-037-14

EQUIPMENT I.D. - X72-BE003 MONORAIL RHR A MAINT. TROLLEY
SYSTEM I.D. - X72 AB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.2 Maximum.

Est. Yearly Run Hours 158 Max. Crew 2 Men

	Task	Time
RI	Inspect, Minor Adjustments, Replace Consumables -	15
RS	RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	15
RD	RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15
MD	Complete Disassembly and Rework to Restore to Design Specs -	15

Task	Manhours	Frequency	Yearly Contribution
-	0.1	98 D	0.3 Hrs
-	0.4	588 D	0.1 Hrs
es	0.7	1,176 D	0.2 Hrs
	5.8	20-40 Years	0.1 Hrs

EQUIPMENT I.D. = X71-XX025 RHR A FL DEMIN SUMP
SYSTEM I.D. = X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-14 = RHR Heat Exchangers & Pump A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 10.0 AVERAGE;
Expected Manhour Range: 3.9 Minimum; 17.7 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men

RI	Inspect, Minor Adjustments, Replace Consumables -	Ta
RS	RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	
RO	RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	
MD	Complete Disassembly and Rework to Restore to Design Specs -	

Task	Manhours	Frequency	Yearly Contribution
-	0.4	30 D	4.2 Hrs
-	1.8	180 D	1.8 Hrs
es	3.5	360 D	3.6 Hrs
	19.1	5-10 Years	1.6 Hrs

EQUIPMENT I.D. - E21-C002 LPCS LINE FILL PUMP
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 4.2 Maximum

Est. Yearly Run Hours 219 Max. Crew 2 Men

	Task	Time
RI	Inspect, Minor Adjustments, Replace Consumables -	15
RS	RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	15
RD	RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	15
MD	Complete Disassembly and Rework to Restore to Design Specs -	15

Task	Manhours	Frequency	Yearly Contribution
	0.3	98 D	1.0 Hrs
	1.3	588 D	0.4 Hrs
	2.6	1,176 D	0.8 Hrs
	16.1	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - E21-C001 LPCS PUMP
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-10R

EST. YEARLY MAINTENANCE MANHOURS: 14.6 AVERAGE;
Expected Manhour Range: 8.4 Minimum; 21.4 Maximum

Est. Yearly Run Hours	219	Max. Crew	7 Men
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RI	Inspect, Minor Adjustments, Replace Consumables -	Ta
RS	RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	
RD	RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	
MD	Complete Disassembly and Rework to Restore to Design Specs -	

Task	Manhours	Frequency	Yearly Contribution
-	1.9	90 D	6.1 Hrs
-	8.3	508 D	2.6 Hrs
es	16.7	1,176 D	5.2 Hrs
	101.7	20-40 Years	2.1 Hrs

A-57

NEDE-23996-1

Unit 6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms. PAGE - 54

EQUIPMENT I.D. - P56-CC003A LACS EQUIP DRAIN SUMP PUMP A EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum;
ROOM / LOCATION: - A-037-15 = LACS Pump Room
C.F. Braun P & I D = K-119B Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables - Task Manhours Frequency Yearly Contribution
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts - 0.4 98 D 1.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies - 2.0 588 D 0.6 Hrs
HD Complete Disassembly and Rework to Restore to Design Specs - 4.0 176 D 1.2 Hrs
14.3 20-40 Years 0.3 Hrs

EQUIPMENT I.D. - P56-CC003B LACS EQUIP DRAIN SUMP PUMP B EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum;
ROOM / LOCATION: - A-037-15 = LACS Pump Room
C.F. Braun P & I D = K-119B Est. Yearly Run Hours 569 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables - Task Manhours Frequency Yearly Contribution
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts - 0.4 98 D 1.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies - 2.0 588 D 0.6 Hrs
HD Complete Disassembly and Rework to Restore to Design Specs - 4.0 176 D 1.2 Hrs
14.3 20-40 Years 0.3 Hrs

EQUIPMENT I.D. - X73-14004 LACS PUMP ROOM COOLER EST. YEARLY MAINTENANCE MANHOURS: 22.0 AVERAGE;
SYSTEM I.D. - X73 AB HEAT VENT. AIR COND. System Expected Manhour Range: 13.0 Minimum; 34.9 Maximum;
ROOM / LOCATION: - A-037-15 = LACS Pump Room
C.F. Braun P & I D = Est. Yearly Run Hours 7,096 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables - Task Manhours Frequency Yearly Contribution
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts - 1.1 37 D 9.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies - 5.0 222 D 4.1 Hrs
HD Complete Disassembly and Rework to Restore to Design Specs - 10.0 444 D 8.2 Hrs
45.9 7-14 Years 2.6 Hrs

EQUIPMENT I.D. - X73-CC003 LACS PUMP ROOM FAN EST. YEARLY MAINTENANCE MANHOURS: 6.5 AVERAGE;
SYSTEM I.D. - X73 AB HEAT VENT. AIR COND. System Expected Manhour Range: 2.7 Minimum; 12.0 Maximum;
ROOM / LOCATION: - A-037-15 = LACS Pump Room
C.F. Braun P & I D = Est. Yearly Run Hours 7,096 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables - Task Manhours Frequency Yearly Contribution
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts - 0.4 37 D 3.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies - 1.6 222 D 1.3 Hrs
HD Complete Disassembly and Rework to Restore to Design Specs - 3.2 444 D 2.6 Hrs
14.5 7-14 Years 0.8 Hrs

DW/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 55

A-037-15

Valves.

EQUIPMENT I.D. - E21-F001 LPCS SUCT Valve
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 13.5 AVERAGE;
Expected Manhour Range: 5.9 Minimum; 21.2 Maximum.

Valve Size 24 inches Max. Crew 3 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.5	90 D	5.7 Hrs
2.4	180 D	2.4 Hrs
4.7	360 D	4.0 Hrs
21.2	5-10 Years	1.6 Hrs

EQUIPMENT I.D. - E21-F011 LPCS RECIRC Valve
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 3.8 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 6.1 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.5	90 D	1.0 Hrs
2.2	588 D	0.7 Hrs
4.3	1,176 D	1.3 Hrs
18.3	20-40 Years	0.4 Hrs

EQUIPMENT I.D. - E21-F005 LPCS DISCH Valve
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 6.4 AVERAGE;
Expected Manhour Range: 3.8 Minimum; 10.0 Maximum.

Valve Size 12 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	90 D	2.7 Hrs
3.7	588 D	1.1 Hrs
7.3	1,176 D	2.3 Hrs
31.1	20-40 Years	0.6 Hrs

EQUIPMENT I.D. - E21-F012 LPCS TEST Valve
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 5.8 AVERAGE;
Expected Manhour Range: 3.4 Minimum; 9.1 Maximum.

Valve Size 12 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	90 D	2.4 Hrs
3.3	588 D	1.0 Hrs
6.6	1,176 D	2.0 Hrs
27.9	20-40 Years	0.5 Hrs

4-50

NEED-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 56

A-037-15 Electrical Equipment.

EQUIPMENT I.D. - E21-C002 LPCS LINE FILL PUMP MOTOR
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 0.6 AVERAGE;
Expected Manhour Range: 0.2 Minimum; 1.4 Maximum.

Est. Yearly Run Hours 219 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.8	1,176 D	0.3 Hrs
5.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E21-C001 LPCS PUMP MOTOR
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 6.4 AVERAGE;
Expected Manhour Range: 1.2 Minimum; 9.1 Maximum.

Est. Yearly Run Hours 219 Max. Crew 6 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.9	98 D	3.0 Hrs
4.1	588 D	1.3 Hrs
8.2	1,176 D	2.6 Hrs
50.3	20-40 Years	1.1 Hrs

EQUIPMENT I.D. - P56-CC003A LPCS EQUIP DRAIN SUMP PUMP A MOT
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC003B LPCS EQUIP DRAIN SUMP PUMP B MOT
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-119B

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
4.0	20-40 Years	0.1 Hrs

WWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 57

EQUIPMENT I.D. - X73-CC003 LPCS PUMP ROOM FAN MOTOR
SYSTEM I.D. - X73 AB HEAT. VENT. AIR COND. System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 5.3 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 9.8 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	37 D	2.5 Hrs
1.3	222 D	1.1 Hrs
2.6	444 D	2.1 Hrs
11.9	7-14 Years	0.7 Hrs

EQUIPMENT I.D. - E21-F001 LPCS SUCT Valve Motor
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E21-F011 LPCS RECIRC Valve Motor
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - E21-F005 LPCS DISCH Valve Motor
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

A-51

WWR-33006-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 58

EQUIPMENT I.D. - E21-F012 LPCS TEST Valve Motor
SYSTEM I.D. - E21 LOW PRESSURE CORE SPRAY System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D = K-108

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.0	98 D	0.1 Hrs
RS	0.1	588 D	0.0 Hrs
RO	0.3	1,176 D	0.1 Hrs
MD	4.0	20-40 Years	0.1 Hrs

A-037-15 Process Auxiliaries.

EQUIPMENT I.D. - X71-XX099 LPCS EQUIP SUMP
SYSTEM I.D. - X71 AB FLOOR DRAIN SUMP System
ROOM / LOCATION: A-037-15 = LPCS Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 6.0 AVERAGE;
Expected Manhour Range: 2.5 Minimum; 11.5 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.2	30 D	2.5 Hrs
RS	1.0	180 D	1.1 Hrs
RO	2.1	360 D	2.1 Hrs
MD	11.4	5-10 Years	0.9 Hrs

A-52

WED-2396-1

BBW/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 59

F-004-08 Process Equipment.

EQUIPMENT I.D. - P38-ZZ001A STANDBY GAS TREATMENT UNIT
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-08 = Standby Gas Treatment Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 5.1 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 8.8 Maximum.

Est. Yearly Run Hours 788 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.7	98 D	2.4 Hrs
RS	3.3	588 D	1.0 Hrs
RO	6.6	1,176 D	2.0 Hrs
MD	20.9	20-40 Years	0.4 Hrs

F-004-08 Valves.

EQUIPMENT I.D. - P38-FY003A AOV 14" Valve
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-08 = Standby Gas Treatment Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 3.2 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 5.3 Maximum.

Valve Size 14 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.5	98 D	1.5 Hrs
RS	2.1	588 D	0.6 Hrs
RO	4.1	1,176 D	1.3 Hrs
MD	12.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - P38-FY003B Valve
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-08 = Standby Gas Treatment Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 3.2 AVERAGE;
Expected Manhour Range: 1.1 Minimum; 5.3 Maximum.

Valve Size 14 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.5	98 D	1.5 Hrs
RS	2.1	588 D	0.6 Hrs
RO	4.1	1,176 D	1.3 Hrs
MD	12.9	20-40 Years	0.2 Hrs

F-004-08 Electrical Equipment.

EQUIPMENT I.D. - P38-ZZ001A STANDBY GAS TREATMENT UNIT MOTOR
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-08 = Standby Gas Treatment Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 4.5 AVERAGE;
Expected Manhour Range: 1.3 Minimum; 7.7 Maximum.

Est. Yearly Run Hours 788 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.7	98 D	2.2 Hrs
RS	2.9	588 D	0.9 Hrs
RO	5.9	1,176 D	1.8 Hrs
MD	18.6	20-40 Years	0.3 Hrs

A-63

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 60

F-004-09 Process Equipment.

EQUIPMENT I.D. - P38-CC003B SGTS HEAT REMOVAL FAN
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-09 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 1.3 AVERAGE;
Expected Manhour Range: 0.5 Minimum; 2.8 Maximum.

Est. Yearly Run Hours 288 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	98 D	0.6 Hrs
0.8	588 D	0.3 Hrs
1.7	1,176 D	0.5 Hrs
5.3	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P38-CC003A SGTS HEAT REMOVAL FAN
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-09 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 1.3 AVERAGE;
Expected Manhour Range: 0.5 Minimum; 2.8 Maximum.

Est. Yearly Run Hours 288 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	98 D	0.6 Hrs
0.8	588 D	0.3 Hrs
1.7	1,176 D	0.5 Hrs
5.3	20-40 Years	0.1 Hrs

F-004-09 Valves.

EQUIPMENT I.D. - P38-FF007A HEAT REMOVAL FAN INTAKE Valve
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-09 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 0.7 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 1.4 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.3 Hrs
0.4	588 D	0.1 Hrs
0.9	1,176 D	0.3 Hrs
3.7	20-40 Years	0.1 Hrs

F-004-09 Electrical Equipment.

EQUIPMENT I.D. - P38-CC003D SGTS HEAT REMOVAL FAN MOTOR
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-09 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 1.0 AVERAGE;
Expected Manhour Range: 0.4 Minimum; 2.2 Maximum.

Est. Yearly Run Hours 788 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.5 Hrs
0.6	588 D	0.2 Hrs
1.3	1,176 D	0.4 Hrs
4.0	20-40 Years	0.1 Hrs

BATV/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 61

EQUIPMENT I.D. - P38-OC001A SGTS HEAT REMOVAL FAN MOTOR
 SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
 ROOM / LOCATION: F-004-09 = Fan Room
 C.F. Braun P & I D = K-160

RI Inspect, Minor Adjustments, Replace Consumables -
 RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
 RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
 MD Complete Disassembly and Rework to Restore to Design Specs -

EQUIPMENT I.D. - P38-FF007A HEAT REMOVAL FAN INTAKE Valve MO
 SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
 ROOM / LOCATION: F-004-09 = Fan Room
 C.F. Braun P & I D = K-160

RI Inspect, Minor Adjustments, Replace Consumables -
 RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
 RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
 MD Complete Disassembly and Rework to Restore to Design Specs -

F-004-10

Process Equipment.

EQUIPMENT I.D. - P38-OC001A EXHAUST FAN
 SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
 ROOM / LOCATION: F-004-10 = Fan Room
 C.F. Braun P & I D = K-160

RI Inspect, Minor Adjustments, Replace Consumables -
 RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
 RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
 MD Complete Disassembly and Rework to Restore to Design Specs -

EQUIPMENT I.D. - P38-OC001B EXHAUST FAN
 SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
 ROOM / LOCATION: F-004-10 = Fan Room
 C.F. Braun P & I D = K-160

RI Inspect, Minor Adjustments, Replace Consumables -
 RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
 RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
 MD Complete Disassembly and Rework to Restore to Design Specs -

EST. YEARLY MAINTENANCE MANHOURS;
 Expected Manhour Range: 0.4 Minimum; 1.0 AVERAGE;
 2.2 Maximum.
 Est. Yearly Run Hours 788 Max. Crew 1 Man.

Task Manhours Frequency Yearly Contribution
 0.1 98 D 0.5 Hrs
 0.6 588 D 0.2 Hrs
 1.3 1176 D 0.4 Hrs
 4.0 20-40 Years 0.1 Hrs

EST. YEARLY MAINTENANCE MANHOURS;
 Expected Manhour Range: 0.1 Minimum; 0.2 AVERAGE;
 0.5 Maximum.
 Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task Manhours Frequency Yearly Contribution
 0.0 98 D 0.1 Hrs
 0.1 588 D 0.0 Hrs
 0.3 1176 D 0.1 Hrs
 4.0 20-40 Years 0.1 Hrs

EST. YEARLY MAINTENANCE MANHOURS;
 Expected Manhour Range: 1.4 Minimum; 3.4 AVERAGE;
 6.3 Maximum.
 Est. Yearly Run Hours 788 Max. Crew 3 Men.

Task Manhours Frequency Yearly Contribution
 0.5 98 D 0.6 Hrs
 2.2 588 D 0.7 Hrs
 4.4 1176 D 1.4 Hrs
 13.9 20-40 Years 0.2 Hrs

EST. YEARLY MAINTENANCE MANHOURS;
 Expected Manhour Range: 1.4 Minimum; 3.4 AVERAGE;
 6.3 Maximum.
 Est. Yearly Run Hours 788 Max. Crew 3 Men.

Task Manhours Frequency Yearly Contribution
 0.5 98 D 0.6 Hrs
 2.2 588 D 0.7 Hrs
 4.4 1176 D 1.4 Hrs
 13.9 20-40 Years 0.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 62

EQUIPMENT I.D. - X63-CC003A ROOM FAN
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	75 D	1.1 Hrs
1.1	450 D	0.5 Hrs
2.2	900 D	0.9 Hrs
6.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X63-BB002A ROOM COOLER
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 7.6 AVERAGE;
Expected Manhour Range: 3.9 Minimum; 13.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.4 Hrs
3.5	450 D	1.4 Hrs
7.0	900 D	2.8 Hrs
18.6	14-28 Years	0.4 Hrs

F-004-10 Valves.

EQUIPMENT I.D. - P38-FF006A EXHAUST FAN INTAKE Valve
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 4.4 AVERAGE;
Expected Manhour Range: 1.3 Minimum; 6.8 Maximum.

Valve Size 24 inches Max. Crew 3 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	98 D	2.1 Hrs
2.8	588 D	0.9 Hrs
5.6	1,176 D	1.7 Hrs
17.5	20-40 Years	0.3 Hrs

F-004-10 Electrical Equipment.

EQUIPMENT I.D. - P38-CC001A EXHAUST FAN MOTOR
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.4 Maximum.

Est. Yearly Run Hours 788 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.4 Hrs
1.9	588 D	0.6 Hrs
3.8	1,176 D	1.2 Hrs
11.9	20-40 Years	0.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 63

EQUIPMENT I.D. - P38-CC001B EXHAUST FAN MOTOR
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.4 Maximum.

Est. Yearly Run Hours 788 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.4 Hrs
1.9	588 D	0.6 Hrs
3.8	1,176 D	1.2 Hrs
11.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - X63-CC003A ROOM FAN MOTOR
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - P38-EF006A EXHAUST FAN INTAKE Valve Motor
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-004-10 = Fan Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

F-007-12 Process Equipment.

EQUIPMENT I.D. - G46-C001B HOLDING PUMP
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FPC&CU Filter Demineralizer B Room
C.F. Braun P & I D = K-116B

EST. YEARLY MAINTENANCE MANHOURS: 15.4 AVERAGE;
Expected Manhour Range: 7.7 Minimum; 25.1 Maximum.

Est. Yearly Run Hours 4,300 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.2	60 D	6.5 Hrs
5.4	360 D	2.7 Hrs
10.8	720 D	5.5 Hrs
33.9	10-20 Years	1.2 Hrs

A-67

NOTE-23906-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 64

EQUIPMENT I.D. - G46-C002 FPC&U F/D PRECOAT PUMP
SYSTEM I.D. - G46 FPC&U FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 * FPC&U Filter Demineralizer B Room
C.F. Braun P & I D = K-116B

EST. YEARLY MAINTENANCE MANHOURS: 15.5 AVERAGE;
Expected Manhour Range: 9.3 Minimum; 24.7 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 3 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.0	98 D	6.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	8.9	588 D	2.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	17.7	1,176 D	5.5 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	44.7	20-40 Years	0.7 Hrs

F-007-12 Valves.

EQUIPMENT I.D. - G46-F006B AOV 8" CONTROL Valve
SYSTEM I.D. - G46 FPC&U FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 * FPC&U Filter Demineralizer B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 15.5 AVERAGE;
Expected Manhour Range: 9.5 Minimum; 24.4 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	30 D	6.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.7	180 D	2.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.4	350 D	5.5 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	24.4	5-10 Years	1.9 Hrs

EQUIPMENT I.D. - G46-F012B AOV 3" CONTROL Valve
SYSTEM I.D. - G46 FPC&U FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 * FPC&U Filter Demineralizer B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 10.9 AVERAGE;
Expected Manhour Range: 5.5 Minimum; 17.8 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	30 D	4.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.9	180 D	1.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.8	360 D	3.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	17.2	5-10 Years	1.3 Hrs

EQUIPMENT I.D. - G46-F005B AOV 3" CONTROL Valve
SYSTEM I.D. - G46 FPC&U FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 * FPC&U Filter Demineralizer B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 8.7 AVERAGE;
Expected Manhour Range: 3.2 Minimum; 14.4 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	30 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.5	180 D	1.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.0	360 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	13.7	5-10 Years	1.1 Hrs

4-100

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by rooms.

PAGE - 65

EQUIPMENT I.D. - G46-F004B AOV 1" CONTROL Valve EST. YEARLY MAINTENANCE MANHOURS: 8.7 AVERAGE;
SYSTEM I.D. - G46 FV6&CU FILTER DEMINERALIZER System Expected Manhour Range: 3.2 Minimum; 14.4 Maximum;
ROOM LOCATION: F-007-12 = FPOU Filter Demineralizer B Room
C.F. Room P & I D =

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	30 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.5	180 D	1.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.0	360 D	3.1 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	13.7	5-10 Years	1.1 Hrs

Valve Size 1 inches Max. Crew 1 Man

EQUIPMENT I.D. - G46-F046B AOV 10" CONTROL Valve EST. YEARLY MAINTENANCE MANHOURS: 17.4 AVERAGE;
SYSTEM I.D. - G46 FV6&CU FILTER DEMINERALIZER System Expected Manhour Range: 11.0 Minimum; 26.9 Maximum;
ROOM LOCATION: F-007-12 = FPOU Filter Demineralizer B Room
C.F. Room P & I D =

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	30 D	7.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.0	180 D	3.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.1	360 D	5.2 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	27.3	5-10 Years	2.1 Hrs

Valve Size 10 inches Max. Crew 2 Men

EQUIPMENT I.D. - G46-F009B AOV 4" GLOBE Valve EST. YEARLY MAINTENANCE MANHOURS: 5.6 AVERAGE;
SYSTEM I.D. - G46 FV6&CU FILTER DEMINERALIZER System Expected Manhour Range: 3.2 Minimum; 10.2 Maximum;
ROOM LOCATION: F-007-12 = FPOU Filter Demineralizer B Room
C.F. Room P & I D =

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	37 D	2.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.2	222 D	1.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.4	444 D	2.0 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	9.4	6-12 Years	0.6 Hrs

Valve Size 4 inches Max. Crew 1 Man

EQUIPMENT I.D. - G46-F000B AOV 4" CONTROL Valve EST. YEARLY MAINTENANCE MANHOURS: 11.0 AVERAGE;
SYSTEM I.D. - G46 FV6&CU FILTER DEMINERALIZER System Expected Manhour Range: 5.6 Minimum; 17.9 Maximum;
ROOM LOCATION: F-007-12 = FPOU Filter Demineralizer B Room
C.F. Room P & I D =

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	30 D	4.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.9	180 D	2.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.9	360 D	3.9 Hrs
MO Complete Disassembly and Rework to Restore to Design Specs -	17.3	5-10 Years	1.3 Hrs

Valve Size 4 inches Max. Crew 1 Man

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 66

EQUIPMENT I.D. - G46-F010B ACV 8" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FPCU Filter Demineralizer B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 16.1 AVERAGE;
Expected Manhour Range: 10.0 Minimum; 25.2 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	30 D	6.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.8	180 D	2.9 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.7	360 D	5.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	7.3	5-10 Years	2.0 Hrs

EQUIPMENT I.D. - G46-F011B ACV 4" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FPCU Filter Demineralizer B Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 11.0 AVERAGE;
Expected Manhour Range: 5.6 Minimum; 17.9 Maximum.

Valve Size 4 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	30 D	4.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.9	180 D	2.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.9	360 D	3.9 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	17.3	5-10 Years	1.3 Hrs

F-007-12 Electrical Equipment.

EQUIPMENT I.D. - G46-C001B HOLDING PUMP MOTOR
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FPCU Filter Demineralizer B Room
C.F. Braun P & I D = K-116B

EST. YEARLY MAINTENANCE MANHOURS: 2.7 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.5 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	60 D	1.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.1	360 D	0.5 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.1	720 D	1.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	6.6	12-24 Years	0.2 Hrs

EQUIPMENT I.D. - G46-C002 FPCU F/D PRECOAT PUMP MOTOR
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FPCU Filter Demineralizer B Room
C.F. Braun P & I D = K-116B

EST. YEARLY MAINTENANCE MANHOURS: 3.7 AVERAGE;
Expected Manhour Range: 1.2 Minimum; 6.8 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.5	98 D	1.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.4	588 D	0.7 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.7	1,176 D	1.5 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	11.9	20-40 Years	0.2 Hrs

A-70

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 67

F-007-12 Process Auxiliaries.

EQUIPMENT I.D. - G46-D001B FFCU FILTER DEMINERALIZER B
SYSTEM I.D. - G46 FFC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-12 = FFCU Filter Demineralizer B Room
C.F. Braun P & I D =EST. YEARLY MAINTENANCE MANHOURS: 39.2 AVERAGE;
Expected Manhour Range: 19.4 Minimum; 45.7 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.4	60 D	12.8 Hrs
10.6	360 D	5.4 Hrs
21.2	720 D	10.8 Hrs
66.7	10-20 Years	2.3 Hrs

F-007-17 Process Equipment.

EQUIPMENT I.D. - G46-C001A HOLDING PUMP
SYSTEM I.D. - G46 FFC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FFCU Filter Demineralizer A Room
C.F. Braun P & I D = K-116AEST. YEARLY MAINTENANCE MANHOURS: 15.4 AVERAGE;
Expected Manhour Range: 7.7 Minimum; 25.1 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.2	60 D	6.5 Hrs
5.4	360 D	2.7 Hrs
10.8	720 D	5.5 Hrs
33.9	10-20 Years	1.2 Hrs

F-007-17 Valves.

EQUIPMENT I.D. - G46-F009A AOV 4" CONTROL Valve
SYSTEM I.D. - G46 FFC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FFCU Filter Demineralizer A Room
C.F. Braun P & I D =EST. YEARLY MAINTENANCE MANHOURS: 5.6 AVERAGE;
Expected Manhour Range: 3.2 Minimum; 10.2 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	37 D	2.4 Hrs
1.2	222 D	1.0 Hrs
2.4	434 D	2.0 Hrs
9.4	6-12 Years	0.6 Hrs

EQUIPMENT I.D. - G46-F008A AOV 8" CONTROL Valve
SYSTEM I.D. - G46 FFC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FFCU Filter Demineralizer A Room
C.F. Braun P & I D =EST. YEARLY MAINTENANCE MANHOURS: 16.1 AVERAGE;
Expected Manhour Range: 10.0 Minimum; 25.2 Maximum.

Valve Size 8 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	30 D	6.8 Hrs
2.8	180 D	2.9 Hrs
5.7	360 D	5.7 Hrs
25.3	5-10 Years	2.0 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 68

EQUIPMENT I.D. - G46-F010A AOV 8" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 16.1 AVERAGE;
Expected Manhour Range: 10.0 Minimum; 25.2 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	30 D	6.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.8	180 D	2.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.7	360 D	5.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	25.3	5-10 Years	2.0 Hrs

EQUIPMENT I.D. - G46-F011A AOV 8" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 16.1 AVERAGE;
Expected Manhour Range: 10.0 Minimum; 25.2 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	30 D	6.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.8	180 D	2.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.7	360 D	5.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	25.3	5-10 Years	2.0 Hrs

EQUIPMENT I.D. - G46-F006A AOV 3" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.4 AVERAGE;
Expected Manhour Range: 2.4 Minimum; 8.3 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	37 D	1.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.9	222 D	0.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.9	444 D	1.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	7.4	6-12 Years	0.5 Hrs

EQUIPMENT I.D. - G46-F012A AOV 12" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 10.2 AVERAGE;
Expected Manhour Range: 5.5 Minimum; 16.7 Maximum.

Valve Size 12 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.5	37 D	4.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.2	222 D	1.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.4	444 D	3.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	17.2	6-12 Years	1.1 Hrs

4-72

MECE-2396-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1970

PAGE - 69

EQUIPMENT I.D. - G46-F005A AOV 1" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 8.7 AVERAGE;
Expected Manhour Range: 3.2 Minimum; 14.4 Maximum.

Valve Size 1 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	30 D	3.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.5	180 D	1.5 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.0	360 D	3.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	13.7	5-10 Years	1.1 Hrs

EQUIPMENT I.D. - G46-F004A AOV 10" CONTROL Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 16.9 AVERAGE;
Expected Manhour Range: 10.6 Minimum; 26.3 Maximum.

Valve Size 10 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	30 D	7.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.0	180 D	3.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.9	360 D	6.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	26.6	5-10 Years	2.1 Hrs

EQUIPMENT I.D. - G46-F046A RELIEF 1 1/2" Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 17.4 AVERAGE;
Expected Manhour Range: 11.0 Minimum; 26.9 Maximum.

Valve Size 10 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	30 D	7.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.0	180 D	3.1 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.1	360 D	6.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	27.3	5-10 Years	2.1 Hrs

F-007-17 Electrical Equipment.

EQUIPMENT I.D. - G46-C001A HOLDING PUMP MOTOR
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCU Filter Demineralizer A Room
C.F. Braun P & I D = K-116A

EST. YEARLY MAINTENANCE MANHOURS: 2.7 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.5 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.2	60 D	1.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.1	360 D	0.5 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.1	720 D	1.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	6.6	12-24 Years	0.2 Hrs

A-73

NEDE-23996-1

DNR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 70

F-007-17

Process Auxiliaries.

EQUIPMENT I.D. - G46-D001A FPCU FILTER DEMINERALIZER A
SYSTEM I.D. - G46 FPCU FILTER DEMINERALIZER System
ROOM / LOCATION: F-007-17 = FPCU Filter Demineralizer A Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 30.2 AVERAGE;
Expected Manhour Range: 19.4 Minimum; 45.7 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.4	60 D	12.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	10.6	360 D	5.4 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	21.2	720 D	10.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	66.7	10-20 Years	2.3 Hrs

F-015-23

Process Auxiliaries.

EQUIPMENT I.D. - X62-BE004 FUEL INSPECTION JIB & TROLLEY HO
SYSTEM I.D. - X62 FB CRANES-HOISTS-ELEVATORS System
ROOM / LOCATION: F-015-23 = Cask Pool Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 5.3 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 8.8 Maximum.

Est. Yearly Run Hours 526 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.8	98 D	2.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.4	588 D	1.1 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.9	1,176 D	2.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	25.7	20-40 Years	0.5 Hrs

F-018-12

Process Equipment.

EQUIPMENT I.D. - P38-ZZ001B STANDBY GAS TREATMENT UNIT B
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 5.1 AVERAGE;
Expected Manhour Range: 1.8 Minimum; 8.8 Maximum.

Est. Yearly Run Hours 788 Max. Crew 4 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.7	98 D	2.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.3	588 D	1.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.6	1,176 D	2.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	20.9	20-40 Years	0.4 Hrs

EQUIPMENT I.D. - P38-ZZ001B SGTS EXHAUST FAN B
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 3.4 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.3 Maximum.

Est. Yearly Run Hours 788 Max. Crew 3 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.5	98 D	1.6 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.2	588 D	0.7 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.4	1,176 D	1.4 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	13.9	20-40 Years	0.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 71

EQUIPMENT I.D. - X63-CC003B SUGT ROOM FAN
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	75 D	1.1 Hrs
1.1	450 D	0.5 Hrs
2.2	900 D	0.9 Hrs
6.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X63-B0002B SGTS COOLER B
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 7.6 AVERAGE;
Expected Manhour Range: 3.9 Minimum; 13.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.4 Hrs
3.5	450 D	1.4 Hrs
7.0	900 D	2.8 Hrs
18.6	14-28 Years	0.4 Hrs

F-018-12 Valves.

EQUIPMENT I.D. - P38-PF007B HEAT REMOVAL FAN INTAKE Valve
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.4 Minimum; 1.8 Maximum.

Valve Size 4 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	98 D	0.4 Hrs
0.6	588 D	0.2 Hrs
1.1	1,176 D	0.3 Hrs
3.5	20-40 Years	0.1 Hrs

F-018-12 Electrical Equipment.

EQUIPMENT I.D. - P38-ZZ001B STANDBY GAS TREATMENT UNIT B MOT
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 4.5 AVERAGE;
Expected Manhour Range: 1.3 Minimum; 7.7 Maximum.

Est. Yearly Run Hours 788 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	98 D	2.2 Hrs
2.9	588 D	0.9 Hrs
5.9	1,176 D	1.8 Hrs
18.6	20-40 Years	0.3 Hrs

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BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 72

EQUIPMENT I.D. - P38-ZZ001B SGTS EXHAUST FAN & MOTOR
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.4 Maximum.

Est. Yearly Run Hours 788 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	98 D	1.4 Hrs
1.9	588 D	0.6 Hrs
3.8	1,176 D	1.2 Hrs
11.9	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - X63-CC003B SGT ROOM FAN MOTOR
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - P38-PF007B HEAT REMOVAL FAN INTAKE Valve Mo
SYSTEM I.D. - P38 STANDBY GAS TREATMENT System
ROOM / LOCATION: F-018-12 = Standby Gas Treatment B Room
C.F. Braun P & I D = K-160

EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	98 D	0.1 Hrs
0.1	588 D	0.0 Hrs
0.3	1,176 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

F-026-08

Process Equipment.

EQUIPMENT I.D. - X63-CC007A SA EXH FAN ROOM CLG FAN
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-08 = Fan B Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	75 D	1.1 Hrs
1.1	450 D	0.5 Hrs
2.2	900 D	0.9 Hrs
6.0	15-30 Years	0.1 Hrs

A-75

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 73

EQUIPMENT I.D. - X63-00011A SA EXH FAN RM UNIT COOLER
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-08 = Fan 8 Room
C.F. Braun P & I D = K-169EST. YEARLY MAINTENANCE MANHOURS: 6.0 AVERAGE;
Expected Manhour Range: 2.4 Minimum; 11.1 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	75 D	2.6 Hrs
2.7	450 D	1.1 Hrs
5.5	900 D	2.2 Hrs
14.6	14-28 Years	0.3 Hrs

EQUIPMENT I.D. - X05-CC001A SHIELD ANNULUS VENT FAN
SYSTEM I.D. - X05 GE SYSTEM - X05 - NOT ON FILE
ROOM / LOCATION: F-026-08 = Fan 8 Room
C.F. Braun P & I D = K-000EST. YEARLY MAINTENANCE MANHOURS: 3.4 AVERAGE;
Expected Manhour Range: 1.5 Minimum; 6.9 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	75 D	1.6 Hrs
1.7	450 D	0.7 Hrs
3.4	900 D	1.4 Hrs
9.0	15-30 Years	0.2 Hrs

F-026-02 Electrical Equipment.

EQUIPMENT I.D. - X63-CC007A SA EXH FAN ROOM CLG FAN MOTOR
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-08 = Fan 8 Room
C.F. Braun P & I D = K-169EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X05-CC001A SHIELD ANNULUS VENT FAN MOTOR
SYSTEM I.D. - X05 GE SYSTEM - X05 - NOT ON FILE
ROOM / LOCATION: F-026-08 = Fan 8 Room
C.F. Braun P & I D = K-000EST. YEARLY MAINTENANCE MANHOURS: 2.5 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.3 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	75 D	1.2 Hrs
1.2	450 D	0.5 Hrs
2.5	900 D	1.0 Hrs
6.6	15-30 Years	0.1 Hrs

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 74

F-026-09

Process Equipment.

EQUIPMENT I.D. - X63-CC007B SA EXH FAN RM CLG FAN
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-09 = Fan 9 Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 2.3 AVERAGE;
Expected Manhour Range: 0.9 Minimum; 4.8 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.3	75 D	1.1 Hrs
1.1	450 D	0.5 Hrs
2.2	900 D	0.9 Hrs
6.0	15-30 Years	0.1 Hrs

EQUIPMENT I.D. - X63-BB011B SA EXH FAN RM UNIT COOLER
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-09 = Fan 9 Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 6.0 AVERAGE;
Expected Manhour Range: 2.4 Minimum; 11.1 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	75 D	2.6 Hrs
2.7	450 D	1.1 Hrs
5.5	900 D	2.2 Hrs
14.6	14-28 Years	0.3 Hrs

EQUIPMENT I.D. - X05-CC001B SHIELD ANNUOUS VENT FAN
SYSTEM I.D. - X05 GE SYSTEM - X05 - NOT ON FILE
ROOM / LOCATION: F-026-09 = Fan 9 Room
C.F. Braun P & I D = K-000

EST. YEARLY MAINTENANCE MANHOURS: 3.4 AVERAGE;
Expected Manhour Range: 1.5 Minimum; 6.9 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	75 D	1.6 Hrs
1.7	450 D	0.7 Hrs
3.4	900 D	1.4 Hrs
9.0	15-30 Years	0.2 Hrs

F-026-09

Electrical Equipment.

EQUIPMENT I.D. - X63-CC007B SA FAN MOTOR
SYSTEM I.D. - X63 FB HEAT. VENT. AIR COND. System
ROOM / LOCATION: F-026-09 = Fan 9 Room
C.F. Braun P & I D = K-169

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	75 D	0.7 Hrs
0.7	450 D	0.3 Hrs
1.5	900 D	0.6 Hrs
4.0	15-30 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 75

EQUIPMENT I.D. - X05-CC001B SHIELD ANNULUS VENT FAN MOTOR EST. YEARLY MAINTENANCE MANHOURS: 2.5 AVERAGE;
SYSTEM I.D. - X05 GE SYSTEM - X05 - NOT ON FILE Expected Manhour Range: 1.0 Minimum; 5.3 Maximum.
ROOM / LOCATION: F-026-09 = Fan 9 Room
C.F. Braun P & I D = K-000

Est. Yearly Run Hours 3,548 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.3	75 D	1.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.2	450 D	0.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	2.5	900 D	1.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	6.6	15-30 Years	0.1 Hrs

F-032-10 Process Equipment.

EQUIPMENT I.D. - P56-CC001A FB201 DRAIN SUMP PUMP EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-119E

Est. Yearly Run Hours 569 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.0	588 D	0.6 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.0	1,176 D	1.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P56-CC001B FB201 DRAIN SUMP PUMP EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-119E

Est. Yearly Run Hours 569 Max. Crew 2 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.0	588 D	0.6 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.0	1,176 D	1.2 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P53-CC001A PLENUM SYS. AIR COMPRESSOR EST. YEARLY MAINTENANCE MANHOURS: 9.0 AVERAGE;
SYSTEM I.D. - P53 PNEUMATIC System Expected Manhour Range: 3.4 Minimum; 15.7 Maximum.
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-128

Est. Yearly Run Hours 7,096 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.5	37 D	4.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.2	222 D	1.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	4.4	444 D	3.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	20.3	7-14 Years	1.1 Hrs

A-73

MEG-2306-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 76

F-032-10 Electrical Equipment.

EQUIPMENT I.D. - P56-CC001A FB201 DRAIN SUMP PUMP MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-119E

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC001B FB201 DRAIN SUMP PUMP MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-119E

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 2.0 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	98 D	0.4 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.6	588 D	0.2 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	1.1	1,176 D	0.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P51-CC001A PLENUM SYS. AIR COMPRESSOR MOTOR
SYSTEM I.D. - P51 PNEUMATIC System
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D = K-128

EST. YEARLY MAINTENANCE MANHOURS: 1.8 AVERAGE;
Expected Manhour Range: 0.7 Minimum; 4.0 Maximum.

Est. Yearly Run Hours 7,096 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.1	37 D	0.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.4	222 D	0.4 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.9	444 D	0.7 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	7-14 Years	0.2 Hrs

F-032-10 Process Auxiliaries.

EQUIPMENT I.D. - X61-XX001 FB DEMIN SUMP
SYSTEM I.D. - X61 FB FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-10 = Standby Gas Treatment Service Roo
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 26.6 AVERAGE;
Expected Manhour Range: 16.1 Minimum; 41.9 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	1.1	30 D	11.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	4.7	180 D	4.7 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	9.3	360 D	9.5 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	50.7	5-10 Years	4.1 Hrs

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 77

F-032-11 Valves.

EQUIPMENT I.D. - G41-F019 Valve
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-11 = Equipment Area Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 20.5 AVERAGE;
Expected Manhour Range: 13.2 Minimum; 31.1 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	30 D	8.7 Hrs
3.6	180 D	3.7 Hrs
7.2	360 D	7.3 Hrs
32.2	5-10 Years	2.5 Hrs

EQUIPMENT I.D. - G41-F021 Valve
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-11 = Equipment Area Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 20.5 AVERAGE;
Expected Manhour Range: 13.2 Minimum; 31.1 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	30 D	8.7 Hrs
3.6	180 D	3.7 Hrs
7.2	360 D	7.3 Hrs
32.2	5-10 Years	2.5 Hrs

EQUIPMENT I.D. - G41-F043 Valve
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-11 = Equipment Area Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 18.0 AVERAGE;
Expected Manhour Range: 11.4 Minimum; 27.8 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	30 D	7.6 Hrs
3.2	180 D	3.2 Hrs
6.3	360 D	6.4 Hrs
28.3	5-10 Years	2.2 Hrs

EQUIPMENT I.D. - G41-F045 Valve
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-11 = Equipment Area Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 18.0 AVERAGE;
Expected Manhour Range: 11.4 Minimum; 27.8 Maximum.

Valve Size 10 inches Max. Crew 2 Men

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.7	30 D	7.6 Hrs
3.2	180 D	3.2 Hrs
6.3	360 D	6.4 Hrs
28.3	5-10 Years	2.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 78

F-032-12

Valves.

EQUIPMENT I.D. - G46-FF201 Valve
 SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
 ROOM / LOCATION: F-032-12 = FPCU Filter Demin. B'wash Tank R
 C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 5.0 AVERAGE;
 Expected Manhour Range: 3.0 Minimum; 8.2 Maximum.

Valve Size 4 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	98 D	2.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.8	588 D	0.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.7	1,176 D	1.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	17.6	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - G46-FF205 Valve
 SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
 ROOM / LOCATION: F-032-12 = FPCU Filter Demin. B'wash Tank R
 C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
 Expected Manhour Range: 1.2 Minimum; 5.1 Maximum.

Valve Size 1 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.7	588 D	0.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.4	1,176 D	1.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	10.5	20-40 Years	0.2 Hrs

EQUIPMENT I.D. - G46-FF204 Valve
 SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
 ROOM / LOCATION: F-032-12 = FPCU Filter Demin. B'wash Tank R
 C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 5.9 AVERAGE;
 Expected Manhour Range: 3.7 Minimum; 9.5 Maximum.

Valve Size 10 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.8	98 D	2.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.4	588 D	1.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	6.7	1,176 D	2.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	20.9	20-40 Years	0.4 Hrs

EQUIPMENT I.D. - G46-FF206 Valve
 SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
 ROOM / LOCATION: F-032-12 = FPCU Filter Demin. B'wash Tank R
 C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.6 AVERAGE;
 Expected Manhour Range: 2.7 Minimum; 7.7 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	98 D	1.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.6	588 D	0.8 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.3	1,176 D	1.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	16.5	20-40 Years	0.3 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 79

EQUIPMENT I.D. - G46-FF202 Valve
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-12 = FPCCU Filter Demin. R'wash Tank R
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.6 AVERAGE;
Expected Manhour Range: 2.7 Minimum; 7.7 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.6	98 D	1.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	2.6	588 D	0.8 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	5.3	1,176 D	1.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	16.5	20-40 Years	0.3 Hrs

F-032-14 Process Equipment.

EQUIPMENT I.D. - G41-C001A CIRCULATING PUMP
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-14 = FPCCU Pump Room
C.F. Braun P & I D = K-115B

EST. YEARLY MAINTENANCE MANHOURS: 28.3 AVERAGE;
Expected Manhour Range: 18.1 Minimum; 43.1 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.2	60 D	11.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	9.9	360 D	5.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	19.8	720 D	10.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	62.4	10-20 Years	2.1 Hrs

F-032-14 Electrical Equipment.

EQUIPMENT I.D. - G41-C001A CIRCULATING PUMP MOTOR
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-14 = FPCCU Pump Room
C.F. Braun P & I D = K-115B

EST. YEARLY MAINTENANCE MANHOURS: 8.9 AVERAGE;
Expected Manhour Range: 2.4 Minimum; 14.5 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 4 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.8	60 D	4.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.5	360 D	1.8 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	7.0	720 D	3.6 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	22.1	12-24 Years	0.6 Hrs

F-032-15 Process Equipment.

EQUIPMENT I.D. - G41-C001B CIRCULATING PUMP
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-15 = FPCCU Pump Room
C.F. Braun P & I D = K-115B

EST. YEARLY MAINTENANCE MANHOURS: 28.3 AVERAGE;
Expected Manhour Range: 18.1 Minimum; 43.1 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.2	60 D	11.9 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	9.9	360 D	5.0 Hrs
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	19.8	720 D	10.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	62.4	10-20 Years	2.1 Hrs

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 80

F-032-15 Electrical Equipment.

EQUIPMENT I.D. - G41-C001B CIRCULATING PUMP MOTOR
SYSTEM I.D. - G41 FUEL POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-15 = FPCCU Pump Room
C.F. Braun P & I D = K-115B

EST. YEARLY MAINTENANCE MANHOURS: 8.9 AVERAGE;
Expected Manhour Range: 2.4 Minimum; 14.5 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	60 D	4.2 Hrs
3.5	360 D	1.8 Hrs
7.0	720 D	3.6 Hrs
22.1	12-24 Years	0.6 Hrs

F-032-16 Process Equipment.

EQUIPMENT I.D. - G46-CC004 DRAIN PUMP
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-16 = FPCCU Transfer Pump Room
C.F. Braun P & I D = K-116A

EST. YEARLY MAINTENANCE MANHOURS: 11.0 AVERAGE;
Expected Manhour Range: 6.4 Minimum; 18.3 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.4	96 D	4.6 Hrs
6.3	588 D	1.9 Hrs
12.5	1,176 D	3.9 Hrs
31.6	20-40 Years	0.5 Hrs

F-032-16 Electrical Equipment.

EQUIPMENT I.D. - G46-CC004 DRAIN PUMP MOTOR
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-16 = FPCCU Transfer Pump Room
C.F. Braun P & I D = K-116A

EST. YEARLY MAINTENANCE MANHOURS: 2.8 AVERAGE;
Expected Manhour Range: 1.0 Minimum; 5.5 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.4	96 D	1.3 Hrs
1.8	588 D	0.6 Hrs
3.6	1,176 D	1.1 Hrs
9.1	20-40 Years	0.1 Hrs

F-032-18 Process Auxiliaries.

EQUIPMENT I.D. - G46-AA910 SERVICE POOL
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-18 = Service Pool Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 65.4 AVERAGE;
Expected Manhour Range: 35.1 Minimum; 93.1 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 8 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
2.6	30 D	27.6 Hrs
11.5	180 D	11.6 Hrs
22.9	360 D	23.3 Hrs
124.6	5-10 Years	10.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 81

F-032-19 Process Auxiliaries.

EQUIPMENT I.D. - G46-AA920 FUEL TRANSFER POOL
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-19 = Fuel Transfer Pool Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 57.5 AVERAGE;
Expected Manhour Range: 33.6 Minimum; 82.3 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 7 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.3	30 D	24.3 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	10.1	180 D	10.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	20.2	360 D	20.5 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	109.6	5-10 Years	8.9 Hrs

F-032-20 Process Auxiliaries.

EQUIPMENT I.D. - G46-AA900 FUEL STORAGE POOL
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-20 = Fuel Storage Pool Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 84.4 AVERAGE;
Expected Manhour Range: 44.9 Minimum; 115.4 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 10 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	3.3	30 D	35.7 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	14.8	180 D	15.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	29.6	360 D	30.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	160.9	5-10 Years	13.1 Hrs

F-032-21 Process Auxiliaries.

EQUIPMENT I.D. - G46-AA930 CASK POOL
SYSTEM I.D. - G46 FPC&CU FILTER DEMINERALIZER System
ROOM / LOCATION: F-032-21 = Cask Pool Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 55.5 AVERAGE;
Expected Manhour Range: 31.0 Minimum; 80.8 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 7 Men.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	2.2	30 D	23.5 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	9.8	180 D	9.9 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	19.5	360 D	19.8 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	105.9	5-10 Years	8.6 Hrs

F-032-22 Valves.

EQUIPMENT I.D. - G38-FP006 Valve
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.7 Minimum; 5.3 Maximum.

Valve Size 4 inches Max. Crew 1 Man

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.4	98 D	1.2 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	1.7	588 D	0.5 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	3.4	1,176 D	1.0 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	10.4	20-40 Years	0.2 Hrs

4-035

NEDE-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 82

EQUIPMENT I.D. - G38-FF007 Valve
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 2.9 AVERAGE;
Expected Manhour Range: 1.7 Minimum; 5.3 Maximum.

Valve Size 4 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.4 98 D 1.2 Hrs
1.7 588 D 0.5 Hrs
3.4 1,176 D 1.0 Hrs
10.4 20-40 Years 0.2 Hrs

EQUIPMENT I.D. - G38-FF024 AOV Valve
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.1 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 6.8 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.5 98 D 1.7 Hrs
2.3 588 D 0.7 Hrs
4.6 1,176 D 1.4 Hrs
14.4 20-40 Years 0.2 Hrs

EQUIPMENT I.D. - G38-FF021 AOV Valve
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 4.1 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 6.8 Maximum.

Valve Size 3 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

0.5 98 D 1.7 Hrs
2.3 588 D 0.7 Hrs
4.6 1,176 D 1.4 Hrs
14.4 20-40 Years 0.2 Hrs

EQUIPMENT I.D. - G38-FF016 AOV Valve
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 7.6 AVERAGE;
Expected Manhour Range: 4.8 Minimum; 11.9 Maximum.

Valve Size 8 inches Max. Crew 1 Man

Task Manhours Frequency Yearly Contribution

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

1.0 98 D 3.2 Hrs
4.3 588 D 1.3 Hrs
8.7 1,176 D 2.7 Hrs
27.1 20-40 Years 0.5 Hrs

A-86

NEDE-23996-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 83

F-032-22 Process Auxiliaries.

EQUIPMENT I.D. - G38-DD001 SPCU DEMINERALIZER
SYSTEM I.D. - G38 SUPPR. POOL COOLING & CLEANUP System
ROOM / LOCATION: F-032-22 = SPCU Filter Demineralizer Room
C.F. Braun P & I D = K-172EST. YEARLY MAINTENANCE MANHOURS: 39.6 AVERAGE;
Expected Manhour Range: 20.4 Minimum; 56.7 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 7 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	3.8	75 D	16.1 Hrs
RS	16.7	450 D	6.8 Hrs
RD	31.4	900 D	13.5 Hrs
MD	89.2	13-26 Years	2.1 Hrs

F-032-25 Process Equipment.

EQUIPMENT I.D. - P56-CC018A CASK DECON SUMP PUMP
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-155EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RD	3.9	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P56-CC018B CASK DECON SUMP PUMP
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-155EST. YEARLY MAINTENANCE MANHOURS: 3.5 AVERAGE;
Expected Manhour Range: 1.4 Minimum; 6.4 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.4	98 D	1.5 Hrs
RS	2.0	588 D	0.6 Hrs
RD	3.9	1,176 D	1.2 Hrs
MD	14.3	20-40 Years	0.3 Hrs

EQUIPMENT I.D. - P48-CC002 BOOSTER PUMP
SYSTEM I.D. - P48 DECONTAMINATION WASTE System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-154EST. YEARLY MAINTENANCE MANHOURS: 10.4 AVERAGE;
Expected Manhour Range: 3.3 Minimum; 16.7 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	1.3	98 D	4.4 Hrs
RS	5.9	588 D	1.8 Hrs
RD	11.9	1,176 D	3.7 Hrs
MD	29.9	20-40 Years	0.5 Hrs

A-87

NEDE-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 84

EQUIPMENT I.D. - P48-CC003 DECON TRANSFER PUMP
SYSTEM I.D. - P48 DECONTAMINATION WASTE System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-154

EST. YEARLY MAINTENANCE MANHOURS: 7.5 AVERAGE;
Expected Manhour Range: 3.2 Minimum; 13.0 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 2 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	1.0	98 D	3.2 Hrs
RS	4.3	588 D	1.3 Hrs
RO	8.6	1,176 D	2.7 Hrs
MD	21.6	20-40 Years	0.3 Hrs

F-032-25 Electrical Equipment.

EQUIPMENT I.D. - P56-CC018A CASK DECON SUMP PUMP MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-155

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 1.9 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.1	98 D	0.4 Hrs
RS	0.6	588 D	0.2 Hrs
RO	1.1	1,176 D	0.3 Hrs
MD	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P56-CC018B CASK DECON SUMP PUMP MOTOR
SYSTEM I.D. - P56 FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-155

EST. YEARLY MAINTENANCE MANHOURS: 0.9 AVERAGE;
Expected Manhour Range: 0.3 Minimum; 1.9 Maximum.

Est. Yearly Run Hours 569 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.1	98 D	0.4 Hrs
RS	0.6	588 D	0.2 Hrs
RO	1.1	1,176 D	0.3 Hrs
MD	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - P48-CC002 BOOSTER PUMP MOTOR
SYSTEM I.D. - P48 DECONTAMINATION WASTE System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-154

EST. YEARLY MAINTENANCE MANHOURS: 1.2 AVERAGE;
Expected Manhour Range: 0.5 Minimum; 2.8 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task	Manhours	Frequency	Yearly Contribution
RI	0.2	98 D	0.6 Hrs
RS	0.8	588 D	0.2 Hrs
RO	1.6	1,176 D	0.5 Hrs
MD	4.0	20-40 Years	0.1 Hrs

A-88

NEDE-2396-1

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 85

EQUIPMENT I.D. - P48-CC003 DECON TRANSFER PUMP MOTOR
SYSTEM I.D. - P48 DECONTAMINATION WASTE System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D = K-154

EST. YEARLY MAINTENANCE MANHOURS: 1.5 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.4 Maximum.

Est. Yearly Run Hours 1,577 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.2	98 D	0.7 Hrs
1.0	588 D	0.3 Hrs
2.0	1,176 D	0.6 Hrs
5.0	20-40 Years	0.1 Hrs

F-032-25 Process Auxiliaries.

EQUIPMENT I.D. - X61-XX065 CASK DECON SUMP
SYSTEM I.D. - X61 FB FLOOR DRAIN SUMP System
ROOM / LOCATION: F-032-25 = Transfer Pump Room
C.F. Braun P & I D =

EST. YEARLY MAINTENANCE MANHOURS: 26.6 AVERAGE;
Expected Manhour Range: 16.1 Minimum; 41.9 Maximum.

Est. Yearly Run Hours 8,760 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	30 D	11.2 Hrs
4.7	180 D	4.7 Hrs
9.3	360 D	9.5 Hrs
50.7	5-10 Years	4.1 Hrs

F-032-26 Process Equipment.

EQUIPMENT I.D. - C11-C001A CRD DRIVE WTR PUMP
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 56.1 AVERAGE;
Expected Manhour Range: 37.1 Minimum; 78.1 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
4.4	60 D	23.7 Hrs
19.7	360 D	10.0 Hrs
39.4	720 D	20.0 Hrs
123.9	10-20 Years	4.2 Hrs

EQUIPMENT I.D. - C11-C001B CRD DRIVE WTR PUMP
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 56.1 AVERAGE;
Expected Manhour Range: 37.1 Minimum; 78.1 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 5 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
4.4	60 D	23.7 Hrs
19.7	360 D	10.0 Hrs
39.4	720 D	20.0 Hrs
123.9	10-20 Years	4.2 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 86

EQUIPMENT I.D. - C11-C001A CRD LUBE OIL PUMP
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 7.0 AVERAGE;
Expected Manhour Range: 3.0 Minimum; 12.7 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	60 D	3.5 Hrs
2.9	360 D	1.5 Hrs
5.7	720 D	2.9 Hrs
18.1	12-24 Years	0.5 Hrs

EQUIPMENT I.D. - C11-C001B CRD LUBE OIL PUMP
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 7.0 AVERAGE;
Expected Manhour Range: 3.0 Minimum; 12.7 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.6	60 D	3.5 Hrs
2.9	360 D	1.5 Hrs
5.7	720 D	2.9 Hrs
18.1	12-24 Years	0.5 Hrs

F-032-26 Valves.

EQUIPMENT I.D. - C11-F002A SUPPLY H2O FLOW CONT Valve
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104C

EST. YEARLY MAINTENANCE MANHOURS: 33.2 AVERAGE;
Expected Manhour Range: 25.5 Minimum; 43.8 Maximum.

Valve Size 2 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	37 D	14.0 Hrs
7.2	222 D	5.9 Hrs
14.4	444 D	11.8 Hrs
56.0	6-12 Years	3.5 Hrs

EQUIPMENT I.D. - C11-F002B SUPPLY H2O FLOW CONT Valve
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104C

EST. YEARLY MAINTENANCE MANHOURS: 33.2 AVERAGE;
Expected Manhour Range: 25.5 Minimum; 43.8 Maximum.

Valve Size 2 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	37 D	14.0 Hrs
7.2	222 D	5.9 Hrs
14.4	444 D	11.8 Hrs
56.0	6-12 Years	3.5 Hrs

NEDE-23996-1

DWR/G Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978 Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 87

EQUIPMENT I.D. - C11-F121 H2O TO RPV Valve
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104C

EST. YEARLY MAINTENANCE MANHOURS: 27.2 AVERAGE;
Expected Manhour Range: 18.4 Minimum; 38.1 Maximum.

Valve Size 2 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.3	37 D	11.5 Hrs
5.9	222 D	4.9 Hrs
11.8	444 D	9.7 Hrs
48.0	6-12 Years	2.8 Hrs

F-032-26 Electrical Equipment.

EQUIPMENT I.D. - C11-C001A CRD DRIVE WTR PUMP MOTOR
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 12.8 AVERAGE;
Expected Manhour Range: 3.0 Minimum; 19.6 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	60 D	6.1 Hrs
5.1	360 D	2.6 Hrs
10.2	720 D	5.1 Hrs
31.9	12-24 Years	0.9 Hrs

EQUIPMENT I.D. - C11-C001B CRD DRIVE WTR PUMP MOTOR
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 12.8 AVERAGE;
Expected Manhour Range: 3.0 Minimum; 19.6 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.1	60 D	6.1 Hrs
5.1	360 D	2.6 Hrs
10.2	720 D	5.1 Hrs
31.9	12-24 Years	0.9 Hrs

EQUIPMENT I.D. - C11-C001A CRD LUBE OIL PUMP MOTOR
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 = CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 1.6 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.6 Maximum.

Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	60 D	0.8 Hrs
0.6	360 D	0.3 Hrs
1.3	720 D	0.6 Hrs
4.0	12-24 Years	0.1 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.
Prepared: December 20, 1978

PAGE - 88

EQUIPMENT I.D. - C11-C001B CRD LUBE OIL PUMP MOTOR
SYSTEM I.D. - C11 CRD HYDRAULIC CONTROL System
ROOM / LOCATION: F-032-26 * CRD Drive Water Pump Room
C.F. Braun P & I D = K-104A

EST. YEARLY MAINTENANCE MANHOURS: 1.6 AVERAGE;
Expected Manhour Range: 0.6 Minimum; 3.6 Maximum.
Est. Yearly Run Hours 4,380 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.1	60 D	0.8 Hrs
0.6	360 D	0.3 Hrs
1.3	720 D	0.6 Hrs
4.0	12-24 Years	0.1 Hrs

F-032-27 Process Equipment.

EQUIPMENT I.D. - G38-CC001A SPCU PUMP
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System
ROOM / LOCATION: F-032-27 * Access Area Room
C.F. Braun P & I D = K-172

EST. YEARLY MAINTENANCE MANHOURS: 17.3 AVERAGE;
Expected Manhour Range: 10.6 Minimum; 28.1 Maximum.
Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	75 D	7.0 Hrs
7.3	450 D	3.0 Hrs
14.6	900 D	5.9 Hrs
39.0	13-26 Years	0.9 Hrs

EQUIPMENT I.D. - G38-CC001B SPCU PUMP
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System
ROOM / LOCATION: F-032-27 * Access Area Room
C.F. Braun P & I D = K-172

EST. YEARLY MAINTENANCE MANHOURS: 17.3 AVERAGE;
Expected Manhour Range: 10.6 Minimum; 28.1 Maximum.
Est. Yearly Run Hours 3,548 Max. Crew 4 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.6	75 D	7.0 Hrs
7.3	450 D	3.0 Hrs
14.6	900 D	5.9 Hrs
39.0	13-26 Years	0.9 Hrs

F-032-27 Valves.

EQUIPMENT I.D. - G38-FF002 SPCU DISCH O/B ISO Valve
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System
ROOM / LOCATION: F-032-27 * Access Area Room
C.F. Braun P & I D = K-172

EST. YEARLY MAINTENANCE MANHOURS: 7.6 AVERAGE;
Expected Manhour Range: 4.8 Minimum; 11.9 Maximum.
Valve Size 8 inches Max. Crew 1 Man

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MO Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
1.0	98 D	3.2 Hrs
4.3	588 D	1.3 Hrs
8.7	1,176 D	2.7 Hrs
27.1	20-40 Years	0.5 Hrs

BWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

Prepared: December 20, 1978

PAGE - 89

EQUIPMENT I.D. - G38-FF003 SPCU SUCTION O/B ISO Valve EST. YEARLY MAINTENANCE MANHOURS: 6.6 AVERAGE;
 SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System Expected Manhour Range: 3.5 Minimum; 10.3 Maximum.
 ROOM / LOCATION: F-032-27 = Access Area Room
 C.F. Braun P & I D = K-172

Valve Size 12 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.8	98 D	2.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.8	588 D	1.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	7.5	1,176 D	2.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	23.4	20-40 Years	0.4 Hrs

EQUIPMENT I.D. - G38-FF004 SPCU SUCTION O/B ISO Valve EST. YEARLY MAINTENANCE MANHOURS: 6.6 AVERAGE;
 SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System Expected Manhour Range: 3.5 Minimum; 10.3 Maximum.
 ROOM / LOCATION: F-032-27 = Access Area Room
 C.F. Braun P & I D = K-172

Valve Size 12 inches Max. Crew 2 Men

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.8	98 D	2.8 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	3.8	588 D	1.2 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	7.5	1,176 D	2.3 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	23.4	20-40 Years	0.4 Hrs

F-032-27 Electrical Equipment.

EQUIPMENT I.D. - G38-FF002 SPCU DISCH O/B ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
 SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
 ROOM / LOCATION: F-032-27 = Access Area Room
 C.F. Braun P & I D = K-172

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - G38-FF003 SPCU SUCTION O/B ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
 SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
 ROOM / LOCATION: F-032-27 = Access Area Room
 C.F. Braun P & I D = K-172

Est. Yearly Run Hours 100 Max. Crew 1 Man.

Task	Manhours	Frequency	Yearly Contribution
RI Inspect, Minor Adjustments, Replace Consumables -	0.0	98 D	0.1 Hrs
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -	0.1	588 D	0.0 Hrs
RO RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies	0.3	1,176 D	0.1 Hrs
MD Complete Disassembly and Rework to Restore to Design Specs -	4.0	20-40 Years	0.1 Hrs

A-93

NEDE-23996-1

DWR/6 Mark III Power Plant Auxiliary and Fuel Building - Radiation Areas - Maintenance Workloads.

Prepared: December 20, 1978
Equipment Data - Equipment Maintenance Task Estimates - by Rooms.

PAGE - 90

EQUIPMENT I.D. - G38-FF004 SPCU SUCTION O/B ISO Valve Motor EST. YEARLY MAINTENANCE MANHOURS: 0.2 AVERAGE;
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System Expected Manhour Range: 0.1 Minimum; 0.5 Maximum.
ROOM / LOCATION: F-032-27 = Access Area Room
C.F. Braun P & I D = K-172

Est. Yearly Run Hours 100 Max. Crew 1 Man.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.0	90 D	0.1 Hrs
0.1	508 D	0.0 Hrs
0.3	1,170 D	0.1 Hrs
4.0	20-40 Years	0.1 Hrs

EQUIPMENT I.D. - G38-CC001A SPCU PUMP MOTOR
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System
ROOM / LOCATION: F-032-27 = Access Area Room
C.F. Braun P & I D = K-172

EST. YEARLY MAINTENANCE MANHOURS: 7.1 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 12.0 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.3 Hrs
3.5	450 D	1.4 Hrs
7.0	900 D	2.8 Hrs
18.6	15-30 Years	0.4 Hrs

EQUIPMENT I.D. - G38-CC001B SPCU PUMP MOTOR
SYSTEM I.D. - G38 SUPPR. POOL CLEANUP System
ROOM / LOCATION: F-032-27 = Access Area Room
C.F. Braun P & I D = K-172

EST. YEARLY MAINTENANCE MANHOURS: 7.1 AVERAGE;
Expected Manhour Range: 2.1 Minimum; 12.0 Maximum.

Est. Yearly Run Hours 3,548 Max. Crew 3 Men.

RI Inspect, Minor Adjustments, Replace Consumables -
RS RI, and Some Disassembly to Replace Minor Worn/Defective Parts -
RD RI, RS, and Disassembly to Replace Worn/Defective Sub-Assemblies
MD Complete Disassembly and Rework to Restore to Design Specs -

Task Manhours	Frequency	Yearly Contribution
0.8	75 D	3.3 Hrs
3.5	450 D	1.4 Hrs
7.0	900 D	2.8 Hrs
18.6	15-30 Years	0.4 Hrs

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TITLE PAGE

AUTHOR P.D. KNECHT	SUBJECT OCCUPATIONAL EXPOSURE REDUCTION	TIE NUMBER 79NED61
		DATE May 1979
TITLE MAINTENANCE ACCESS TIME ESTIMATES BWR/6 Auxiliary and Fuel Building		GE CLASS II GOVERNMENT CLASS
REPRODUCIBLE COPY FILED AT TECHNICAL SUPPORT SERVICES, R&UD, SAN JOSE, CALIFORNIA 95125 (Mail Code 211)		NUMBER OF PAGES
SUMMARY This report provides an estimate of manpower and time requirements for maintenance work in BWR/6 Auxiliary and Fuel Building radiation areas. The results of this report, combined with radiation levels estimates can then be used to identify areas where changes could be made in order to reduce man rem exposure to personnel.		

By cutting out this rectangle and folding in half, the above information can be fitted into a standard card file.

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SECTION Plant Design Engineering

BUILDING AND ROOM NUMBER 1900-309 MAIL CODE 165

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