Basis Approval Package for System 1_BA

BLR COMB AIR/FLUE GAS

Grouped By System, Sorted By Equipment ID, Procedure, Section, and Revision

Task Change Summary

		(Freq)
Use As Is:	16	
Revise:	48	41
Delete:	73	
New	59	
Design Change:		
Run To Failure:	16	
Total:	**212**	

Department Breakdown

Department	Total
	16
Coal & Yard	3
Electrician	24
Instrument Tech (I&C)	86
Laboratory	4
Mechanic	36
Mechanical Contractor	1
Operations Units 1 & 2	36
Technicians Vib/ Lab	6

Approvals					
Department:					
Name:					
Date:					

Implementation Package Approval Signoff

Sorted By Component ID, Department, and Action

System: **1_BA**
Page: 1 of 1
Printed By: LPJohnson
Date: 02/09/2001, 8:14

Task ID	Component ID:	Dept	Action	Task Description	Approve	Reject
669	1AT-BA001	INST	Use As Is	CHECK CALIBRATION OF OXYGEN PROBES (NORTH & S	☐	☐
846	1BA02CA	MECH	Add New	Rebuiild or repair blading or housing areas which have been erro	☐	☐
272	1BA02CA	MECH	Add New	Change bearing lubricant and take sample for analysis.	☐	☐
160	1BA02CA	MECH	Revise Existing	CHANGE GREASE IN COUPLING CLEAN, INSPECT, & REF	☐	☐
273	1BA02CB	MECH	Add New	Change bearing lubricant and take sample for analysis.	☐	☐
847	1BA02CB	MECH	Add New	Rebuiild or repair blading or housing areas which have been erro	☐	☐
161	1BA02CB	MECH	Revise Existing	CHANGE GREASE IN COUPLING CLEAN INSPECT & REFI	☐	☐
55	1BA03AA	CLYD	Delete Existing	VACUUM DUCTWORK AND CROSSOVER AS REQUIRED	☐	☐
734	1BA03AA	MECH	Add New	Inspect for signs of degraded performance or structural integrity (	☐	☐
729	1BA03AA	TECV	Add New	Perform vibration analysis in accordance with plant procedure.	☐	☐
56	1BA03AB	CLYD	Delete Existing	VACUUM DUCTWORK AND CROSSOVER AS REQUIRED	☐	☐
735	1BA03AB	MECH	Add New	Inspect for signs of degraded performance or structural integrity (	☐	☐
728	1BA03AB	TECV	Add New	Perform vibration analysis in accordance with plant procedure.	☐	☐
370	1PT-BA059A	INST	Revise Existing	CLEAN BOILER TAPS. SEE ATTACHMENT FOR LOCATIO	☐	☐
670	1PT-BA059A	INST	Use As Is	CHECK CALIBRATION OF TRANSMITTER AND DCS INDI	☐	☐
372	1PT-BA059B	INST	Revise Existing	CLEAN BOILER TAPS. SEE ATTACHMENT FOR LOCATIO	☐	☐
671	1PT-BA059B	INST	Use As Is	CHECK CALIBRATION OF TRANSMITTER AND DCS INDI	☐	☐
374	1PT-BA059C	INST	Revise Existing	CLEAN BOILER TAPS. SEE ATTACHMENT FOR LOCATIO	☐	☐
672	1PT-BA059C	INST	Use As Is	CHECK CALIBRATION OF TRANSMITTER AND DCS INDI	☐	☐

Remarks

Basis Approval Package for System 1_BA

Sorted and Grouped By Component ID

Printed By: LPJohnson
Date: 02/09/2001 8:14:56 A

Component ID: 1AT-BA001 **TRANSMITTER-BOILER FLUE GAS OXYGEN**

System: 1_BA
Manuf ID:
Type: XM
Drawing: 04296 P&ID M-37
Duty:
Environment:

Procedure / Sec / Rev	Title/Description	Freq	MHrs	Mode	Action	Dept
92 / 1 / 1	Calibrate Analyzer	6 M	8	1	**UAI**	**INST**

Task ID: 669 CHECK CALIBRATION OF OXYGEN PROBES (NORTH & SOUTH) FILL OUT CAL. DATA SHEET

Basis

Calibration will continue based on criticality of O2 indication and input to heat rate calculation.

Basis Approval Package for System 1_BA

Sorted and Grouped By Component ID

Printed By: LPJohnson
Date: 02/09/2001 8:14:57 A

Component ID: 1BA02CB **FAN-ID 1B**

System: 1_BA
Manuf ID:
Type: FN
Drawing: 04296 P&ID M-44
Duty:
Environment:

Procedure / Sec / Rev	Title/Description	Freq	MHrs	Mode	Action	Dept
/ /	Rebuild or replace coal or ash erroded components.	18 M	32	5	**New**	**MECH**
Task ID: 847	Rebuiild or repair blading or housing areas which have been erroded with ash.					
/ /	Change Bearing Lubricant and Sample	18 M	2	5	**New**	**MECH**
Task ID: 273	Change bearing lubricant and take sample for analysis.					
140 / 1 / 1	Change lubricant removing and replacing existing oil / lubricant.	54 M	4	5	**Rev**	**MECH**
Task ID: 161	CHANGE GREASE IN COUPLING CLEAN INSPECT & REFILL WITH FALK LTG.					

Change Justification: Revision made because of industry norms and past experience with the Falk couplings. Industry recommends changing lubricant (coupling grease) every 3 to 5 years. Interviews with Ken M. indicate no problems with coupling when inspected in the past.

Basis

Highly inportant equipment with a low likelyhood of failure. Significant ash errosion occurs each year such that repair is required to assure continued operation until the next outage.

Basis Approval Package for System 1_BA

Sorted and Grouped By Component ID

Printed By: LPJohnson
Date: 02/09/2001 8:14:57 A

Component ID: 1BA03AA **AIR PREHEATER 1A**

System: 1_BA
Manuf ID: 331
Type: AP
Drawing: 04296 P&ID M-37
Duty:
Environment:

Procedure / Sec / Rev	Title/Description	Freq	MHrs	Mode	Action	Dept
/ /	Inspect	18 M	4	5	**New**	**MECH**
Task ID: 734	Inspect for signs of degraded performance or structural integrity due to errosion/corrosion.					
/ /	Vibration overall analysis.	2 M	2		**New**	**TECV**
Task ID: 729	Perform vibration analysis in accordance with plant procedure.					
129 / 1 / 1	Clean and inspect.	18 M	24	5	**Del**	**CLYD**
Task ID: 55	VACUUM DUCTWORK AND CROSSOVER AS REQUIRED _					

Change Justification: This PM task doesn't apply to the are heater and will be addressed under the boiler duct work ID number.

Basis

Fouling is evident to the operators by the DP on the control chart and also the performance testing of the air heater. Internal seal failure is indi when air leakage testing or performance testing is done. Errosion/corrosion problems are not as readily apparent by operations but are includ part of the annual boiler inspection.

Basis Approval Package for System 1_BA

Sorted and Grouped By Component ID

Printed By: LPJohnson
Date: 02/09/2001 8:14:58 A

Component ID: 1PT-BA059B **TRANSMITTER-PRESSURE FURNACE DRAFT**

System: 1_BA **Drawing:** P&ID M-37
Manuf ID: **Duty:**
Type: XM **Environment:**

Procedure / Sec / Rev	Title/Description	Freq	MHrs	Mode	Action	Dept
479 / 1 / 1	Clean and inspect.	18 M	16	5	**Rev**	**INST**

Task ID: 372 CLEAN BOILER TAPS. SEE ATTACHMENT FOR LOCATIONS.

CLEAN BOILER TAPS AT THE FOLLOWING LOCATIONS;
1ST FLOOR- 3 TAPS ON EACH PULVERIZER
3RD FLOOR- 1 TAP ON EACH BURNER
6TH FLOOR- 4 TAPS ON SOUTH SIDE, 1 TAP ON NORTH SIDE, 2 TAPS ON WEST SIDE
7TH FLOOR- 1 TAP ON NORTH SIDE, 1 TAP ON SOUTH SIDE, 2 TAPS FOR THE ORSAT
8TH FLOOR- 6 TAPS ON ID, FD, AND AIR HEATERS

Change Justification: Task was previously assigned to the Boiler. Add task to this component ID.

Basis

DCS uses median of the three transmitters. Failure of any one transmitter will have no impact. Operators will have indication of a plugged reference line and will also be aware if one of the three is reading BAD. Not used in performance calcs.

Procedure / Sec / Rev	Title/Description	Freq	MHrs	Mode	Action	Dept
153 / 1 / 1	Calibration.	36 M	2	5	**UAI**	**INST**

Task ID: 671 CHECK CALIBRATION OF TRANSMITTER AND DCS INDICATION, FILL OUT CONTROL CHART.

Basis

DCS uses median of the three transmitters. Failure of any one transmitter will have no impact. Operators will have indication of a plugged reference line and will also be aware if one of the three is reading BAD. Not used in performance calcs.

Printed By: LPJohnson
Date: 02/09/2001 8:15:33 A

PM Task Change Justification for System 1_BA

BLR COMB AIR/FLUE GAS

PM Task Change Justification for System 1_BA

Sorted By Component ID, Procedure, Section, and Revision

Original Value in Reverse Text

Printed By: LPJohnson
Date: 02/09/2001 8:15:33 A

Action: **Delete Existing**
Component ID: **1BA03AA** **AIR PREHEATER 1A**

Recommended PM Task **Task ID: 55**

Procedure: 129 / 1 / 1 **Task Title:** Clean and inspect.

Description: VACUUM DUCTWORK AND CROSSOVER AS REQUIRED _

Frequency: 18 M **Crew Size:** 3 **Man-hrs:** 24 **Dept:** CLYD **Mode:** 5

Imp Vehicle: WORK ORDER **WR Number:** 6080 **Task Type:** Time Directed

Comment:

Change Justification

This PM task doesn't apply to the are heater and will be addressed under the boiler duct work ID number.

Actions To Implement

Delete Empac activity for clean and inspect Air Preheater.

PM Task Change Justification for System 1_BA

Sorted By Component ID, Procedure, Section, and Revision

Original Value in Reverse Text

Printed By: LPJohnson
Date: 02/09/2001 8:15:33 A

Action: **Add New**
Component ID: **1BA20S** **CHIMNEY-BOILER STACK**

Recommended PM Task **Task ID: 69**

Procedure: / / **Task Title:** Internal inspection for corrosion, erosion or fouling.

Description: Gunite inspection, general oveall condition.

Frequency: 6 Y **Crew Size:** **Man-hrs:** 14 **Dept:** MCTR **Mode:**

Imp Vehicle: WORK ORDER **WR Number:** TBD **Task Type:** Time Directed

Comment: Non repetitive work order, per Tom Larson.

Actions To Implement

Create PM task for Stack inspection. These inspections have been performed in the past; however, there has been no formal PM in place to track thei

PM Task Change Justification for System 1_BA

Sorted By Component ID, Procedure, Section, and Revision

Original Value in Reverse Text

Printed By: LPJohnson
Date: 02/09/2001 8:15:34 A

Action: **Revise Existing**
Component ID: **1TZ-BA024** **ACTUATOR-AIR HTR 1A AIR BYPASS DAMPER CONTROL DRIVE**

Recommended PM Task **Task ID: 70**

Procedure: 65 / 1 / 1 **Task Title:** Clean and inspect.
/ /

Description: CLEAN, LUBRICATE, CHECK OPERATION ALSO STROKE FROM CONTROL ROOM, CHECK CALIBRATION 0F ASSOCIATED I/P OR M/P FILL OUT CONTROL CHART.
CLEAN, LUBRICATE, CHECK OPERATION ALSO STROKE FROM CONTROL ROOM, CHECK CALIBRATION 0F ASSOCIATED I/P OR M/P FILL OUT CONTROL CHART

Frequency: 36 M **Crew Size:** 1 **Man-hrs:** 2 **Dept:** INST **Mode:** 5
18 M

Imp Vehicle: WORK ORDER **WR Number:** 2039 **Task Type:** Time Directed

Comment:

Change Justification

According to vendor literature, purpose of lubrication is to prevent corrosion of cylinder walls. Improvements in Instrument Air quality (e.g. new dryers) should redu the possibility of corrosion and dirt infiltration. Extension to 36 months is appropriate based on these improvements.

Actions To Implement

Extend Empac activity from 18 to 36 months and retain calibration of I/P or M/P.

PM Task Change Justification for System 1_BA

Sorted By Component ID, Procedure, Section, and Revision

Original Value in Reverse Text

Printed By: LPJohnson
Date: 02/09/2001 8:15:34 A

Action: **Revise Existing**
Component ID: **1TZ-BA026** **ACTUATOR-AIR HTR 1B AIR BYPASS DAMPER CONTROL DRIVE**

Recommended PM Task **Task ID: 71**

Procedure: 67 / 1 / 1 **Task Title:** Clean and inspect.
/ /

Description: CLEAN, LUBRICATE, CHECK OPERATION ALSO STROKE FROM CONTROL ROOM, CHECK CALIBRATION 0F ASSOCIATED I/P OR M/P FILL OUT CONTROL CHART.
CLEAN, LUBRICATE, CHECK OPERATION ALSO STROKE FROM CONTROL ROOM, CHECK CALIBRATION 0F ASSOCIATED I/P OR M/P FILL OUT CONTROL CHART

Frequency: 36 M **Crew Size:** 1 **Man-hrs:** 2 **Dept:** INST **Mode:** 5
18 M

Imp Vehicle: WORK ORDER **WR Number:** 2041 **Task Type:** Time Directed

Comment:

Change Justification

According to vendor literature, purpose of lubrication is to prevent corrosion of cylinder walls. Improvements in Instrument Air quality (e.g. new dryers) should reduc possibility of corrosion and dirt infiltration. Extension to 36 months is appropriate based on these improvements.

Actions To Implement

Extend Empac activity from 18 to 36 months and retain calibration of I/P or M/P.

Detailed Data for System 1_BA

Sorted and Grouped By Component ID

Blank Details Indicate No Data

Printed By: LPJohnson
Date: 02/09/2001 8:34:30 A

Component ID: **1BA01WB** MOTOR-FD FAN 250HP/2300VOLT 1B

Unit: WE1
System: 1_BA
Manuf ID: 993
Type: MO
Duty:
Environment:

Credited PM Tasks

Procedure / Sec / Rev	Task Title	Type	Mhrs	Freq	Mode	Dept
141 / 1 / 1	Change lubricant removing and replacing existing oil / lubricant.	Time Directed	4	12 M	5	ELEC
142 / 1 / 1	Clean and inspect.	Time Directed	3	12 M	5	ELEC
143 / 1 / 1	Clean and inspect.	Time Directed	4	12 M	5	ELEC

Non-Credited PM Tasks

Vendor Recommendations

Commitments

Maintenance History

WO Number	Originator	Cause	Work Date	TOOS	TTR	Description
99-142617-000	CONV77		02/29/2000	2976	0	PM: CHANGE OIL IN MOTOR DTE HEAVY MED. Procedure : 0BA00010
99-142642-000	CONV77		03/06/2000	3120	0	PM: CLEAN, INSPECT, CHANGE GREASE IN MAGNETIC COUPLING
99-142644-000	CONV77		03/06/2000	3120	0	PM: CLEAN, INSPECT, CHANGE BRUSHES _____ IN MAGNETIC COUPLING

Interviews

General References

Detailed Data for System 1_BA

Sorted and Grouped By Component ID

Blank Details Indicate No Data

Printed By: LPJohnson
Date: 02/09/2001 8:34:30 A

Component ID: **1BA02CA** FAN-ID 1A

Unit: WE1
System: 1_BA
Manuf ID:

Type: FN
Duty:
Environment:

Credited PM Tasks

Procedure / Sec / Rev	Task Title	Type	Mhrs	Freq	Mode	Dept
122 / 1 / 1	Change lubricant removing and replacing existing oil / lubricant.	Time Directed	4	24 M	5	MECH

Non-Credited PM Tasks

Procedure / Sec / Rev	Task Title	Type	Mhrs	Freq	Dept
/ /	Vibration overall analysis.	Condition Monitoring	2	2 M	TECV
1P4 / 6.1 / 2	Check Fluid Level and Condition	Condition Monitoring	0.5	12 H	OP1

Vendor Recommendations

Commitments

Maintenance History

WO Number	Originator	Cause	Work Date	TOOS	TTR	Description
00-146254-000	B KUDLA		03/15/2000	768	0	CM: BORE COUPLINGS TO SHAFT SIZES. SEND OUT TO CUT KEY WAYS WHEN READY. SC0TTIE W. HAS THE BLANKS.
00-148074-000	BREEDEN		05/16/2000	624	0	CM: WE WERE GETTING HIGH VIBRATION ALARMS ON THIS FAN FAN SEEMS TO BE FINE. PLEASE CHECK PROBES AND FIX
00-148849-000	KATKE		06/27/2000	984	0	CM: INBOARD FAN BEARING LEAKS OIL
99-139647-000	S.BANZ		08/12/1999	408	0	CM: HIGH AXIAL VIBRATION. COULD BE BEARING WEAR, ASH BUILDUP, OR IN NEED OF BALANCE OR A COMBINATION OF ANY OF THESE.
99-139649-000	S.BANZ		08/12/1999	408	0	CM: VIBRATION SYMPTOMS SUGGEST LARGER DRIVE INBOARD BEARING IS FAILING. ALSO CHECK OUT SMALLER BEARING CLOSER TO MOTOR. REPLACE IF VISUAL INPSECTION CONFIRMS.
99-142633-000	CONV77		02/14/2000	2616	0	PM: CHANGE GREASE IN COUPLING CLEAN, INSPECT, & REFILL WITH FALK LTG.
99-142825-000	JOLSON		04/20/2000	4008	0	CM: REPLACE SHAFT, ROTOR, INSPECT AND REPAIR/REPLACE AS REQUIRED THE LINERS, CERAMIC TILE, INLET VANES, ETC..... ALSO INSPECT AND REPAIR/REPLACE BEARINGS AND COUPLINGS, ETC..... CERAMIC TILED, REMOVED OUTLET DAMPERS & SEALED OFF OPENING, REPAIRED SIDE LINER WEAR BY DAMPER PENETRATIONS, HAD TROUBLE CENTERING TURNING VANES BECAUSE THEY WERE NOT CONCENTRIC, ALIGNED THE SHOLE DRIVE TRAIN, BALANCES & RETURNED TO SERVICE. REMOVED OLD ROTOR & CUTUP FOR SCRAP. CLEANED UP THE 8TH FLOOR OF ALL UNNECESSARY ITEMS.

Detailed Data for System 1_BA

Sorted and Grouped By Component ID

Blank Details Indicate No Data

Printed By: LPJohnson
Date: 02/09/2001 8:34:30 A

Component ID: **1BA02CA** FAN-ID 1A

Unit: WE1
System: 1_BA
Manuf ID:

Type: FN
Duty:
Environment:

99-144189-000	JOLSON	02/08/2000	1320	0	CM: HARD FACE THE ROTOR AS REQUIRED SEE BUTCH OR KEVIN FOR MORE INFORMATION

Interviews

Interviewed	Interviewer	Date	Dept	Remarks
Ken Messerschmidt	rwaldin	12/07/2000	MECH	Changing lubricant seems unnecessary based on condition of parts and lubricant found during past lubrication and inspection.

General References

Detailed Data for System 1_BA

Sorted and Grouped By Component ID

Blank Details Indicate No Data

Printed By: LPJohnson
Date: 02/09/2001 8:34:31 A

Component ID: **1BA02CB** FAN-ID 1B

Unit: WE1
System: 1_BA
Manuf ID:

Type: FN
Duty:
Environment:

Credited PM Tasks

Procedure / Sec / Rev	Task Title	Type	Mhrs	Freq	Mode	Dept
140 / 1 / 1	Change lubricant removing and replacing existing oil / lubricant.	Time Directed	4	24 M	5	MECH

Non-Credited PM Tasks

Procedure / Sec / Rev	Task Title	Type	Mhrs	Freq	Dept
/ /	Vibration overall analysis.	Condition Monitoring	2	2 M	TECV
1P4 / 6.1 / 2	Check Fluid Level and Condition	Condition Monitoring	0.5	12 H	OP1

Vendor Recommendations

Commitments

Maintenance History

WO Number	Originator	Cause	Work Date	TOOS	TTR	Description
00-148008-000	BGORALSKI		06/06/2000	1248	0	CM: BUFFALO FAN BEARING SOUTH HAS OIL LEAK
99-139984-000	R.SNIPPEN		04/20/2000	6312	0	CM: PLEASE FIX OIL LEAK ON OUTBOARD FAN BEARING. APPEA RS TO BE A LEAKY OUTER SHAFT SEAL.
99-141997-000	LODZ		11/04/1999	528	0	CM: FAN CONTROL IS SWINGING.
99-142220-000	BREEDEN		11/04/1999	312	0	CM: AMPS ARE STILL SWINGING ON THIS FAN. LOW WAS ABOUT 25. HIGH WAS ABOUT 125. THIS WAS MOST NOTICEABLE AT HIGHER LOADS. PLEASE CHECK
99-142634-000	CONV77		04/18/2000	4152	0	PM: CHANGE GREASE IN COUPLING CLEAN INSPECT & REFILL WITH FALK LTG.

Detailed Data for System 1_BA

Sorted and Grouped By Component ID

Blank Details Indicate No Data

Printed By: LPJohnson
Date: 02/09/2001 8:34:31 A

Component ID: **1BA02CB** FAN-ID 1B

Unit: WE1
System: 1_BA
Manuf ID:

Type: FN
Duty:
Environment:

99-142826-000	JOLSON	04/20/2000	4008	0	CM: REPLACE SHAFT, ROTOR, INSPECT AND REPAIR/REPLACE AS REQUIRED THE LINERS, CERAMIC TILE, INLET VANES, ETC..... ALSO INSPECT AND REPAIR/REPLACE BEARINGS AND COUPLINGS, ETC..... PO 903723 (BLANKET PO) USED TO MACHINE KEYWAY, .875" WIDE X .325" DEEP, IN COUPLING HALF. BUILT & INSTALLED BEAMS FOR SAFE & EASY INSTALLATION & REMOVAL OF ROTOR; RETILED; REMOVED OUTLET DAMPERS, BLOCKS OFF & REPAIRED ANY GOUGING, INSTALLED NEW TURNING VANES, ALIGNED SHOLE DRIVE TRAIN & BALANCED. REMOVED ROTOR (OLD) FROM 8TH FLOOR AND CUT UP FOR SCRAP. CLEANED UP 8TH FLOOR OF ALL NON-NEEDED MATERIAL & SCRAP. ADDED ADDITIONAL LIFTING POINTS & STEPS TO THE FAN HOUSINGS SO INSULATION COULD BE PUT AROUND THESE BUT STILL BE AVAILABLE FOR FUTURE USE.

Interviews

Interviewed	Interviewer	Date	Dept	Remarks
Ken Messerschmidt	rwaldin	12/07/2000	MECH	Changing lubricant seems unnecessary based on condition of parts and lubricant found during past lubrication and inspection.

General References

PM Task Title

Sorted By Title Description

Printed By: LPJohnson
Date: 02/09/2001 8:21:00

Title ID	Task Title	Procedure	Description	Task Type
ABCL	Abrasive Cleaning	//		Time Directed
AE	Acoustic emission monitoring to detect metal fatigue and other defects.	//		Condition Monitoring
AM1	Acoustic monitoring to detect sounds indicative of fluid leakage.	//		Condition Monitoring
Adjust	Adjust packing	//		Time Directed
AV	Alignment verification of clearances and alignment of moving part	//		Condition Monitoring
AVI	Analyzer Visual Inspection	//	Visually inspect analyzer per procedure and take corrective action as required.	Condition Monitoring
BCL	Backflush control lines.	//		Time Directed
BPL	Backflush process lines.	//		Time Directed
BHYDRR	Bearing (Hydrodynamic) Repair and Replacement	//	Inspect bearings per procedure and repair/replace if needed.	Condition Monitoring
BTA	Bearing temperature monitoring or Thermographic analysis to detect hot spots caused by friction.	//		Condition Monitoring
BTM	Bearing temperature monitoring.	//		Condition Monitoring
BWM	Bearing wear monitoring.	//		Condition Monitoring
Bench	Bench test and adjust to ensure valve opens and results within tolerances.	//		Time Directed
BSL	Blowdown Sensing Line	//		Time Directed
BTC	Bolt torque / tightness check to manufacturer's specifications or in the absence of specifications, securely tighten.	//		Time Directed
Breake	Breaker timing measurement for breaker to open and close trendin results	//		Condition Monitoring
TM	Breaker timing measurement for breaker to open and close trendin results.	//		Condition Monitoring
BRNHT	Brinnell Hardness Testing	//		Condition Monitoring
CAA	Calibrate Analyzer	//	Calibrate analyzer per procedure and take corrective action as needed. Docume as-found as-left condition, and feedback to optimize task interval.	Failure Finding
CF	Calibration by checking and adjusting trip set points.	//		Time Directed
CB	Calibration by simulating input and adjusting zero.	//		Time Directed
CE	Calibration by simulating switch input and adjusting switch actuation set point.	//		Time Directed
CG	Calibration of linear displacement to manufacturer's specifications	//		Time Directed
C	Calibration.	//		Time Directed
CPS	Cathodic Protection Survey	//		Condition Monitoring
CCVI	Centrifugal Compressors Visual Inspection	//	Visually inspect compressor per procedure and take corrective action as needed.	Condition Monitoring
CPOC	Centrifugal Pump Oil Change (Off-Line)	//	Change oil in pump per procedure and document.	Time Directed
CPOLVI	Centrifugal Pumps On-Line Visual Inspection	//	Visually inspect pump per procedure and take corrective action as needed.	Condition Monitoring
CBLS	Change Bearing Lubricant and Sample	//	Take a sample of the bearing lubricant, then drain and refresh with new lubricar	Time Directed

PM Task Title

Sorted By Title Description

Printed By: LPJohnson
Date: 02/09/2001 8:21:01

Title ID	Task Title	Procedure	Description	Task Type
CBLB	Change Light Bulbs	//		Time Directed
CLO	Change lubricant removing and replacing existing oil / lubricant.	//		Time Directed
FRT	Charcoal adsorption test (Freon test).	//		Condition Monitoring
CHFLC	Check Fluid Level and Condition	//	Check fluid level and condition, and take corrective action as needed.	Time Directed
CHK	Check oil temperature and pressure	//		Condition Monitoring
PTC	Check valve Performance test which includes ultrasonic position determination and acoustic leak test.	//		Condition Monitoring
VC	Check voltage measuring the voltage on each cell.	//		Condition Monitoring
CIPI	Chemical Injection Point Inspection	//		Condition Monitoring
Chemic	Chemically clean to remove corrosion, scaling or fouling.	//		Time Directed
CI1	Clean and inspect air filters, printed circuit cards or card connectors. Remove contaminants or corrosion, and look for subcomponent degradation.	//		Time Directed
CI2	Clean and inspect electrical connections or terminals removing contaminants or corrosion and looking for degraded electrical connection.	//		Time Directed
CI4	Clean and inspect internals. Remove dust, dirt, contaminants or corrosion, look for wear and insulation breakdown.	//		Time Directed
CI3	Clean and inspect moving parts. Remove contaminants or corrosion, look for degradation.	//		Time Directed
CI	Clean and inspect.	//		Time Directed
LUBSTRK	Clean, Lubricate, and Stroke	//	Clean, Lubricate, and check proper operation of actuator/positioner and associated signal converter.	Time Directed
CFT	Coal Fineness Test	//		Time Directed
SS	Commutator reconditioning by stoning the commutator and seatin; the brushes.	//		Time Directed
CTC1	Continuity check of meter winding.	//		Time Directed
CTC2	Continuity check of wiring to ground.	//		Time Directed
CTC	Continuity check.	//		Time Directed
CVIBM	Continuous Vibration Monitoring	//		Condition Monitoring
CVFT	Control Valve Functional Testing	//	Functionally test control valve per procedure and take corrective action as neede	Failure Finding
CONVII	Control Valve Internal Inspection	//	Pull, inspect, clean and take corrective action as needed. Document "as-found" "as-left" condition.	Time Directed
COUPLU	Coupling Lubrication	//	Lubricate coupling per procedure and in accordance with OEM recommendatio	Time Directed
CSA	Current signature analysis.	//		Condition Monitoring
DP	Differential pressure test of the filter to measure loading or filter element integrity.	//		Condition Monitoring

PM Task Title

Sorted By Title Description

Printed By: LPJohnson
Date: 02/09/2001 8:21:01

Title ID	Task Title	Procedure	Description	Task Type
DCT1	Discharge capacitance test to determine motor / generator winding condition.	//		Time Directed
DCT	Discharge capacitance test.	//		Time Directed
DCT2	Discharge capacity test to determine battery performance under load and identify internal cell problems.	//		Time Directed
ECT	Eddy current test.	//		Condition Monitoring
ECA	Effluent chemical analysis	//		Condition Monitoring
EMOC	Electric Motor Oil Change (off-line)	//	Change motor bearing oil per procedure and document.	Time Directed
EST	Electrical surge test.	//		Time Directed
ETIIIE	External Thermographic Inspection of Internally Insulated Equipment	//		Condition Monitoring
EVSP	External Visual Surveillance of Piping	//		Condition Monitoring
EVSPV	External Visual Surveillance of Pressure Vessels	//		Condition Monitoring
FANLUB	Fan Lubrication	//	Lubricate fans per procedure and in accordance with OEM recommendations.	Time Directed
DOP	Filter efficiency test (DOP).	//		Condition Monitoring
FEM	Filter Element Maintenance	//		Time Directed
FLT	Flow check using installed flow indicators.	//		Failure Finding
Flow t	Flow test to track and trend flow against system performance curv	//		Condition Monitoring
CKF	Fluid level check.	//		Time Directed
FLSH	Flush deposits	//		Time Directed
FT	Functional Test	//	Functionally test and take corrective action as needed.	Failure Finding
FT1	Functional test by measuring battery voltage and current under full load.	//		Failure Finding
FT2A	Functional test by operating under full load to determine if it is abl to maintain normal head pressure and / or flow.	//		Failure Finding
FT2	Functional test by operating under full load to determine if it is abl to maintain normal operations.	//		Failure Finding
FT10	Functional test by performing source check.	//		Failure Finding
FT5	Functional test by simulating input, observing for leak.	//		Failure Finding
FT4	Functional test by simulating input, observing operation, and measuring output as required.	//		Failure Finding
FT6	Functional test by simulating input, providing air supply, and performing leak check.	//		Failure Finding
FT3	Functional test by simulating input, providing air supply, observin operation, and measuring output as required.	//		Failure Finding
FT9	Functional test by timing the startup or coastdown period to verify startup or trip operation.	//		Failure Finding