

1 **Q. GENERATION - HYDRO**

2
3 **Rattling Brook Hydro Plant Refurbishment (Clustered) - \$18,242,000**

4 **PUB 10.0 NP**

5
6 **Provide for the last five years:**

- 7 **1. The particulars of maintenance costs in relation to this plant, with details**
8 **in relation to the penstock and the surge tank,**
9 **2. Maintenance logs,**
10 **3. Inspection reports/assessments, and**
11 **4. Outage reports with reasons.**

12
13 **A. *Maintenance Cost***

14
15 Please refer to CA-30.0 NP for the particulars of maintenance costs in relation to the
16 penstock and the surge tank for the years of 2002 to 2006.

17
18 ***Maintenance Logs***

19
20 Please refer to Attachment A for maintenance logs for the Rattling Brook plant for years
21 2003 to 2006. These logs have been retrieved from Avantis, the Company's Asset
22 Management software tool. Prior to 2003 the Company did not have a software
23 program that was used to track maintenance completed to the plant therefore logs are not
24 available for 2002.

25
26 ***Inspection Reports/Assessments***

27
28 Please refer to Attachment B for inspection reports and assessments that were completed
29 for Rattling Brook for the years 2002 to 2006. Enclosed in this Attachment are the
30 Quarterly and In-house Dam Safety Inspections. The Quarterly Dam Safety Inspections
31 are completed by the plant operating staff at Rattling Brook. The In-house Dam Safety
32 Inspections are completed on a bi-annual basis by a civil engineer in the Company's
33 Generation Engineering group.

34
35 Please refer to Volume II of the 2007 Capital Budget Application, Appendices D, E, and
36 F for the Civil, Electrical, and Mechanical Assessments reports that were completed from
37 2002 to 2006.

38
39 ***Outage Reports***

40
41 Please refer to Attachment C for a copy of the outage reports for Rattling Brook for Unit
42 #1 and Unit #2.

Maintenance Logs for Rattling Brook Plant
2003 to 2006

RBK: Access Roads and Bridges System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
28520	Road Grading Required	RBK: Access Roads & Bridges System	05 Repair		Plant road needs grading to avoid flooding at plant during rainy season.		No
26568	Plant Road Needs Grading	RBK: Access Roads & Bridges System	05 Repair		Plant road needs grading to avoid flooding at plant during rainy season.		No

RBK: Amy's Gate Water Level System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
51177	Recalibrate Water Level	RBK: Amy's Gate Water Level System	03 Preventive Maintenance (M3)	5/2/2006	The unit was inspected to determine the problem is caused by faulty probe. When replacement probe was received, installation and calibration was performed using the druck pressure calibrator. The preferred source of pressure during calibration is actual raising & lowering of probe in forebay water. Unit calibration check should be performed when storage levels are high.	1. See first timecard for time value 2. Investigation of water level indication error at rattling reservoir, level indication noted to be in error by approximately 1.4 feet. a. Reduce water level range and recalibration of water level transducer. b. Check and recalibrate PDT / PDR transducers (transmission equipment) c. Re-calibrate and check local indication at Rattling plant & Scada. d. Modify water level data sheet & prepare reservoir re-calibration report. 3. Note attached re-calibration report OK	Yes
44791	Investigate False Water Level Reading	RBK: Amy's Gate Water Level System	01 Inspection/Investigation	8/23/2005	The control center and plant are all reading high and are at the maximum levels. This is obviously a false reading as the water levels are low. Kevin Gill has requested that the PPM's shut down the system until he can further investigate the problem.	OK	Yes
44791	Investigate False Water Level Reading	RBK: Amy's Gate Water Level System	01 Inspection/Investigation	11/23/2005	The control center and plant are all reading high and are at the maximum levels. This is obviously a false reading as the water levels are low. Kevin Gill has requested that the PPM's shut down the system until he can further investigate the problem.	The unit was inspected to determine the problem is caused by faulty probe. When replacement probe was received, installation and calibration was performed using the druck pressure calibrator. The preferred source of pressure during calibration is actual raising & lowering of probe in forebay water. Unit calibration check should be performed when storage levels are high. See WO # 42388	Yes
42388	Recalibration	RBK: Amy's Gate Water Level System	13 Restoration	5/2/2006	The reading on Friday was off by 1.1 feet. All along it was off by .4 feet but that was attributed to draw down. We need someone to look at this water level monitoring and adjust it. This reading is especially important now when we are at full supply.	1. Investigation of water level indication error at rattling reservoir. a. Reduce water level range and recalibration of water level transducer. b. Check and recalibrate PDT / PDR transducers (transmission equipment) c. Re-calibrate and check local indication at Rattling plant & Scada. d. Modify water level data sheet & prepare reservoir re-calibration report. See re-calibration sheet attached to avanti's shared area. OK	Yes
42388	Recalibration	RBK: Amy's Gate Water Level System	13 Restoration	5/2/2006	The reading on Friday was off by 1.1 feet. All along it was off by .4 feet but that was attributed to draw down. We need someone to look at this water level monitoring and adjust it. This reading is especially important now when we are at full supply.	OK	Yes

RBK: Amy's Lake Dam

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
38739	Vegetation Management Required	RBK: Amy's Lake Dam	16 Vegetation Control		Brush clearing required this will be done by outside contractor when set up.		No
33919	Dam Safety Engineering Inspection (High-1 Category)	RBK: Amy's Lake Dam	01 Inspection/Investigation		Dam Safety Engineering Inspection (High-1 Category)		No
27103	Dam Safety Operator Inspection	RBK: Amy's Lake Dam	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Yes
27027	Storage Dam Site Walkabout	RBK: Amy's Lake Dam	01 Inspection/Investigation	10/30/2003	Storage Dam Site Walkabout		Yes
25004	Storage Dam Site Walkabout	RBK: Amy's Lake Dam	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22883	Storage Dam Site Walkabout	RBK: Amy's Lake Dam	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Amy's Lake Gate Structure

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52182	Control Gate Conditional Assessment	RBK: Amy's Lake Gate Structure	01 Inspection/Investigation		Control Gate Conditional Assessment		No
43287	Control Gate Inspection	RBK: Amy's Lake Gate Structure	01 Inspection/Investigation	8/23/2005	Control Gate Inspection	Some blockage in Amys discharge channel. Gate guide ; seals and sill is underwater therefore unable to check. When last cleaned by divers the trashracks checked ok.	Yes
43260	Control Gate Operational Test	RBK: Amy's Lake Gate Structure	03 Preventive Maintenance (M3)	8/8/2005	Control Gate Operational Test		Yes
38738	Remove Debris Blocking Channel	RBK: Amy's Lake Gate Structure	13 Restoration		Outlet Channel, debris blocking channel, should be removed. As per Byron Hayter and priority by Bill Guy		No
36303	Investigate Deteriorated Concrete	RBK: Amy's Lake Gate Structure	01 Inspection/Investigation		Intake Structure, concrete deteriorated, Needs repairs. We will do a full inspection of this structure next summer when water levels allow as per Garry Humby		No
24234	Clean Trash Racks	RBK: Amy's Lake Gate Structure	05 Repair	7/22/2003	Debris in front of trashracks unable to run 2 machines This task will also require the use of a Boom Truck and also a Diving Contractor.	The trade requirement for this work order should have been one PPM for about 5 hours.	Yes
22284	Clean Trash Racks	RBK: Amy's Lake Gate Structure	05 Repair				No
22284	Clean Trash Racks	RBK: Amy's Lake Gate Structure	05 Repair		This job also requires the use of a diving crew and the use of a boom truck.		No
22261	Adjust Gate Opening Indicator	RBK: Amy's Lake Gate Structure	05 Repair	8/14/2003	Gate opening indication out of adjustment.	Checked gate indication and recalibrated in local and remote.	Yes
22261	Adjust Gate Opening Indicator	RBK: Amy's Lake Gate Structure	05 Repair	8/14/2003		Checked and recalibrated gate indication in local and remote.	Yes

RBK: Forebay Dam Site Walkabout

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Closing Comments	Closed (Yes/No)
52240	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
51453	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
51000	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	6/14/2006	ok	Yes
50357	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	5/17/2006	OK	Yes
49243	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	4/11/2006	ok	Yes
48449	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	3/20/2006	Snow covered.	Yes
48157	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	2/15/2006	OK	Yes
47475	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	1/11/2006		Yes
46801	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	12/12/2005	ok	Yes
45731	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	11/15/2005		Yes
44992	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	10/19/2005	OK	Yes
44216	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
43354	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	8/8/2005	large amount of vegetation on downstream slope See WO# 36432	Yes
42574	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	7/6/2005	OK	Yes
41755	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	6/15/2005	vegetation requires cutting See WO # 36432	Yes
41091	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	5/16/2005	Vegetation needs to be cut. See WO # 36432.	Yes
40278	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	4/7/2005	dam snow covered OK	Yes
39165	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	3/11/2005	Snow Covered. OK	Yes
38011	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	2/9/2005	dam is snow covered	Yes
37489	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	1/5/2005	Recommended follow up recorded on work order # 37527.	Yes
37003	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	12/13/2004	OK	Yes
36432	Vegetation Management Required	RBK: Forebay Dam	16 Vegetation Control			No
35882	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	11/25/2004	ok OK	Yes
35335	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	10/7/2004	OK	Yes
34575	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	9/27/2004	large amount of vegetation on the down stream & upstream slopes Planned to be done in 2004 as per J Curran.	Yes
33968	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	8/19/2004	OK	Yes
33653	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	7/19/2004		Yes
33011	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	6/8/2004		Yes
32205	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	5/19/2004		Yes
32205	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	5/19/2004		Yes

RBK: Forebay Dam Site Walkabout

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Closing Comments	Closed (Yes/No)
31762	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	4/23/2004		Yes
30942	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	3/3/2004	Unable to do a good inspection due to heavy snowcover in area.	Yes
30610	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	2/18/2004		Yes
29864	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	1/21/2004	Dam was snowcovered at time of inspection. Dam was snowcovered at time of inspection.	Yes
29516	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	12/9/2003	DAM SNOWCOVERED , NO UNUSUAL CONDITIONS OBSERVED .	Yes
29141	Calibration Required	RBK: Forebay Dam	02 Predictive Maintenance	1/13/2004	It was discussed with plant supervisor & operations staff that the approx. 6' error indicated that the communications line between the fore bay and the plant was open circuited. The trouble was resolved by regional staff.	Yes
29141	Calibration Required	RBK: Forebay Dam	02 Predictive Maintenance		This task was not required since the problem was resolved according to closing comments under task 1.	Yes
29053	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	11/27/2003		Yes
27104	Dam Safety Operator Inspection	RBK: Forebay Dam	01 Inspection/Investigation	10/30/2003		Yes
26929	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
26928	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
26927	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
26926	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	10/24/2003		Yes
24882	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
24881	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
24880	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
24879	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
24878	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	9/2/2003		Yes
22785	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
22784	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
22783	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation			No
22782	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	8/7/2003	OK	Yes
21087	Forebay Dam Site Walkabout	RBK: Forebay Dam	01 Inspection/Investigation	7/30/2003	ponded water one area	Yes

RBK Forebay Spillway

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Activity type	Closed (Yes/No)
27105	Dam Safety Operator Inspection	RBK: Forebay Spillway	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection			Yes
27105	Dam Safety Operator Inspection	RBK: Forebay Spillway	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Sample	Yes
27028	Storage Dam Site Walkabout	RBK: Forebay Spillway	01 Inspection/Investigation	10/24/2003	Storage Dam Site Walkabout			Yes
25005	Storage Dam Site Walkabout	RBK: Forebay Spillway	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout			Yes
22884	Storage Dam Site Walkabout	RBK: Forebay Spillway	01 Inspection/Investigation	8/20/2003	Storage Dam Site Walkabout			Yes

RBK: Forebay Water Level Gauge

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52156	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation		Water Level Transducer Calibration Check		No
51388	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation		Water Level Transducer Calibration Check		No
50962	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	6/15/2006	Water Level Transducer Calibration Check	reading ok OK	Yes
50315	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	5/23/2006	Water Level Transducer Calibration Check	OK	Yes
49185	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	4/11/2006	Water Level Transducer Calibration Check	Actual reading 1 tenth higher than plant reading. OK	Yes
48390	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	3/20/2006	Water Level Transducer Calibration Check	ok	Yes
48104	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	2/15/2006	Water Level Transducer Calibration Check	OK	Yes
47409	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	1/19/2006	Water Level Transducer Calibration Check		Yes
46780	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	12/8/2005	Water Level Transducer Calibration Check	Actual reading 1 tenth lower than plant reading actual reading is 1/2 tenth higher than plant reading	Yes
45691	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	11/16/2005	Water Level Transducer Calibration Check	reading	Yes
44930	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	10/20/2005	Water Level Transducer Calibration Check	OK	Yes
44151	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	9/9/2005	Water Level Transducer Calibration Check	Reading is 1 tenth higher than actual reading.	Yes
43234	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	8/9/2005	Water Level Transducer Calibration Check	plant reading same as actual reading	Yes
42483	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	7/6/2005	Water Level Transducer Calibration Check	OK	Yes
41692	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	6/29/2005	Water Level Transducer Calibration Check		Yes
41049	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	5/18/2005	Water Level Transducer Calibration Check	actual reading is 8.5 tenths higher than scada reading See WO #41810	Yes
40218	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	4/15/2005	Water Level Transducer Calibration Check	Actual reading is 8 tenths higher than plant reading. See WO #33222	Yes
39108	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	3/11/2005	Water Level Transducer Calibration Check	Actual reading is 9 tenths higher than plant and SCC reading. Advised J Decker of problem a decision to be made very soon on replacement.	Yes
37959	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	2/10/2005	Water Level Transducer Calibration Check		Yes
37425	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	1/5/2005	Water Level Transducer Calibration Check	Comments/time was put on time card for 37507. See work order 33222	Yes
36993	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	12/13/2004	Water Level Transducer Calibration Check	Actual reading is two tenths higher than plant reading. See WO# 33222	Yes
35840	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	11/4/2004	Water Level Transducer Calibration Check	actual reading reading is two tenths higher than plant reading WO# 33222 has been created to correct this problem.	Yes
35272	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	10/19/2004	Water Level Transducer Calibration Check	actual read is 1.1/2 tenths higher than plant reading See WO# 33222	Yes
34536	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	9/13/2004	Water Level Transducer Calibration Check	actual reading 1.5 tenths higher than reading at the plant	Yes
33689	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	8/17/2004	Water Level Transducer Calibration Check	Actual reading is 1.5 tenths higher than reading at the plant. See WO #33222	Yes

RBK: Forebay Water Level Gauge

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
33588	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	7/22/2004	Water Level Transducer Calibration Check	there is a 2.1/2 tenths difference in actual reading. See work order 33222.	Yes
33222	Water Level Re-Calibration Required	RBK: Forebay Water Level Gauge	13 Restoration	2/25/2005	Bill Guy has forwarded the following instructions to the control centre for them to follow until we get the recalibration completed. "The Forebay is actually about 3 tenths higher than the scada reading. With The Scada reading at 334.6 we are spilling at the forebay emergency spillway. Please control the forebay at a scada reading of 334.3 to prevent spilling at the emergency spillway."	See comments attached to time card for K. Gill. OK	Yes
33222	Water Level Re-Calibration Required	RBK: Forebay Water Level Gauge	13 Restoration	2/4/2005	Bill Guy has forwarded the following instructions to the control centre for them to follow until we get the recalibration completed. "The Forebay is actually about 3 tenths higher than the scada reading. With The Scada reading at 334.6 we are spilling at the forebay emergency spillway. Please control the forebay at a scada reading of 334.3 to prevent spilling at the emergency spillway."	During conversation with PPMs & Bill Guy, it appears the error is fluctuant in magnitude but at or near the same elevation. This would imply that the pressure differential required to cause a movement of the probe bellows has increased and the reading sensitivity is decreased. Recalibration would only appear to help because of large pressure changes during the process, which would exercise the probe moving parts, and possibly temporarily free them up. The replacement of the probe is not a possibility because the unit is obsolete, a total system replacement would be required, approx value \$ 3500.00 System replacement should be considered during plant upgrade. Spoke with J Decker this will be replaced during Plant Upgrade.	Yes
32930	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	8/22/2004	Water Level Transducer Calibration Check	The actual reading at the forebay is 2.5 tenths higher than the plant reading. Check with Jeremy Deckers group for followup.	Yes
32163	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	5/19/2004	Water Level Transducer Calibration Check	Plant reading is 3.5 tenths lower than actual reading at forebay.	Yes
31643	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	4/26/2004	Water Level Transducer Calibration Check	Reading at forebay is two tenths higher than plant reading.	Yes
30884	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	3/1/2004	Water Level Transducer Calibration Check		Yes
30503	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	2/18/2004	Water Level Transducer Calibration Check		Yes
29799	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	1/20/2004	Water Level Transducer Calibration Check	Plant reading is one tenth higher than actual reading at forebay.	Yes
29476	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	12/9/2003	Water Level Transducer Calibration Check	Reading at forebay is one tenth higher than reading showing at plant.	Yes
29010	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	11/27/2003	Water Level Transducer Calibration Check		Yes
26787	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	10/30/2003	Water Level Transducer Calibration Check		Yes
24689	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	9/22/2003	Water Level Transducer Calibration Check		Yes
22636	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	8/12/2003	Water Level Transducer Calibration Check		Yes
20966	Water Level Transducer Calibration Check	RBK: Forebay Water Level Gauge	01 Inspection/Investigation	7/23/2003	Water Level Transducer Calibration Check	Forebay reading 2 tenths higher than plant reading.	Yes

RBK: Intake Gate Structure

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
44192	Intake Operational Test	RBK: Intake Gate	12 Isolation	9/26/2005	Intake Operational Test		Yes
44192	Intake Operational Test	RBK: Intake Gate	03 Preventive Maintenance (M3)	9/26/2005	Intake Operational Test		Yes
42546	Intake Conditional Assessment	RBK: Intake Gate	01 Inspection/Investigation		Dewater Penstock		No
41731	Intake Conditional Assessment	RBK: Intake Gate	12 Isolation		Switching Order preparation/approval		No

RBK: Intake Trashracks

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
48263	Remove Ice From Trash Rack	RBK: Intake Trashracks	03 Preventive Maintenance (M3)	1/24/2006	With the change in temterature we have a lot if ice on trash racks causing the the plant to trip of. We will require a diving crew to remove this ice.	OK	Yes
48263	Remove Ice From Trash Rack	RBK: Intake Trashracks	03 Preventive Maintenance (M3)		With the change in temterature we have a lot if ice on trash racks causing the the plant to trip of. We will require a diving crew to remove this ice.		No

RBK: Penstock

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
51423	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	7/12/2006	Penstock Site Walkabout		No
50505	Repair Penstock Blowout at Rattling Brook	RBK: Penstock	12 Isolation	5/8/2006	A clearance is required to partially drain the penstock to allow for the removal of two bands on the woodstave section and for the installation of a steel plate to repair a leak in the pipe.	ok	Yes
50505	Repair Penstock Blowout at Rattling Brook	RBK: Penstock	12 Isolation	5/10/2006	As per Gary Murray, "The blow out is just below the bridge and we will have to de-water to just below the location and install a steel plate. Tom and Byron tried to repair and could not do anything with it. This is the area where there is erosion due to the stream on the upper side of the highway. We should check the area to see if there has been more erosion which caused the pipe to settle (causing the blowout) which may need to be addressed also." In talking with Bill Guy, it was determined that two of the bands will have to be removed and then a piece of steel plate installed over the affected section. This can be done by in house staff and the penstock does not have to be completely dewatered.	ok	Yes
49217	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	4/17/2006	Penstock Operator Inspection	OK	Yes
47447	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	1/13/2006	Penstock Site Walkabout	Unable to walk the penstock due to ice and snow on roadbed. Checked penstock in several areas. OK	Yes
44964	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	12/16/2005	Penstock Operator Inspection	OK	Yes
44036	Replace Bolts and Tighten Expansion Joint	RBK: Penstock	05 Repair	7/26/2005	We experienced a leak in the expansion joint of the steel pipeline near the surge tank at RBK. We should replace the bolts as some are not able to be tightened any further.	h&b construction completed the job OK no cost available.	Yes
42519	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	8/3/2005	Penstock Site Walkabout	no change in the washout area roadbed requires some ditching in several areas penstock requires some plugging unable to repair the leaks in the expansion joint See WO#28520 for road work.	Yes
40252	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	4/18/2005	Penstock Operator Inspection	OK	Yes
37461	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	1/12/2005	Penstock Site Walkabout	Recommended Follow Up: Expansion joint leaking on Steel section of RBK Penstock. Schedule repairs in late spring or summer by PPM. See work order 38737	Yes
36376	Penstock Repairs Required	RBK: Penstock	05 Repair	11/5/2004	roadbed flooded in one area requires ditching lot of large leaks requires plugging will discuss work with bill guy next week p 3	Work on penstock by H&B Construction completed Nov.05. Started Nov.01 total of 45 hrs.@ \$6500.00. Cost of cedar shingles for repairs \$1309.85. Invoice Complete OK	Yes
35309	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	10/14/2004	Penstock Operator Inspection	roadbed flooded in one area requires ditching lot of large leaks requires plugging will discuss work with bill guy next week p 3 WO #36376 Created to do this work	Yes
33625	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	7/13/2004	Penstock Site Walkabout		Yes
32968	Penstock Engineering Inspection	RBK: Penstock	01 Inspection/Investigation	6/9/2004	Penstock Engineering Inspection		Yes
31681	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	5/11/2004	Penstock Operator Inspection	Details of work noted on form #776 submitted to Tony Chislett.	Yes
29638	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	1/20/2004	Penstock Site Walkabout	Penstock and roadbed was snowcovered at time of inspection.	Yes
26853	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	10/30/2003	Penstock Site Walkabout		Yes

RBK: Penstock

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
24790	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	9/17/2003	Penstock Operator Inspection	penstock requires a lot of maintenance plugging installing plates repairs to broken cradles ditching roadbed the penstock will be drained in october this work can be done at this time this work will require a outside contractor. Penstock will be drained in october plates can be installed at this time requires contractor to make necessary repairs to penstock. PENSTOCK NEEDS A LOT OF WORK DONE. P 3 This is covered under work order #22159	Yes
24790	Penstock Operator Inspection	RBK: Penstock	01 Inspection/Investigation	9/17/2003	Penstock Operator Inspection	penstock requires a lot of maintenance plugging installing plates repairs to broken cradles ditching roadbed the penstock will be drained in october this work can be done at this time this work will require a outside contractor. Penstock will be drained in october plates can be installed at this time requires contractor to make necessary repairs to penstock. PENSTOCK NEEDS A LOT OF WORK DONE. P 3 This is covered under work order #22159	Yes
24767	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	9/23/2003	Penstock Site Walkabout		Yes
22709	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	8/12/2003	Penstock Site Walkabout	Bad woodstaves in several areas.Poor drainage on roadbed. Threads and nuts rusting on band's. Several broken cradle's. More settlement in penstock and cradle's in washout area.Brush in several area's.	Yes
22264	Repair Penstock Leaks	RBK: Penstock	05 Repair	11/28/2003		Work done by outside contractor for more details contact gary murray. Through conversation with Gary Murray, it was determined that the contractor took about three weeks to repair the penstock leaks.	Yes
22264	Repair Penstock Leaks	RBK: Penstock	05 Repair	11/28/2003	Requires outside contractor to make necessary repairs to Penstock.	Work done by outside contractor for more details contact gary murray. Through conversation with Gary Murray, it was determined that the contractor took about three weeks to repair the penstock leaks.	Yes
21059	Penstock Site Walkabout	RBK: Penstock	01 Inspection/Investigation	8/15/2003	Penstock Site Walkabout	bad woodstaves in several areas poor drainage on roadbed threads&nuts rusting on bands several broken cradles more settlement in pipe&cradles in washout area brush in area This work has been captured in held work request #1465	Yes

RBK: Powerhouse Air Compressor

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
26185	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26194	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26193	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26192	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	10/20/2003	RBK1 Air Compressor Weekly Visual Inspection	ok	Yes
26312	RBK1 Air Compressor Operational Inspection	RBK: Powerhouse Air Compressor	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Air Compressor Operational Inspection		Yes
26311	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26310	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26309	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26308	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
26307	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	9/29/2003	RBK1 Air Compressor Weekly Visual Inspection		Yes
23989	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
23988	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
23987	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation		RBK1 Air Compressor Weekly Visual Inspection		No
23986	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	8/25/2003	RBK1 Air Compressor Weekly Visual Inspection		Yes
21800	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	7/29/2003	RBK1 Air Compressor Weekly Visual Inspection	Check oil level should be added to the activity description.	Yes
21799	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	7/18/2003	RBK1 Air Compressor Weekly Visual Inspection	OK	Yes
21798	RBK1 Air Compressor Weekly Visual Inspection	RBK: Powerhouse Air Compressor	01 Inspection/Investigation	7/17/2003	RBK1 Air Compressor Weekly Visual Inspection	ok	Yes

RBK: Powerhouse Electrical System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
48289	Install Temporary Heaters in Plant	RBK: Powerhouse Electrical System	03 Preventive Maintenance (M3)	1/24/2006	Install temporary heaters in Turbine Pit. Also we need to install Receptacles at the forebay shack for ice away pumps.	OK	Yes
40424	Install Receptacles & Heaters	RBK: Powerhouse Electrical System	08 Installation	3/17/2005	Install 2 heaters and several GFI receptacles.	OK	Yes
40182	Identify and Label AC/DC Panels	RBK: Powerhouse Electrical System	06 Modification - Non-capital		We will have to first identify the correct circuits and put temporary labels in place while we are waiting for permanent labeling to be completed. This was a safety deficiency identified in past safety meetings.		No
40182	Identify and Label AC/DC Panels	RBK: Powerhouse Electrical System	06 Modification - Non-capital				No
36396	Install Receptacles for Pest Control	RBK: Powerhouse Electrical System	08 Installation	10/21/2004	Tom Hanlon requested the installation of three receptacles in the attic of the plant for pest control equipment.	OK	Yes
35026	Plant Metering - Site Inspection	RBK: Powerhouse Electrical System	12 Isolation	2/16/2005	A switching order is required as per the following description. As per the recent PUB ruling on NL and H's rate application, NP is required to provide Hydro with access to our generation plant metering for the purpose of downloading energy and demand data. An important aspect of this project will be the verification and documentation of existing plant metering equipment. Plant Electricians will be conducting site visits in order to access, trace, verify and document all plant metering. In addition, grounding lugs are required on the bus in most plants, generator side and a possible location for these lugs needs to be determined.	time was entered on task one.	Yes
35026	Plant Metering - Site Inspection	RBK: Powerhouse Electrical System	07 Project - Capital	2/16/2005	As per the recent PUB ruling on NL and H's rate application, NP is required to provide Hydro with access to our generation plant metering for the purpose of downloading energy and demand data. An important aspect of this project will be the verification and documentation of existing plant metering equipment. Plant Electricians will be conducting site visits in order to access, trace, verify and document all plant metering. In addition, grounding lugs are required on the bus in most plants, generator side and a possible location for these lugs needs to be determined.	time was entered on task one.	Yes

RBK: Powerhouse Overhead Crane

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52345	RBK Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		According to CSA B167-96, we are required to have a qualified inspection company, inspect all overhead cranes at least annually.		No
51544	Annual Overhead Crane Inspection	RBK: Powerhouse Overhead Crane	01 Inspection/Investigation				No
51374	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	7/6/2006	Powerhouse Crane Operational Inspection	ok	No
50947	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	6/13/2006	Powerhouse Crane Operational Inspection	every thing ok	Yes
50275	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/12/2006	Powerhouse Crane Operational Inspection	OK	Yes
49171	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	4/12/2006	Powerhouse Crane Operational Inspection	OK	Yes
48374	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	3/15/2006	Powerhouse Crane Operational Inspection	OK	Yes
48065	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	2/10/2006	Powerhouse Crane Operational Inspection	OK	Yes
47395	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	1/18/2006	Powerhouse Crane Operational Inspection		Yes
47395	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	1/18/2006	Powerhouse Crane Operational Inspection		Yes
46744	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	12/12/2005	Powerhouse Crane Operational Inspection		Yes
45651	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	11/15/2005	Powerhouse Crane Operational Inspection		Yes
45534	Annual Overhead Crane Inspection	RBK: Powerhouse Overhead Crane	01 Inspection/Investigation	10/12/2005		Inspection completed by Dover Crane.	Yes
44916	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/13/2005	Powerhouse Crane Operational Inspection	OK	Yes
44136	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	9/14/2005	Powerhouse Crane Operational Inspection	ok OK	Yes
43195	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	8/5/2005	Powerhouse Crane Operational Inspection	everything ok	Yes
42466	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	7/5/2005	Powerhouse Crane Operational Inspection	OK	Yes
41676	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	6/13/2005	Powerhouse Crane Operational Inspection	ok OK	Yes
41008	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/13/2005	Powerhouse Crane Operational Inspection	OK	Yes
40203	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
39034	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	3/11/2005	Powerhouse Crane Operational Inspection	OK	Yes
39033	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
39032	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
39031	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
39030	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
39029	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)		Powerhouse Crane Operational Inspection		No
37128	Remove Jumper From Limit Switch	RBK: Powerhouse Overhead Crane	06 Modification - Non-capital	11/9/2004			Yes
36505	Temporarily Jump Out Limit Switches	RBK: Powerhouse Overhead Crane	06 Modification - Non-capital	10/29/2004	This is required due to lifting limitations, height wise, of the crane.	OK	Yes

RBK: Powerhouse Overhead Crane

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
36419	Adjust Crane Limits	RBK: Powerhouse Overhead Crane	01 Inspection/Investigation	12/6/2004	Have a crane contractor adjust the upper limit switch for the Rattling Brook crane. We are doing a temp bypass of the switch today Oct 22/2004 (caution tags to be used) to permit re-assembly of Unit 1 but a permanent change to raise the upper limit is required.	Dover crane completed this workorder. Will have to contact B Guy for cost of contractor.	Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
34522	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	10/5/2004	Powerhouse Crane Operational Inspection		Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
30870	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	5/4/2004	Powerhouse Crane Operational Inspection	Inspection was completed by Dover Crane over a three hour time period.	Yes
24675	Powerhouse Crane Operational Inspection	RBK: Powerhouse Overhead Crane	03 Preventive Maintenance (M3)	9/15/2003	Powerhouse Crane Operational Inspection		Yes

RBK: Powerhouse Plumbing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
26567	Repair Sump pit pump	RBK: Powerhouse Plumbing	05 Repair		Sump pit pump not working properly sitll floods sometimes with 2 machines on line.		No

RBK: Powerhouse Ventilation System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
50936	Replace Starter Contacts for Exhaust Fan at Rolling Brook	RBK: Powerhouse Ventilation System	05 Repair	5/19/2006	As per Pat O'Keefe, we need to replace the contacts in the starter for the building exhaust fan.	Investigation to determine why the large exhaust fan @ RBK plant is periodically tripping the overload relay. All voltage and current checks appear OK, physical inspection of contactor shows contact wear to the right side phase which is beyond field dressing, contact need to be replaced. Arrangements made to acquire new contacts or replace contactor. OK	Yes
40923	Permanant Repair Required on Louvres	RBK: Powerhouse Ventilation System	05 Repair	10/3/2005	We have had several attempts at stopping the leakage of air from the pilot valve and new parts are now available for the permanent repair.	OK	Yes
40176	Repair Louvers	RBK: Powerhouse Ventilation System	05 Repair	3/8/2005	We have had several attempts at stopping the leakage of air from the pilot valve and new parts have been ordered, however the leakage is so great that we should replace the o-rings in the pilot valve now to keep the louvres operational until the correct replacement parts arrive.	Replaced O-Rings and all working well.	Yes
40146	Repair Louvers	RBK: Powerhouse Ventilation System	05 Repair	3/2/2005	Plant freezing up because louvers not closing.	louvers are still operating right Parts that normally wear ordered.	Yes
32265	Inspect Building Exhaust Fans	RBK: Powerhouse Ventilation System	01 Inspection/Investigation	6/1/2004	The building exhaust fans need to be inspected to check for proper operation including condition of belts and shaft and motor bearings. This should be done prior to increasing seasonal temperatures.		Yes

RBK: Rattling Brook Hydro Plant

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
51271	Replace Water Level Transducer and DC Lightening Protection	RBK: Rattling Brook Hydro Plant	05 Repair		As per Bill Guy: "replace gate opening monitoring transducer, one Electrician and one tech four hours."		No
44791	Investigate False Water Level Reading	RBK: Rattling Brook Hydro Plant	05 Repair		The lightning arrestor has failed and needs to be replaced.		No
38905	Inventory Lockout Relays	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation		As per Jeremy Decker/Kevin Gill, we need to take an inventory of the lockout relays in service in all plants, including manufacturer, type, number of contacts and trip coil type as well as the voltage rating and burden. This will assist us in determining		No
22268	Repair G1 and G2 Head Cover Flood Alarms	RBK: Rattling Brook Hydro Plant	05 Repair			When filling out time cards, both were put against task #1.	Yes
48290	Check Trips and Alarms on Both Units and Reinstate Trash Rack Block Trip/Alarm	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/10/2006	As per John Budgett, we need to check trips and alarms on each unit and we need to reinstate the trash rack block trip/alarm. The plant did not trip on trash racks blocked during the ice problems that occurred on the week of the 23rd of January.	Drawing revisions to accurately record trip and alarm acts of G1 & G2 at Rattling Brook are not completed. The investigation of the trash rack blocked protection revealed that the system wasn't of a failsafe design and had multiple failures active.	Yes
48290	Check Trips and Alarms on Both Units and Reinstate Trash Rack Block Trip/Alarm	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/7/2006	As per John Budgett, we need to check trips and alarms on each unit and we need to reinstate the trash rack block trip/alarm. The plant did not trip on trash racks blocked during the ice problems that occurred on the week of the 23rd of January.	See comments on task 1 OK	Yes
48263	Remove Ice From Trash Rack	RBK: Rattling Brook Hydro Plant	03 Preventive Maintenance (M3)	1/25/2006	With the change in temperature we have a lot of ice on trash racks causing the the plant to trip of. We will require a diving crew to remove this ice.	Switching Order 131650 OK	Yes
44793	Clean Cooling Water Strainers	RBK: Rattling Brook Hydro Plant	03 Preventive Maintenance (M3)	8/19/2005	As per Tom Hanlon, the cooling water strainers which serves both units were blocked and needed to be cleaned.		Yes
42430	Clean Cooling Water Strainers	RBK: Rattling Brook Hydro Plant	03 Preventive Maintenance (M3)	5/31/2005	As per Tom Hanlon, the cooling water strainers which serves both units were blocked and needed to be cleaned.	all strainers on system removed and cleaned	Yes
41610	Investigate False Water Level Reading	RBK: Rattling Brook Hydro Plant	05 Repair	5/11/2005	The lightning arrestor has failed and needs to be replaced.	A.C. feed surge arrester of Amy's water level system was replaced & S/S neutral bonded to equipment ground at S/S entrance. OK	Yes
41610	Investigate False Water Level Reading	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	5/10/2005	Paul Trickett reported that the water level at Amy's Gate is reading out. Over the past couple of years, we have had instances where the water level was out as much as six feet but was resolved by regional staff and other instances where the technician	OK	Yes
40996	Investigate False Intruder Alarms	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	4/12/2005	Byron Hayler notes that there have been several call outs recently due to intruder alarms at the plant. Each call out did not result in any unusual findings so each has been determined to be false alarms. After speaking with Rick Mercer, the problem ma	new contact installed on the back door at the old control center building OK	Yes
38930	Engineering Investigation of Rattling Brook	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/24/2005	We will be carrying out an inspection of both the switchgear and penstock at Rattling Brook as part of the preparation for the upcoming Capital program for 2006.	Work complete & time charged to Task 1 OK	Yes
38930	Engineering Investigation of Rattling Brook	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/24/2005	This work to be carried out in determining the required work for the capital program in 2006	Work complete & time charged to Task 1 OK	Yes
38909	Internal Turbine Inspection Required	RBK: Rattling Brook Hydro Plant	12 Isolation	2/23/2005		See formal report for information.	Yes
38909	Internal Turbine Inspection Required	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/18/2005	February 15 - Outage to units 1 and 2 to complete Internal As per Gary Murray's comments, Internal inspection of runners, wicket gates, scroll case, etc. (SO Prepared by John Budgett) This will be an 8 hour outage to the turbines. The fol	Internal inspection complete, report to follow OK	Yes
38909	Internal Turbine Inspection Required	RBK: Rattling Brook Hydro Plant	01 Inspection/Investigation	2/15/2005	This is to be completed as part of the inspection required for capital upgrade work preview.	OK	Yes
38930	Engineering Investigation of Rattling Brook	RBK: Rattling Brook Hydro Plant	12 Isolation	2/11/2005		prepare switching order and assist in plant assessment survey OK	Yes
22268	Repair G1 and G2 Head Cover Flood Alarms	RBK: Rattling Brook Hydro Plant	05 Repair	8/11/2003	G1 & G2 Head Cover flood alarms not working on both machines.	Removal and installation of new Omega float devices. Materials: Omega floats LV-10, conduit, bushings, LT, Cable, connectors, 6X6X4 PVC boxes, 24VDC relays, Terminal blocks and Din Rail Cost \$300	Yes

RBK: Rattling Brook Unit 1

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52347	RBK G1 Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation				No
52292	Polarization Index Testing	RBK: Rattling Brook Unit 1	12 Isolation				No
52292	Polarization Index Testing	RBK: Rattling Brook Unit 1	02 Predictive Maintenance				No
51514	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	7/13/2006			No
51065	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/6/2006		OK	Yes
51052	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/14/2006		EVERY THING OK OK	Yes
51023	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	6/27/2006		WC # RBK G-1 THB-666677 WC # G-1 LGB-666678	Yes
50395	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	5/10/2006		WC # G-1 TUB-666678 Received 2006-05-27 OK	Yes
49302	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	4/12/2006		OK	Yes
49098	Vibration PM Set Up and Baseline Signature Development	RBK: Rattling Brook Unit 1	07 Project - Capital	3/13/2006	Before an effective PM job can be carried out, we need to set up each unit such that the equipment can be readily attached to each bearing. Also, the software should be set up for the information collection for each site/plant with the appropriate Baseline Signatures developed such that the PM can be carried out on a yearly go forward basis.	same time worked on task by student eng. OK	Yes
49068	Vibration PM Set Up and Baseline Signature Development	RBK: Rattling Brook Unit 1	07 Project - Capital		Before an effective PM job can be carried out, we need to set up each unit such that the equipment can be readily attached to each bearing. Also, the software should be set up for the information collection for each site/plant with the appropriate Baseline Signatures developed such that the PM can be carried out on a yearly go forward basis. The next part of this job is to analyze the baseline test results.		No
46503	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	3/15/2006		OK	Yes
46475	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	3/15/2006		RBK G-1 THB WC # 666682 RBK G-1 LGB WC # 666689 RBK G-1 TUB WC # 666670 Samples recieved.	Yes
46197	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	2/8/2006		OK	Yes
47538	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	1/19/2006			Yes
46871	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/14/2005			Yes
46857	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/13/2005		OK	Yes
46824	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	12/7/2005		WC # 666723 RBK-G1-TUB 666724 RBK-G1-LGB 666725 RBK-G1-THB Samples recieved.	Yes
45776	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	11/15/2005			Yes
45055	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	10/19/2005		OK	Yes
44273	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation				No
44243	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	9/13/2005		THB WC # 666855 LGB WC # 666854 TUB WC # 666856. Samples recieved.	Yes
44243	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	9/13/2005		THB WC # 666855 LGB WC # 666854 TUB WC # 666856. Samples recieved.	Yes
43423	Polarization Index Testing	RBK: Rattling Brook Unit 1	12 Isolation	3/14/2006		done OK	Yes
43423	Polarization Index Testing	RBK: Rattling Brook Unit 1	02 Predictive Maintenance	3/14/2006		done OK	Yes
43396	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	8/10/2005		every thing ok at time of inspection	Yes
43174	Replace Packing On Power Piston	RBK: Rattling Brook Unit 1	12 Isolation				No
42642	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	7/12/2005		OK	Yes
41828	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/28/2005			Yes
41809	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/14/2005		OK	Yes
41778	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	6/15/2005		WC# rtk-g1 thb-651409 WC # rtk-g1 lgb- 651409 WC # rtk g1 tub 651410 Received 2005-06-17	Yes
41137	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	5/12/2005		OK	Yes
40341	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	5/2/2005		This time was for updating the MSDS sheets for the stations at Rattling.	Yes
39222	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	3/23/2005		OK	Yes
39192	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	3/3/2005		RBK-G1-WC #651269-G1- LGB-WC #651270 -RBK -G1-TUB -WC # 651271 Samples recieved	Yes
38952	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	2/9/2005			Yes
37557	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	1/24/2005		ok	Yes
37074	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/14/2004			Yes
37057	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/14/2004			Yes
37026	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	12/10/2004		ok Recieved Dec 14/04	Yes
35926	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	11/29/2004		OK	Yes

RBK: Rattling Brook Unit 1

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
35358	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/7/2004			Yes
34832	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	9/30/2004		All activities were not completed due to rewind taking place on unit.	Yes
34802	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)				No
34809	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	8/28/2004		An overhaul for rewind is now in progress on RBK-G1.	Yes
33721	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	7/13/2004		OK	Yes
33062	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/30/2004		replaced one comm & 3 slipping brushes	Yes
33065	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	6/11/2004			Yes
33034	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	6/9/2004		Wear Check Numbers are as follows: RBK-G1- THB 612627 RBK-G1- LGB 612628 RBK-G1- TUB 612629 Samples Recieved	Yes
32249	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	5/17/2004			Yes
31825	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	4/28/2004			Yes
31000	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	3/31/2004			Yes
30970	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	3/23/2004		WC Numbers: RBK-G1-LGB - 612612 RBK-G1-TUB - 612613 RBK-G1-THB - 612614 Recieved	Yes
30654	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	2/26/2004			Yes
30625	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	2/24/2004		WC Number's 612607 612608 612609	Yes
29935	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	1/27/2004			Yes
29882	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	1/9/2004		RBK G-1-TUB WC # 612486 RBK G-1-THB WC # 612487 RBK G-1-LGB WC # 612488	Yes
29584	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	12/18/2003			Yes
29587	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	11/13/2003		checked on information from Herb Synder , no smell from oil but to much to be just grease checking on warranty for unit .John Curran up dated on unit .	Yes
29536	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	12/9/2003		RBK - G1- TUB WO# 612538 RBK - G1 - THB WO# 612539 RBK - G1 - LGB WO# 612540	Yes
29100	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 1	01 Inspection/Investigation	11/26/2003			Yes
29068	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 1	03 Preventive Maintenance (M3)	11/25/2003		WC numbers : RBK-G1-TVB 581542 RBK-G1-LGB 581541 RBK-G1-THB 581540	Yes

RBK: Rattling Brook Unit 2

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52348	RBK G2 Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation				No
52293	Polarization Index Testing	RBK: Rattling Brook Unit 2	12 Isolation				No
52293	Polarization Index Testing	RBK: Rattling Brook Unit 2	02 Predictive Maintenance				No
51515	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	7/13/2008			No
51066	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/8/2008		OK	Yes
51053	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/12/2008		EVERY THAIG OK OK	Yes
51024	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	6/22/2008		WC # RBK G-2 THB-666674 WC # G-2 LGB -666675 WC # RBK G-2 TUB-666676 Received 2008-06-27 OK	Yes
50398	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	5/10/2008		OK	Yes
49303	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	4/12/2008		OK	Yes
49068	Vibration PM Set Up and Baseline Signature Development	RBK: Rattling Brook Unit 2	07 Project - Capital	3/15/2008	Before an effective PM job can be carried out, we need to set up each unit such that the equipment can be readily attached to each bearing. Also, the software should be set up for the information collection for each site/plant with the appropriate Baseline Signatures developed such that the PM can be carried out on a yearly go forward basis.	same time worked on task by student eng	Yes
49068	Vibration PM Set Up and Baseline Signature Development	RBK: Rattling Brook Unit 2	07 Project - Capital		Before an effective PM job can be carried out, we need to set up each unit such that the equipment can be readily attached to each bearing. Also, the software should be set up for the information collection for each site/plant with the appropriate Baseline Signatures developed such that the PM can be carried out on a yearly go forward basis. The next part of this job is analyze the baseline test results.		No
48504	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	3/15/2008		OK	Yes
48476	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	3/15/2008		RBK-G2 THB WC # 666689 RBK-G2 LGB WC # 666690 RBK-G2 TUB WC # 666691 Samples recieved.	Yes
48196	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	2/8/2008		OK	Yes
47539	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	1/19/2008			Yes
46872	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/13/2005			Yes
46858	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/13/2005		OK	Yes
46825	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	12/7/2005		WC # 666719 RBK G2 TUB- WC # 666720 RBK-G2-LGB WC # 666721 RBK G2 THB WC # 666719 RBK G2 TUB WC # 666720 RBK-G2 LGB WC #666721 RBK G2 THB Samples recieved.	Yes
45777	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	11/15/2005			Yes
45056	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	10/20/2005		OK	Yes
44274	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	9/9/2005		OK	Yes
44244	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	6/13/2005		THB WC # 666851 TUB WC # 666852 LGB WC # 666853. Samples recieved.	Yes
43424	Polarization Index Testing	RBK: Rattling Brook Unit 2	12 Isolation	3/14/2006		OK	Yes
43424	Polarization Index Testing	RBK: Rattling Brook Unit 2	02 Predictive Maintenance	3/14/2006		OK	Yes
43397	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/10/2005		every thing ok at time of inspection	Yes
42843	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	7/12/2005		OK	Yes
41827	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/28/2005		OK	Yes
41810	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/15/2005		OK	Yes
41779	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	6/15/2005		wc # rtk-q2 thb 651411 wc # rtk q2- lgb 651412 wc # rtk -q2 tub 651413 Received 2005-06-17	Yes
41138	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	5/11/2005		OK	Yes
40342	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	4/28/2005		This time was for updating the MSDS sheets at Rattling Brook.	Yes
39223	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	3/18/2005		OK	Yes
39193	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	3/3/2005		RBK-G2- THB-WC #651272 RBK-G2 LGB- WC #651273 RBK-G2 TUB WC #651274 Sample recieved	Yes
38053	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	2/10/2005			Yes
37558	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	1/17/2005		ok ok	Yes
37075	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/13/2004			Yes
37058	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/13/2004			Yes
37027	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	12/10/2004		ok Recieved Dec 14/04	Yes
35927	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	11/30/2004		OK	Yes
35389	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	10/19/2004		ok	Yes
34833	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	9/23/2004		OK	Yes

RBK: Rattling Brook Unit 2

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
34603	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	8/26/2004		wear check # 635082 is for thrust bearing on g-2 wear check # 635083 is for lower guide bearing g-2 wear check # 635084 is for turbine bearing on g-2 Samples Received	Yes
34018	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	8/31/2004		OK	Yes
33722	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	7/13/2004		OK	Yes
33083	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	7/5/2004		replaced 2 comm & 4 slipping brushes	Yes
33086	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	6/11/2004		OK	Yes
33035	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	6/9/2004		Wear Check Numbers are as follows: RBK-G2-THB 635074 RBK-G2-LGB 635075 RBK-G2-TUB 635076 Samples Received	Yes
32250	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	5/13/2004			Yes
31826	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	4/28/2004			Yes
31001	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	3/31/2004			Yes
30971	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	3/24/2004		WC Numbers : RBK -G2-TUB - 612615 RBK -G2- LGB- 612616 RBK-G2- THB- 612615	Yes
30655	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	2/10/2004			Yes
30626	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	2/24/2004			Yes
29836	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	1/27/2004			Yes
29883	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	1/8/2004		RBK G-2-THB WC # 612489 RBK G-2-LGB WC # 612490 RBK G-2-TUB WC # 612491	Yes
29585	Generating Equipment Operational Inspection (6-month)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/15/2003			Yes
29568	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	12/15/2003			Yes
29537	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	12/3/2003		RBK - GR - THB WD# 612541 RBK - GR- LGB - WD# 612542 RBK - G2- TUB WD# 612543	Yes
29101	Generating Equipment Visual Inspection (monthly)	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	11/24/2003			Yes
29070	Oil Sampling & Analysis - Bearing System	RBK: Rattling Brook Unit 2	03 Preventive Maintenance (M3)	11/25/2003		WC numbers RBK-G2-TUB 581517 RBK-G2-THB 581543 RBK-G2-LGB 581544	Yes
28760	Install New SKF Monitors and Cabling for Vibration on Turbine and Lower Guide Bearings	RBK: Rattling Brook Unit 2	08 Installation	12/3/2003	The trouble with the vibration protection at RBK-G2 has been partially investigated and appears to be caused by interference on the signal from the vibration conditioner at the machine and the PLC input. The cables are run with power cables. There has been some conversation about the cable routing and possible tray installation. The correction to the vibration trip problem was to disable the trip until such a time as the decision is made to install the tray or to re-route temporary cables to verify the problem. Two new SKF monitors are also required.	Probe head damaged upon closer inspection. Also a conditioner needed to be replaced.	Yes
28760	Install New SKF Monitors and Cabling for Vibration on Turbine and Lower Guide Bearings	RBK: Rattling Brook Unit 2	08 Installation	1/21/2004	The trouble with the vibration protection at RBK-G2 has been partially investigated and appears to be caused by interference on the signal from the vibration conditioner at the machine and the PLC input. The cables are run with power cables. There has been some conversation about the cable routing and possible tray installation. The correction to the vibration trip problem was to disable the trip until such a time as the decision is made to install the tray or to re-route temporary cables to verify the problem. Two new SKF monitors are also required and will be installed by a technologist from Jeremy Decker's group	Probe head damaged upon closer inspection. Also a conditioner needed to be replaced.	Yes
28618	Inspect Vibration Probes	RBK: Rattling Brook Unit 2	01 Inspection/Investigation	10/18/2003	This is follow up work from work order #s21830 and 21633	Please see attached word doc.	Yes
24232	Investigate Unit Creep on Shutdown	RBK: Rattling Brook Unit 2	01 Inspection/Investigation		Unit creeps sometimes when shutdown. It was shut by SCC this morning and was creeping for 4 hours with no creep alarm.		No

RBK: Rattling Lake Spillway

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
38740	Vegetation Management Required	RBK: Rattling Lake Spillway	16 Vegetation Control		Brush clearing required this will be done by outside contractor when set up.		No
					Deteriorated. Needs repairs and painting. Also catwalk narrow dangerous when logs are piled on it. This may be capital job please sent to G. Humby's for engineering assessment on structure & catwalk. This catwalk is fairly narrow & when the stop logs are stored on top of it this creates a safety concern. Could you see what we can do to correct these problems.		No
36316	Check Condition Of Catwalk	RBK: Rattling Lake Spillway	05 Repair				No
33918	Dam Safety Engineering Inspection (High-1 Category)	RBK: Rattling Lake Spillway	01 Inspection/Investigation		Dam Safety Engineering Inspection (High-1 Category)		No
27026	Storage Dam Site Walkabout	RBK: Rattling Lake Spillway	01 Inspection/Investigation	10/30/2003	Storage Dam Site Walkabout		Yes
25003	Storage Dam Site Walkabout	RBK: Rattling Lake Spillway	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22862	Storage Dam Site Walkabout	RBK: Rattling Lake Spillway	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Surge Tank

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
37127	Replace Surge Tank Building Heaters	RBK: Surge Tank	05 Repair	11/10/2004	The construction heaters need to be replaced in the surge tank building.		Yes
36134	Bracing Repairs Required	RBK: Surge Tank	05 Repair		Bracing Repairs are required on the surge tank. Additional details available from Gary Humby.		No
28670	Repair Ice Damage to Surge Tank	RBK: Surge Tank	05 Repair	10/22/2004	This will require the use of an outside contractor to be coordinated by Bill Guy	job completed by bowringer for \$16,900 hst excluded Cost captured on invoice.	Yes

RBK: U1 BCWS

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
33270	Cooling Water Valve Modifications	RBK: U1 Bearing Cooling Water System	OS Modification - Non-capital	7/8/2004	check and tighten if necessary all cooling water gland nuts on RBK G1 & G2. Also lock all valves in position with locking wire. 2 EPM for 2 hours.	Ok	Yes
32054	Reduce G1 Gland Water Supply Flow	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	4/15/2004	In an effort to reduce or minimize the trips associated with this we will investigate and adjust the trip setting on the flow for this line. It is currently set at 3/4 Gal/Min.	trip adjusted to a lower setting. Trip adjusted lower.	Yes
31683	Remove Cooling Water Strainers for Maintenance	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		A switching order is required to isolate the machine to remove the cooling water strainers for maintenance.		No
31683	Remove Cooling Water Strainers for Maintenance	RBK: U1 Bearing Cooling Water System	O3 Preventive Maintenance (M3)		The existing cooling water strainers are original to the facility and are non-operational. We need to investigate if the strainers are in a suitable condition for extended service and make recommendations for follow up action. An external investigation was carried out and it was decided that the strainers should be removed from service and sandblasted, freed up and re-installed.		No
31326	Inspect Cooling Water Strainers	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	2/26/2004	The existing cooling water strainers are original to the facility and are non-operational. We need to investigate if the strainers are in a suitable condition for extended service and make recommendations for follow up action. In addition there is some question as to whether or not the piping arrangement is suitable for today's use. The existing piping allowed for the use of a sprinkler system which has been removed, this may account for the existence of two systems feeding the same bearings.	The strainers were inspected externally and it was decided to dismantle them and repack the operating arms as no maintenance has been done on them since they were installed in 1958. Modifications to the cooling system are to be done during refit in 2-3 years. The sprinkler system and fire system have been removed over the years therefore this filter system is sized for a greater demand than its under today. I feel that this filter system could be put in service for many years to come if some maintenance was done to it.	Yes
20655	Replace Pressure Reducing Valves	RBK: U1 Bearing Cooling Water System	OS Repair	12/29/2003	Replace two pressure reducing valves on RBK Plant cooling water supplies. Valves are 1 1/4 inch threaded with a maximum rating of 215 psi.	I replaced the section of piping and the reducing valve. This pipit was corroded and leaking. The reducing station used in the plant on G1 @ G2 are undersized refer to drawing # NL-11800-1. This is only a temporary fix on G2, because of the undersized piping and the corrosion.	Yes
28199	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
28198	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
28197	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
28196	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	10/28/2003	RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
26333	RBK1 Bearings Operational Inspection	RBK: U1 Bearing Cooling Water System	O3 Preventive Maintenance (M3)	9/12/2003	RBK1 Bearings Operational Cooling Water System Inspection	OK	Yes
26317	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection	Solenoid's not in service on RBK G-1	Yes
26316	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
26315	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
26314	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
26313	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	9/29/2003	RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
24318	Gland cooling water leak	RBK: U1 Bearing Cooling Water System	OS Repair	7/29/2003	Refuse allow on gland cooling water		Yes
23973	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		Yes
23972	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
23971	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation		RBK1 Bearings Weekly Visual Cooling Water System Inspection		No
23970	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	8/26/2003	RBK1 Bearings Weekly Visual Cooling Water System Inspection		Yes
22457	Repair Pressure Reducing Valve	RBK: U1 Bearing Cooling Water System	OS Repair				No
22457	Repair Pressure Reducing Valve	RBK: U1 Bearing Cooling Water System	O3 Preventive Maintenance (M3)				No
21803	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	7/29/2003	Cooling water supply pressure reducing valve not working properly.		Yes
21802	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	7/23/2003	RBK1 Bearings Weekly Visual Cooling Water System Inspection	OK	Yes
21801	RBK1 Bearings Weekly Visual Inspection	RBK: U1 Bearing Cooling Water System	O1 Inspection/Investigation	7/22/2003	RBK1 Bearings Weekly Visual Cooling Water System Inspection	only 30 minutes required to complete.	Yes

RBK U2 BCWS

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
44767	Replace Cooling Water Solenoid	RBK: U2 Bearing Cooling Water System	06 Modification - Non-capital	5/23/2005			Yes
40043	Water Leaks & Governor Adjustment	RBK: U2 Bearing Cooling Water System	05 Repair	2/17/2005	Make repairs to leaky cooling water solenoid gland water & draft tube door.	OK	Yes
					On Oct 14 the RBK G-2 unit tripped on start up with a problem on the turbine bearing cooling water. Byron Hayter simply closed the supply valve and opened it again. He also cleaned the strainers but there was nothing there significant. The cooling water for this bearing is taken from the head cover, not upstream of the main valve. Vince Carey has suggested removing the flow meter and cleaning it as he thinks the meter did not register a flow on start up. This has not occurred before as per Byron.	work order#36356 was in fact for the turbine gland water and not for the turbine bearing as work order indicated. Trying to set a flow on this gland water that won't flood the pit. It has to be reduced to a gallon or less a minute. Flow patterns in the scroll case can set of this trip very easily especially on start-up. This water flow is to the stuffing box of the main shaft. When a flow is set when new packing installed it will maintain that flow. All the water from below on top of the runner is trying to escape up through the stuffing box. The flow switch is now disabled and the operator can clean the strainers with the unit in operation. There was repeated trips on this unit causing many call outs that has now been eliminated. We don't have these flow meter on our other vertical units and if we install them there I'm sure we will increase our troubles with these units. Even if we put time delay in the program any change in flow pattern inside the turbine or discharge side of the gland will cause us more grief. I've set this machine to a gallon a minute and everything is	Yes
36356	Clean Turbine Bearing Flow Meter	RBK: U2 Bearing Cooling Water System	05 Repair	10/28/2004	In an effort o to reduce or minimize the trips associated with this we will investigate and adjust the trip setting on the flow for this line. It is currently set at 3/4 Gal/Min.	Trip reduced to .5 gallon to eliminate nuisance trip.. Flow meters has a narrow band and would cause trouble with loading changes and pressure rises.	Yes
32065	Reduce G2 Gland Water Supply Flow	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	5/10/2004			Yes
28227	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
28228	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
28225	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
28224	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	10/28/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection	ok	Yes
28703	Replace Cooling Water Piping	RBK: U2 Bearing Cooling Water System	12 Isolation		A switching order is required to isolate unit to replace the piping for the cooling water system and to inspect the cooling water ejector pump.		No
28703	Replace Cooling Water Piping	RBK: U2 Bearing Cooling Water System	05 Repair		This is follow up work from work order #21822 and will be completed in coordination with a mechanical maintenance person from John Budgett's group.		No
26376	RBK2 Bearings Operational Inspection	RBK: U2 Bearing Cooling Water System	03 Preventive Maintenance (M3)	8/12/2003	RBK2 Bearings Operational Cooling Water System Inspection		Yes
26360	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
26359	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
26358	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
26357	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
26356	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	10/4/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection	ok	Yes
26356	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	10/4/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection	ok	Yes
24001	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
24000	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No
23999	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Cooling Water System Inspection		No

RBK U2 BCWS

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
21998	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	8/25/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection		Yes
						These lines are in good condition and a revamping of all piping to be done when a major overhaul is to be done within 2-5 years. There is a lot of duplication of lines because of the fire system that used to be on both units. This will be addressed at that time.	
22251	Replace Cooling Water Supply Lines	RBK: U2 Bearing Cooling Water System	05 Repair	2/25/2004			Yes
22251	Replace Cooling Water Supply Lines	RBK: U2 Bearing Cooling Water System	05 Repair				No
22251	Replace Cooling Water Supply Lines	RBK: U2 Bearing Cooling Water System	05 Repair		#2 cooling water supply worn and needs replacement. Material was brought several years ago some of it is still at site.		No
21824	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	7/30/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection		Yes
21823	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	7/23/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection	OK	Yes
						G2 cooling water needs to be replaced some pipe & fittings are at the plant. Previously noted. This work is captured under work order #26703 and is on hold waiting for switching order preparation and approval.	
21822	RBK2 Bearings Weekly Visual Inspection	RBK: U2 Bearing Cooling Water System	01 Inspection/Investigation	7/16/2003	RBK2 Bearings Weekly Visual Cooling Water System Inspection		Yes

RBK: U2 Ventilation/Heat Control System

Work Order	Work Order Title	Entity Name	Work Type	Task Supervisor	Date work completed	Description	Closing Comments	Closed (Yes/No)
35635	Modification Required Control Power	RBK: U2 Ventilation/Heat Control System	01 Inspection/Investigation	William Guy	12/9/2004	Control for the louvers on RBK-G2 is lost when the breaker is open for the DC power supply for RBK-G1 causing a ventilation problem on RBK-G2. See if it's possible to get a temporary feed to supply the DC power for RBK-G2 louvers while G1 is out of service for rewind.		Yes

RBK: Rattling Brook Unit 1

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
50453	Partial Discharge Analysis Testing (Gander)	RBK: Unit 1 AC Synchronous Generator	02 Predictive Maintenance		Partial Discharge Analysis is required. This test will be completed after the unit has been running for six hours.		No
50453	Partial Discharge Analysis Testing (Gander)	RBK: Unit 1 AC Synchronous Generator	02 Predictive Maintenance		Partial Discharge Analysis is required.		No
48425	Infrared Thermography	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		Infrared Thermography		No
41176	Partial Discharge Analysis Testing	RBK: Unit 1 AC Synchronous Generator	02 Predictive Maintenance	12/13/2005	Partial Discharge Analysis is required. Two tests will have to be conducted to capture both Hot and Cold testing.	OK	Yes
39142	Infrared Thermography	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	12/13/2005	Infrared Thermography	OK	Yes
30919	Infrared Thermography	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	2/17/2004	Infrared Thermography	OK	Yes
25191	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
25190	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26189	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26188	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	10/20/2003	RBK1 Generator Weekly Visual Inspection	OK	Yes
26541	Investigate Pit Flood Alarm	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		Investigate alarm and make recommendations for follow up work along with estimated priority and requirements.		No
26540	Head Cover Pit Flood	RBK: Unit 1 AC Synchronous Generator	05 Repair	8/1/2003	It was identified by Bill Guy that the head cover pit flood alarm is not working and should be checked out by Jeremy Decker's group. Make recommendations for any follow up work required including priority and estimated requirements.	blockage in headcover drain pit flood alarm not working blockage in headcover drain alarm not working This work is captured in work order # 26541	Yes
26306	RBK1 Generator Operational Inspection	RBK: Unit 1 AC Synchronous Generator	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Generator Operational Inspection	No scales at plant to check brush pressure.	Yes
26305	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26304	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26303	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26302	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
26301	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
23685	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	9/29/2003	RBK1 Generator Weekly Visual Inspection		Yes
23684	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
23683	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
23682	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation		RBK1 Generator Weekly Visual Inspection		No
21787	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	8/28/2003	RBK1 Generator Weekly Visual Inspection		Yes
21786	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	7/29/2003	RBK1 Generator Weekly Visual Inspection		Yes
21785	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	7/23/2003	RBK1 Generator Weekly Visual Inspection	OK	Yes
21784	RBK1 Generator Weekly Visual Inspection	RBK: Unit 1 AC Synchronous Generator	01 Inspection/Investigation	7/17/2003	RBK1 Generator Weekly Visual Inspection	30 min. required to complete.	Yes

RBK: Unit 1 Bearings

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
34021	Vibration Analysis	RBK: Unit 1 Bearings	02 Predictive Maintenance				No

RBK: Unit 1 Brush Gear

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
49763	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	12 Isolation	3/28/2006		replaced 4 comm & 2 slipring brushes Should have been Task 2 Should have been Task 2 OK	Yes
49763	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)	3/28/2006		See Comments on Task 1 OK	Yes
40409	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	12 Isolation	3/14/2005		replaced 6 slipring & 4comm brushes on rbk g-1 Mistake Mistake OK	Yes
40409	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)	3/14/2005		See comments Task1 OK	Yes
37928	Slip Ring Repairs and Brush Maintenance	RBK: Unit 1 Brush Gear	12 Isolation	1/6/2005	A switching order is required to isolate the unit to remove the brush gear and stone the slip ring.	Replaced 4 slip ring brushes & 3 com brushes.	Yes
37928	Slip Ring Repairs and Brush Maintenance	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)	1/7/2005	Due to an imperfection in the upper slip ring, we need to remove the brush gear and stone the ring. We should also take the opportunity to do the brush gear maintenance at the same time.	Replaced 4 slip ring brushes & 3 com brushes.	Yes
37914	Adjust Brush Gear	RBK: Unit 1 Brush Gear	12 Isolation		According to Byron Hayter, there was a noise and possibly a rough spot on the top ring that was causing the brushes to wear abnormally. He and Tom removed the brush gear and stoned the slip ring to remove the rough spot but we still need to have the brush gear re aligned and set up properly.		No
37914	Adjust Brush Gear	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)		According to Byron Hayter, there was a noise and possibly a rough spot on the top ring that was causing the brushes to wear abnormally. He and Tom removed the brush gear and stoned the slip ring to remove the rough spot but we still need to have the brush gear re aligned and set up properly.		No
31993	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	12 Isolation	3/22/2004		Replaced 1 com and 1 slipring brush.	Yes
31993	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)	3/24/2004		Replaced 1 com and 1 slipring brush. Replaced 1 com and 1 slipring brush.	Yes
28678	Brush Gear Maintenance Required	RBK: Unit 1 Brush Gear	03 Preventive Maintenance (M3)	9/24/2003	Inspect and clean brush gear and replace brushes as required.	Replaced (5) slipring brushes (3)comm brushes	Yes

RBK: Unit 1 Flow Metering Equipment

Work Order	Work Order Title	Entity Name	Entity Location	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
33842	Investigate Cooling Water Flow Fluctuations	RBK: Unit 1 Flow Metering Equipment	RBK: Unit 1 Instrumentation	05 Repair	10/19/2004	Turbine cooling water flow fluctuates and sends alarm to SCC. We replaced the Valve but this was not the cause. Possibly the flow switches are causing problems. We cleaned the strainers on June 30 and since we have had 2 incidents. This will require mechanical maintenance expertise to determine source of problem. John Budge!! has picked up material & will transport to Rattling Brook.	No problem found at this time.	Yes

RBK: Unit 1 Gate Governor

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52178	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)		Oil Sampling & Analysis - Governor		No
48140	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/9/2006	Oil Sampling & Analysis - Governor	WC # 666864 Sample received.	Yes
46786	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/7/2005	Oil Sampling & Analysis - Governor	WC # 666722 Sample received.	Yes
					As per Bill Guy, the governor pump motor has failed and as far as they know, the bearings need to be replaced. It has to be removed from service and taken to a repair center for an overhaul and testing and then reinstalled.	Guards were removed and the chain was turned by hand. The roughness was felt in Governor bearing not motor so motor was not removed. This should have been RBK G2 WE HAD TO DRAIN ABOUT 40 GALLONS OF OIL OUT OF THE TANK AND SUMP. WE THEN TOOK THE PUMP OUT AND TOOK IT APART. WE FOUND THE NONDRIVE GEAR SHAFT AND BUSHING TORE UP. WE BOUGHT THE END COVER AND SHAFT TO PRO WELD TO GET REPAIRED. WHEN WE PUT THE PUMP TOGETHER IT WAS TIGHT. WE TOOK THE PUMP APART AND FOUND THE BUSHINGS WERE NOT LINEUP. WE BROUGHT THE PUMP BACK TO PRO WELD AND HONE OUT THE BUSHING UNTIL THE SHAFT WOULD ROTATE FREELY. BOTH END COVERS WERE WORN NEEDS TO BE REFACE SOMETIME IN THE FUTURE	Yes
46311	Remove, Repair and Reinstall Governor Pump Motor	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	11/13/2005			Yes
44951	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/11/2005	Oil Sampling & Analysis - Governor	WC # 666842 Received Oct 21.	Yes
43255	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/4/2005	Oil Sampling & Analysis - Governor	WC # 651420 Sample received.	Yes
					We have a leak on the packing on the power piston. Now packing has to be ordered from American Governor.		No
43174	Replace Packing On Power Piston	RBK: Unit 1 Gate Shaft Governor	13 Restoration				No
41717	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/13/2005	Oil Sampling & Analysis - Governor	WC # 651405 Received 2005-06-15 OK	Yes
40239	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	4/7/2005	Oil Sampling & Analysis - Governor	Wear Check # 651278 Received 2005-04-09	Yes
37094	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/11/2005	Oil Sampling & Analysis - Governor	WC # 651350	Yes
36989	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/10/2004	Oil Sampling & Analysis - Governor	WC # 635060 Received Dec 14/04	Yes
35259	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/9/2004	Oil Sampling & Analysis - Governor	WC # 635059 Received Dec 14/04	Yes
33911	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	8/13/2004	Oil Sampling & Analysis - Governor	WC # 635080 Sample Received	Yes
32958	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/9/2004	Oil Sampling & Analysis - Governor	Wear Check Number 612625 Sample Received.	Yes
31687	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	4/26/2004	Oil Sampling & Analysis - Governor	WC # 612620 Sample received.	Yes
30540	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/24/2004	Oil Sampling & Analysis - Governor	WC # 612608	Yes
29502	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/9/2003	Oil Sampling & Analysis - Governor	WC # 612538	Yes
29448	Recalibrate Gate Limit Indication	RBK: Unit 1 Gate Shaft Governor	05 Repair	6/8/2004	Recalibrate gate limit on G1. Reads low when limit is at 100%.	ok ok	Yes
28215	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
28214	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
28213	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
						While checking movement in the governor broke assembly was notice, four bolts had become loose and was re - tighten maybe a check for this could be included as an activity.	
28212	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	10/20/2003	RBK1 Governor Weekly Visual Inspection	ok	Yes
26811	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)		Oil Sampling & Analysis - Governor		No
26342	RBK1 Governor Operational Inspection	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	9/10/2003	RBK1 Governor Operational Inspection		Yes
26341	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
26340	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
26339	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
26338	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
26337	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
23689	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	9/29/2003	RBK1 Governor Weekly Visual Inspection		Yes
23688	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
23687	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
23686	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation		RBK1 Governor Weekly Visual Inspection		No
23685	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	8/26/2003	RBK1 Governor Weekly Visual Inspection		Yes
22858	Oil Sampling & Analysis - Governor	RBK: Unit 1 Gate Shaft Governor	03 Preventive Maintenance (M3)	8/12/2003	Oil Sampling & Analysis - Governor	WC Number 581519	Yes
21815	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	7/28/2003	RBK1 Governor Weekly Visual Inspection		Yes
21814	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	7/30/2003	RBK1 Governor Weekly Visual Inspection	OK	Yes
21813	RBK1 Governor Weekly Visual Inspection	RBK: Unit 1 Gate Shaft Governor	01 Inspection/Investigation	7/17/2003	RBK1 Governor Weekly Visual Inspection	ok	Yes

RBK: Unit 1 Generator Lower Guide Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
45313	Inspect Lower Guide Oil Level Transducer	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		As per Tom Hanlon, "Oil level lower guide bearing not working." When Tom and Byron were draining the oil from the lower guide bearing, they noted that the Magnatrol oil level switch did not function. According to Tom, the DC was not turned off during the oil change and there are now kinks in the 1/4" copper line from the switch. The first check should be to shut the machine, remove the cover from the switch housing and physically toggle the switch to see if it activates. If not, further investigation by an electrician is required.		No
45814	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	12 Isolation		A switching order clearance is required to isolate the unit to perform a oil change on the thrust bearing.		No
45814	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	10/26/2005	Recent reports from oil analysis indicate a dramatic increase in the lead content and in the acid number. The oil has been in this bearing for more than 300 days which is good for Hydro Safe, but now is the right time to change the oil before it gets too bad.	Received	Yes
45814	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	10/26/2005	Recent reports from oil analysis indicate a dramatic increase in the lead content and in the acid number. The oil has been in this bearing for more than 300 days which is good for Hydro Safe, but now is the right time to change the oil before it gets too bad.	Received	Yes
31076	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	12 Isolation	3/10/2004	A switching order is required to isolate the machine for an Oil Change.		Yes
31878	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	3/10/2004	As a result of recent sample analysis from wear check, it is recommended that we change the oil. This will also require lowering the oil pot to clean it thoroughly.	note 1 clearance required not self protection	Yes
31876	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	13 Restoration	3/24/2004	As a result of recent sample analysis from wear check, it is recommended that we change the oil. This will also require lowering the oil pot to clean it thoroughly. This work will be done in coordination with mechanical maintenance.		Yes
31876	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	3/24/2004	Carry out an inspection of the bearing to ensure the		No
31876	Oil Change Required	RBK: Unit 1 Generator Lower Guide Bearing	02 Predictive Maintenance	3/24/2004	We should resample the oil one hour after initial start up when oil change is complete and forward sample to Mike Burt.		Yes
28207	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28206	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28205	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28204	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	10/20/2003	RBK1 Bearings Weekly Visual Inspection	ok	Yes
26880	Oil Sample Required	RBK: Unit 1 Generator Lower Guide Bearing	02 Predictive Maintenance	8/15/2003	Take oil sample and forward to Trina Troke for analysis.		
26335	RBK1 Bearings Operational Inspection	RBK: Unit 1 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Bearings Operational Inspection	WC Number 561522	Yes
26327	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		Yes
26326	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26325	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26324	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26323	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23981	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	9/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
23980	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23979	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23978	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
21899	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	5/28/2003	RBK1 Bearings Weekly Visual Inspection		Yes
21898	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	7/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
21898	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	7/27/2003	RBK1 Bearings Weekly Visual Inspection	OK	Yes
21897	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Lower Guide Bearing	01 Inspection/Investigation	7/17/2003	RBK1 Bearings Weekly Visual Inspection	Only 15 min. required.	Yes

RBK: Unit 1 Generator Rotor

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
31917	Replace Brake Shoes	RBK: Unit 1 Generator Rotor	08 Installation	3/15/2004	A switching order is required to isolate the machine for PPM's to replace the brake shoes.	One brake pad and a new bracket had to be machined at a cost of \$126.50 .	Yes
31917	Replace Brake Shoes	RBK: Unit 1 Generator Rotor	08 Installation	3/18/2004	Brake shoes require replacement due to an unexpected stop on the machine which caused excessive wear on the shoes.	One brake pad and a new bracket had to be machined at a cost of \$126.50 .	Yes

RBK: Unit 1 Generator Stator

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
46264	Check Neutral Connections	RBK: Unit 1 Generator Stator	01 Inspection/Investigation	11/2/2005	Thermoscan connections all stator leads and split phase CTs in generator termination cabinet. Pls put copy of report on Avantis.	Thermoscanned Connections OK. OK	Yes
37575	Jumper RTD's	RBK: Unit 1 Generator Stator	06 Modification - Non-capital	12/23/2004	Jumper RTD'S . These are not in use at this time so they need to be jumped and brought to ground . This can be done at the generator termination box. This needs to be done as soon as possible to protect the RTD "s from over voltage	ok	Yes
34405	Megger Unit	RBK: Unit 1 Generator Stator	03 Preventive Maintenance (M3)	7/26/2004	Due to high humidity levels unit has to tarped & meggered		Yes

RBK: Unit Generator Upper Guide/Thrust Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
					Recent reports from oil analysis indicate an increase in the lead content but other than that, the oil is in good condition. However, due to a dramatic increase in the temperature, we should change the oil. This is a first step in determining the problem but the oil, even if it is not the problem, will degrade very fast under high temperatures so it should be changed anyway.		
51119	Oil Change Required	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	03 Preventive Maintenance (M3)	5/15/2006		ok	Yes
28203	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28202	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28201	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28200	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	10/20/2003	RBK1 Bearings Weekly Visual Inspection	ok	Yes
26659	Oil Sample Required	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	02 Predictive Maintenance	6/15/2003	Take oil sample and forward to Trina Troke for analysis.		
26334	RBK1 Bearings Operational Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Bearings Operational Inspection	WC Number 181521	Yes
26322	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		Yes
26321	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26320	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26319	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26318	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23977	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	9/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
23976	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23975	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23974	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
21806	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	8/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
21805	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	7/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
21804	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	7/23/2003	RBK1 Bearings Weekly Visual Inspection	OK	Yes
				7/17/2003	RBK1 Bearings Weekly Visual Inspection	ok	Yes

RBK: Unit 1 Hydroelectric Turbine

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
29217	Replace Gate Grease Pipe	RBK: Unit 1 Hydroelectric Turbine	05 Repair	10/28/2003		ok	Yes
28187	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
28186	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
28185	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
28184	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	10/30/2003	RBK1 Turbine Weekly Visual Inspection	OK	Yes
26300	RBK1 Turbine Operational Inspection	RBK: Unit 1 Hydroelectric Turbine	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Turbine Operational Inspection		Yes
26299	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
26298	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
26297	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
26296	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
26295	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	9/29/2003	RBK1 Turbine Weekly Visual Inspection		Yes
23961	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
23960	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
23959	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation		RBK1 Turbine Weekly Visual Inspection		No
23958	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	8/26/2003	RBK1 Turbine Weekly Visual Inspection		Yes
21794	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	7/29/2003	RBK1 Turbine Weekly Visual Inspection		Yes
21793	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	7/30/2003	RBK1 Turbine Weekly Visual Inspection	completed July 23, ok	Yes
21792	RBK1 Turbine Weekly Visual Inspection	RBK: Unit 1 Hydroelectric Turbine	01 Inspection/Investigation	7/17/2003	RBK1 Turbine Weekly Visual Inspection	ok	Yes

RBK: Unit 1 Main & Bypass Valve Control

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
36551	Install Asco Valves	RBK: Unit 1 Main & Bypass Valve Control	08 Installation	6/15/2005	Over the last couple of years gaskets have been failing on the solenoid that operates the 5 way valve which in turn operates the main valves. In discussion with John Budgell it was decided to replace the present solenoid with an Asco valve which should be able to handle the pressure.	OK	Yes
35196	Remove 5 Way Valve for Repairs	RBK: Unit 1 Main & Bypass Valve Control	05 Repair	11/5/2004	Over the last couple of months we have been having some problems with this valve not working properly. The unit is out of service for a rewind now. To complete this work a self protection will be required. We will try to make these repairs on site if possible	Valve was removed from pit. It was disassembled and inspected. The cylinders were removed along with the piston spools. Everything was in good condition but no work had been done on them since 1958. All parts were cleaned and sandblasted and a new o-ring kit was installed. The unit for # 1 was installed on #2 unit. Then this 5-way was taken up and the same maintenance was performed. The O rings used were purchased locally low cost. OK	Yes
29446	Replace G1 Pivot Valve Limit Switch	RBK: Unit 1 Main & Bypass Valve Control	05 Repair	11/20/2003	Limit switch burnt, needs to be replaced. Pivot valve indicates closed when opened. required one limit switch: G.E. CR9440J1C or similar.	G1 main valve indication repaired. The valve indication circuit for both G1 & G2 need to be modified to more accurately indicate when the valve is actually OPEN & eliminate the potential of future limit switch problems. See request 2182	Yes

RBK: Unit 1 Main Inlet Pivot Valve

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
26343	RBK1 Main Inlet Valve Inspection	RBK: Unit 1 Main Inlet Pivot Valve	01 Inspection/Investigation	9/12/2003	RBK1 Main Inlet Valve Inspection	Leaking through main inlet valve. No indicator light on panel. This is covered under work order #22248	Yes
22248	Replace Main Inlet Pivot Valve	RBK: Unit 1 Main Inlet Pivot Valve	07 Project - Capital		Pivot valve sticks intermittently and won't open. Should be replaced.		No

RBK: Unit 1 Turbine Guide Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
28211	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28210	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28209	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
28208	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	10/30/2003	RBK1 Bearings Weekly Visual Inspection	ok	Yes
25661	Oil Sample Required	RBK: Unit 1 Turbine Guide Bearing	02 Predictive Maintenance	8/15/2003	Take oil sample and forward to Trina Troke for analysis.	WC Number 581523	Yes
26336	RBK1 Bearings Operational Inspection	RBK: Unit 1 Turbine Guide Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK1 Bearings Operational Inspection		Yes
26332	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26331	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26330	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26329	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
26328	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	9/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
23985	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23984	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23983	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation		RBK1 Bearings Weekly Visual Inspection		No
23982	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	8/26/2003	RBK1 Bearings Weekly Visual Inspection		Yes
22172	Investigate G1 Turbine Bearing Temp. Alarm	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	8/11/2003	G1 turbine bearing temperature alarm not working.	Alarm was disconnected due to a broken capillary tube. A new system of Thermocouples is set to be installed when a new PLC protection device is installed. However, until such a time the unit is still protected through a generator lockout on high temperature	Yes
21812	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	7/29/2003	RBK1 Bearings Weekly Visual Inspection		Yes
21811	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	7/18/2003	RBK1 Bearings Weekly Visual Inspection	OK	Yes
21810	RBK1 Bearings Weekly Visual Inspection	RBK: Unit 1 Turbine Guide Bearing	01 Inspection/Investigation	7/22/2003	RBK1 Bearings Weekly Visual Inspection	Only 15 required to complete insp.	Yes

RBK: Unit 1 Turbine Head Cover

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
35787	Clean and Paint Head Cover	RBK: Unit 1 Turbine Head Cover	03 Preventive Maintenance (M3)		Tom Hanlon recommends that the head cover be cleaned and painted.		No

RBK: U2 AC Synchronous Generator

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
50454	Partial Discharge Analysis Testing (Gander)	RBK: Unit 2 AC Synchronous Generator	02 Predictive Maintenance		Partial Discharge Analysis is required. This test will be completed after the unit has been running for six hours		No
50454	Partial Discharge Analysis Testing (Gander)	RBK: Unit 2 AC Synchronous Generator	02 Predictive Maintenance		Partial Discharge Analysis is required.		No
48426	Infrared Thermography	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		Infrared Thermography		No
41177	Partial Discharge Analysis Testing	RBK: Unit 2 AC Synchronous Generator	02 Predictive Maintenance	12/13/2005	Partial Discharge Analysis is required. Two tests will have to be conducted to capture both Hot and Cold testing.	This one took a little longer as it was the first time using the new Tester. OK	Yes
39143	Infrared Thermography	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	12/13/2005	Infrared Thermography	Minor healing on Left phase @ switchgear & Generator Cabinet. OK	Yes
34922	Heating Receptacles Required	RBK: Unit 2 AC Synchronous Generator	08 Installation	3/27/2008	Two 240 Volt receptacles are required to allow for the use of heaters to reduce moisture on the generator windings.	OK	Yes
34503	Investigate Unit Trip on Phase C Differential Over Current	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	8/11/2004	This unit tripped on phase c differential over current and needs further investigation to determine the cause. Please refer to activities list for further details.	Extended time taken due to wait on "confirmation of outage" form approval.	Yes
31872	Repair Hot Spots at Connections for Switchgear and Generator	RBK: Unit 2 AC Synchronous Generator	12 Isolation	5/26/2004	A switching order is required to isolate both generators in order to install grounds and make repairs.	repaired hot spots	Yes
31872	Repair Hot Spots at Connections for Switchgear and Generator	RBK: Unit 2 AC Synchronous Generator	12 Isolation		Assist electrician from John Budget's group in making repairs to the power cables as indicated below. Hot spot right phase connection @ switchgear cables to generator. Hot spot left phase connection @ generator JB cable to switchgear.	repaired hot spots The time for the entire work order was captured under task 1.	Yes
31872	Repair Hot Spots at Connections for Switchgear and Generator	RBK: Unit 2 AC Synchronous Generator	05 Repair		Hot spot right phase connection @ switchgear cables to generator. Hot spot left phase connection @ generator JB cable to switchgear.	repaired hot spots The time for the entire work order was captured under task 1.	Yes
31872	Repair Hot Spots at Connections for Switchgear and Generator	RBK: Unit 2 AC Synchronous Generator	09 Acceptance Testing			repaired hot spots The time for the entire work order was captured under task 1.	Yes
30920	Infrared Thermography	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	3/3/2004	Infrared Thermography	Priority 3 Hot spot right phase connection @ switchgear cables to generator. Hot spot left phase connection @ generator JB cable to switchgear. Switching order required both jobs can be done same time Thermoscan after repairs made. See work order 31872	Yes
28223	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
28222	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
28221	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
28220	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	10/21/2003	RBK2 Generator Weekly Visual Inspection		Yes
26355	RBK2 Generator Operational Inspection	RBK: Unit 2 AC Synchronous Generator	03 Preventive Maintenance (M3)	9/15/2003	RBK2 Generator Operational Inspection		Yes
26354	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
26353	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
26352	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
26351	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
26350	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	9/29/2003	RBK2 Generator Weekly Visual Inspection		Yes
23997	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
23996	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
23995	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation		RBK2 Generator Weekly Visual Inspection		No
23994	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	8/25/2003	RBK2 Generator Weekly Visual Inspection		Yes
21821	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	7/30/2003	RBK2 Generator Weekly Visual Inspection		Yes
21620	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	7/23/2003	RBK2 Generator Weekly Visual Inspection	OK	Yes
21619	RBK2 Generator Weekly Visual Inspection	RBK: Unit 2 AC Synchronous Generator	01 Inspection/Investigation	7/16/2003	RBK2 Generator Weekly Visual Inspection	Stator temp not working on G2. This has been covered off in another request that is currently on hold.	Yes

RBK: Unit 2 Bearings

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
34022	Vibration Analysis	RBK: Unit 2 Bearings	02 Predictive Maintenance				No

RBK: Unit 2 Brush Gear

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
49764	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	12 Isolation	5/2/2006		replaced 5 comm & 3 slipring brushes Should have been charged to Task 2 Should have been charged to Task 2 OK	Yes
49764	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	03 Preventive Maintenance (M3)	3/22/2006		See comments on Task 1 OK	Yes
40410	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	12 Isolation	3/22/2005		replaced 3 slipring & 1 comm brushes Mistake Mistake OK	Yes
40410	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	03 Preventive Maintenance (M3)	3/15/2005		See comments Task1 OK	Yes
31994	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	12 Isolation	3/22/2004		Replaced 5 com and 6 slipring brushes.	Yes
31994	Brush Gear Maintenance Required	RBK: Unit 2 Brush Gear	03 Preventive Maintenance (M3)	3/23/2004		Replaced 5 com and 6 slipring brushes.	Yes

RBK: Unit 2 Control System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40426	Unit Not Synchronizing	RBK: Unit 2 Controls System	01 Inspection/Investigation	3/17/2005	Unit will not synchronize.	Replaced broken control wire in RBK-G2 control panel. Investigation of RBK-G2 failure to enable synchronizing determined that the trouble was a break in the wire No. 670/2 between the 52 CS-2, terminal 6 & 25MA-1, terminal 10. The circuit interruption was found to be a broken wire in the G2-B door harness. W.O. 40408 mentioned on Plant Availability report 2409 should be cancelled & proper W.O. # attached to Plant Availability report. Plant Availability report changed.	Yes

RBK: Unit 2 Gate Shaft Governor

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52177	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)		Oil Sampling & Analysis - Governor		No
48141	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/9/2008	Oil Sampling & Analysis - Governor	WC # 656855 Oil sample received OK.	Yes
48787	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/9/2005	Oil Sampling & Analysis - Governor	WC # 656848 Sample received.	Yes
					As per Bill Guy, the governor pump motor has failed and as far as they know, the bearings need to be replaced. It has to be removed from service and taken to a repair center for an overhaul and testing and then reinstalled.	G2 GOV. PUMP HAD THE SHORT SHAFT AND BUSHING WORN .WENT TO PRO WELD TO MACHINE NEW SHAFT AND BUSHING .PUT PUMP BACK TOGETHER AND FOUND PUMP STILL TIGHT AND ROUGH.TOOK PUMP APART AND FOUND THE TWO BUSHING WERE NOT IN LINE WITH EACH OTHER.HAD TO BRING BACK TO PRO-WELD TO HONE BUSHINGS .PUT PUMP BACK TOGETHER AND PUMP WAS OK.ON THE END COVERS OF THE PUMP HOUSING THEIR ARE WEAR MARKS FROM THE TWO GEARS.IF THE END CLEARANCE GETS TO LARGE THE PUMP WILL START TO LOSE PRESSURE.AS OF THEN THE PRESSURE WAS OK. Time was recorded on Task 1 by mistake.	
48311	Remove, Repair and Reinstall Governor Pump Motor	RBK: Unit 2 Gate Shaft Governor	05 Repair	11/2/2005			Yes
44952	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/11/2005	Oil Sampling & Analysis - Governor	WC # 656843 Received Oct 21.	Yes
44952	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/11/2005	Oil Sampling & Analysis - Governor	WC # 656843 Received Oct 21.	Yes
44952	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/11/2005	Oil Sampling & Analysis - Governor	WC # 656843 Received Oct 21.	Yes
43256	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	8/4/2005	Oil Sampling & Analysis - Governor	WC # 651421	Yes
41718	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/15/2005	Oil Sampling & Analysis - Governor	WC #651406 Received 2005-06-15 OK	Yes
40240	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	4/7/2005	Oil Sampling & Analysis - Governor	Wear Check # 651399. Received 2005-04-08	Yes
40043	Water Leaks & Governor Adjustment	RBK: Unit 2 Gate Shaft Governor	05 Repair	2/17/2005	Adjust gate limit on partial shutdown solenoid.	OK	Yes
37995	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/7/2005	Oil Sampling & Analysis - Governor	WC # 651267	Yes
36900	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/10/2004	Oil Sampling & Analysis - Governor	WC # 635061 Received Dec 14/04	Yes
35287	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/6/2004	Oil Sampling & Analysis - Governor	WC # 635051 Sample Received	Yes
33912	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	8/13/2004	Oil Sampling & Analysis - Governor	WC # 635078 Sample Received	Yes
32957	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/9/2004	Oil Sampling & Analysis - Governor	Wear Check Number 612626 Sample received.	Yes
					A switching order is required to isolate the unit and governor to filter the governor oil due to a moderate amount of particulates in the oil, 19423 ppm with abnormal limit at 5000 ppm.		Yes
32707	Governor Oil Requires Filtering	RBK: Unit 2 Gate Shaft Governor	12 Isolation	11/4/2005			
					Wear Check sent a report that indicates the governor oil needs to be filtered due to a moderate amount of particulates (19423 ppm with abnormal limit at 5000 ppm). There has been a steady increase in the amount of particulates showing up in the samples with each sample taken.		Yes
32707	Governor Oil Requires Filtering	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	11/4/2005			Yes
31668	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	4/26/2004	Oil Sampling & Analysis - Governor	WC # 612621 Sample received.	Yes
30541	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	2/24/2004	Oil Sampling & Analysis - Governor	WC # 612497	Yes
29503	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	12/9/2003	Oil Sampling & Analysis - Governor	WC# 612537	Yes
29447	Recalibrate Gate Limit Indication	RBK: Unit 2 Gate Shaft Governor	05 Repair	12/4/2003	Recalibrate Gate limit indication. Scada reading 89% actual reading 100%.	Both G1 and G2 done G1 and G2 completed together	Yes
29447	Recalibrate Gate Limit Indication	RBK: Unit 2 Gate Shaft Governor	05 Repair		Recalibrate Gate limit indication. Scada reading 89% actual reading 100%.	Both G1 and G2 done G1 and G2 completed together	Yes
28243	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
28242	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
28241	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
28240	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
26812	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	10/21/2003	Oil Sampling & Analysis - Governor	ok	Yes
26573	Adjust Governor Pressure	RBK: Unit 2 Gate Shaft Governor	12 Isolation	8/19/2003		Adjusted Cut in to 180 psi from 170 and Cut out to 210 from 190.	Yes
26573	Adjust Governor Pressure	RBK: Unit 2 Gate Shaft Governor	05 Repair	8/18/2003	Invoke Self Protection.	Adjusted Cut in to 180 psi from 170 and Cut out to 210 from 190.	Yes
26385	RBK2 Governor Operational Inspection	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	6/12/2003	RBK2 Governor Operational Inspection		Yes
26364	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
26353	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
26352	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
26351	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
26350	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation	10/3/2003	RBK2 Governor Weekly Visual Inspection	ok	Yes
24017	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
24016	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No

RBK: Unit 2 Gate Shaft Governor

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
24015	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation		RBK2 Governor Weekly Visual Inspection		No
24014	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation	8/25/2003	RBK2 Governor Weekly Visual Inspection		Yes
22659	Oil Sampling & Analysis - Governor	RBK: Unit 2 Gate Shaft Governor	03 Preventive Maintenance (M3)	8/12/2003	Oil Sampling & Analysis - Governor	WC Number 581520	Yes
21836	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation	7/30/2003	RBK2 Governor Weekly Visual Inspection		Yes
21835	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation	7/18/2003	RBK2 Governor Weekly Visual Inspection	OK	Yes
21834	RBK2 Governor Weekly Visual Inspection	RBK: Unit 2 Gate Shaft Governor	01 Inspection/Investigation	7/16/2003	RBK2 Governor Weekly Visual Inspection	ok	Yes

RBK: Unit 2 Generator Lower Guide Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
47655	Oil Change Required	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	1/4/2006	Recent reports from oil analysis indicate a dramatic increase in the lead content and in the acid number. The oil has been in this bearing for more than 300 days which is good for Hydro Safe, but now is the right time to change the oil before it gets too bad.	Oil samples are WC # 666582 WC# 666583. Samples received.	Yes
47655	Oil Change Required	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	1/4/2006	Recent reports from oil analysis indicate a dramatic increase in the lead content and in the acid number. The oil has been in this bearing for more than 300 days which is good for Hydro Safe, but now is the right time to change the oil before it gets too bad.	Oil samples are WC # 666582 WC# 666583. Samples received.	Yes
40439	Change Oil	RBK: Unit 2 Generator Lower Guide Bearing	08 Installation		Switching order to change oil lower guide.		No
40439	Change Oil	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	3/23/2005	Oil change is required because of information from oil analysis report.	OK	Yes
40439	Change Oil	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	3/29/2005	Take Oil Sample after one week of running time.	Received 2005-03-31 OK	Yes
33778	Oil Change Required	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	7/8/2004	We need to change the oil in the Turbine and Lower Guide Bearing pots due to recent results from wear check.	oil change completed on rbk g2 lgh with hydro safe oil oil sample was taken from the drum wear check # is 635085 oil change completed on rbk g2 turbine bearing new hydro safe installed in oil pot wearcheck #635085 sampel taken from drum All this work was on RBK-G2	Yes
30208	Oil Change Required	RBK: Unit 2 Generator Lower Guide Bearing	05 Repair	12/11/2003	Due to results of oil analysis by wearcheck, it is recommended that the oil be changed.		Yes
30208	Oil Change Required	RBK: Unit 2 Generator Lower Guide Bearing	05 Repair	12/12/2003	Re-sample the oil within one hour of service and once again one week after use and forward samples to Mike Burt.		Yes
26235	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26234	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26233	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26232	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	10/30/2003	RBK2 Bearings Weekly Visual Inspection	OK	Yes
26378	RBK2 Bearings Operational Inspection	RBK: Unit 2 Generator Lower Guide Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK2 Bearings Operational Inspection		Yes
26370	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26369	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26368	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26367	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26366	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	10/3/2003	RBK2 Bearings Weekly Visual Inspection	Vibration probe not working therefore unable to get vibration reading for activity. Vibration probe not working; technologist required to make repairs ; priority to be set by Jeremy Decker. Work order 26616	Yes
24009	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
24007	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
24006	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	8/25/2003	RBK2 Bearings Weekly Visual Inspection		No
21830	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	7/30/2003	RBK2 Bearings Weekly Visual Inspection	vibration probe not working	Yes
21829	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	7/23/2003	RBK2 Bearings Weekly Visual Inspection	completed July 23 . For follow up: Lower Guide & turbine vibration probes not working. This work is captured on work order #26616.	Yes
21828	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Lower Guide Bearing	01 Inspection/Investigation	7/18/2003	RBK2 Bearings Weekly Visual Inspection	ok	Yes

RBK: Unit 2 Generator Stator

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
46264	Check Neutral Connections	RBK: Unit 2 Generator Stator	01 Inspection/Investigation	11/2/2005	Thermoscan connections between stator neutral leads and split phase CTs in generator termination cabinet. Pls put copy of report on Avantis.	See copy of report that was sent that internal mail.	Yes
46237	Repair Stator Lead	RBK: Unit 2 Generator Stator	05 Repair	10/24/2005	Stator leads is burnt of & has to be repaired.	Found two leads on one phase burnt off. Replaced connectors on all three phases with a crimped connector. Also i replaced one of the connectors on the neutral buss. In order to replace the rest of the connectors on the neutral buss i think the lightning arrestors will need to be removed. Those connectors should also be replaced as soon as possible. See file g2 stator under photos rbk. Location of Pictures Asset Management\Generation\Ratlling Brook\Photos\G2 STATOR	Yes
46237	Repair Stator Lead	RBK: Unit 2 Generator Stator	05 Repair	10/24/2005	Stator leads is burnt of & has to be repaired.	Worked with B Roche. OK	Yes
29125	Complete Installation of Stator Protection	RBK: Unit 2 Generator Stator	08 Installation	12/3/2003	Technologist installed RTD card while at site under previous work order to investigate problems with the stator temp. sensing device and updated the panelview for display indication as well.	New cabling installed from generator terminator cabinet to PLC. PLC and PV550 programmed with alarms set to 85 and Trips set to 95 degrees celcius. See Craig's comments	Yes
29125	Complete Installation of Stator Protection	RBK: Unit 2 Generator Stator	08 Installation		Technologist installed RTD card while at site under previous work order to investigate problems with the stator temp. sensing device and updated the panelview for display indication as well. Electrician will be completing the wiring and technologist will have to complete commissioning.	New cabling installed from generator terminator cabinet to PLC. PLC and PV550 programmed with alarms set to 85 and Trips set to 95 degrees celcius. See Craig's comments	Yes
22171	Investigate Stator Temp. Sensing Device	RBK: Unit 2 Generator Stator	01 Inspection/Investigation	10/15/2003	G2 Stator Temp. Not working since machine was upgraded.	Old RTU display not functioning. I have installed a RTD card in the processor and updated the panelviaw for display indication. This stator protection is standard in our hydroplants. Work order 29125	Yes

RBK: Unit 2 Generator Upper Guide/Thrust Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)		
43162	Oil Change Required	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	12 Isolation	7/12/2005	A switching order clearance is required to isolate the unit to perform a oil change on the upper guide bearing.	Oil also changed on RBK-G2 Turbine bearing as per request of Bill Guy. WC Numbers : RBK-G2 THB 651416 RBK G 2 TUB 651417 Oil from New Drum 651418 Oil samples taken 5 days after unit put back in service. OK	Yes		
43162	Oil Change Required	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	03 Preventive Maintenance (M3)	7/15/2005	Recent reports from oil analysis indicate a trended increase in the lead content and in the acid number. Byron also indicates that the temperature on this bearing has increased to the alarm point. The oil has been in this bearing for more than 500 days which is good for Hydro Safe, but with all things combined, including low water levels, now is the right time to change the oil.	Oil also changed on RBK-G2 Turbine bearing as per request of Bill Guy. WC Numbers : RBK-G2 THB 651416 RBK G 2 TUB 651417 Oil from New Drum 651418 Oil samples taken 5 days after unit put back in service. Oil sample received 2005-07-28	Yes		
26231	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26230	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26229	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26228	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	10/27/2003	RBK2 Bearings Weekly Visual Inspection	ok	Yes		
26377	RBK2 Bearings Operational Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK2 Bearings Operational Inspection		Yes		
26365	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26364	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26363	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26362	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
26361	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
24005	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	9/29/2003	RBK2 Bearings Weekly Visual Inspection		Yes		
24004	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
24003	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
24002	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No		
21827	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	8/25/2003	RBK2 Bearings Weekly Visual Inspection		Yes		
21826	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	7/30/2003	RBK2 Bearings Weekly Visual Inspection		Yes		
21825	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	7/24/2003	RBK2 Bearings Weekly Visual Inspection	OK	Yes		
21825	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Generator Upper Guide/Thrust Bearing	01 Inspection/Investigation	7/16/2003	RBK2 Bearings Weekly Visual Inspection	ok	Yes		

RBK: Unit 2 Governor Control System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
31282	Investigate Governor Control	RBK: Unit 2 Governor Control System	01 Inspection/Investigation	2/17/2004	Speed control will not lower in local mode but it will raise. Speed control will work both raise and lower in remote mode. Pat O'keefe is going to RBK next week and technologist could probably help him over the phone to trouble shoot this problem.	G2 speeder motor local control not working checked found wire burnt off near wear door closes ,ran new wire from terminal block at bottom of breaker to top of door.	Yes

RBK: Unit 2 Hydroelectric Turbine

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
42392	Update Alarms & Commission	RBK: Unit 2 Hydroelectric Turbine	06 Modification - Non-capital	6/9/2005	(1) Generate alarm message on local ann. (2) Develop & wire general PLC alarm to R.T.U. for remote indication. Follow up from WO #36621.	This job was complete as per K Gill OK	Yes
36621	Set Flow & Install Timers on PLC	RBK: Unit 2 Hydroelectric Turbine	06 Modification - Non-capital	5/11/2005	The flow switch for the gland water was disabled by Vinca Carey when completing WO#36336. From an investigation by J Decker we will be enabling this trip again & installing timers on PLC.	The logic program was modified to install timer on G2 low gland water flow trip, however it was set for maximum time because the flow switch sensitivity is coarse compared to the maximum flow permitted (without flooding the headcover). The flow switch was re-zeroed and the the set-point re-commissioned, and an alarm created 15 seconds after the flow fall below the set-point, the trip will occur 32752 seconds after. Follow Up (1) Generate alarm message on local ann. (2) Develop & wire general PLC alarm to R.T.U. for remote indication. This follow up was suggested to be completed when the forebay W.L. installation is being performed. See WO # 42392	Yes
28218	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
28217	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
28216	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	10/30/2003	RBK2 Turbine Weekly Visual Inspection	Adj. time OK	Yes
26688	Investigate Leak in Draft Tube Door	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		This is follow up work from work order 21817 and was given a P5 by Tom Hanlon.		No
28349	RBK2 Turbine Operational Inspection	RBK: Unit 2 Hydroelectric Turbine	03 Preventive Maintenance (M3)	9/15/2003	RBK2 Turbine Operational Inspection		Yes
26348	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
28347	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
28346	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
26345	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
26344	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	10/3/2003	RBK2 Turbine Weekly Visual Inspection	ok	Yes
23993	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
23992	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
23991	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation		RBK2 Turbine Weekly Visual Inspection		No
23990	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	8/25/2003	RBK2 Turbine Weekly Visual Inspection		Yes
21818	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	7/31/2003	RBK2 Turbine Weekly Visual Inspection		Yes
21817	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	7/24/2003	RBK2 Turbine Weekly Visual Inspection	Draft tube door is leaking small amount. P5 This is captured in work order #26688 and is currently on hold as it is a capital job.	Yes
21816	RBK2 Turbine Weekly Visual Inspection	RBK: Unit 2 Hydroelectric Turbine	01 Inspection/Investigation	7/17/2003	RBK2 Turbine Weekly Visual Inspection	ok	Yes

RBK: Unit 2 Main & Bypass Valve Control

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40423	Install Indicating Lights	RBK: Unit 2 Main & Bypass Valve Control	08 Installation	3/17/2005	Install indicating lights on G2 main valve. Over the last couple of years gaskets have been failing on the solenoid that operates the 5 way valve which in turn operates the main valves. In discussion with John Budgell it was decided to replace the present solenoid with an Asco valve which should be able to handle the pressure.	OK	Yes
36551	Install Asco Valves	RBK: Unit 2 Main & Bypass Valve Control	08 Installation	6/16/2005		Valve was removed from pit. It was disassembled and inspected. The cylinders were removed along with the piston spools. Everything was in good condition but no work had been done on them since 1958. All parts were cleaned and sandblasted and a new o-ring kit was installed. The unit for # 1 was installed on #2 unit. Then this 5-way was taken up and the same maintenance was performed. The O rings used were purchased locally low cost. OK	Yes
35196	Remove 5 Way Valve for Repairs	RBK: Unit 2 Main & Bypass Valve Control	05 Repair	10/29/2004	Over the last couple of months we have been having some problems with this valve not working properly. To complete this work a self protection will be required. We will try to make these repairs on site if possible.		Yes
31395	Inspect Five Way Control Valve	RBK: Unit 2 Main & Bypass Valve Control	01 Inspection/Investigation	8/28/2003	RBK-G2 Pivot Valve sometimes fail to operate. The problem appears to be in the water operated 2" 5 Way Control Valve. Drawing # BE-35993-47-26 shows a plunger and cylinders. These or the piping to the system may contain rust or dirt that will impair operation of the system.	Water levels high, problem not present at time. Operator says problem has not happened in while no action taken operator will monitor valve. found loose fittings and tightened.	Yes

RBK: Unit 2 Main Inlet Pivot Valve

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
34927	Investigate Main Inlet Pivot Valves Remote Control	RBK: Unit 2 Main Inlet Pivot Valve	01 Inspection/Investigation	8/12/2004	Pivot valve not working in remote modes.	Investigation showed that the 20W-2 relay was not working. A replacement was found on site and installed. A spare relay from our system needs to be sent to RBK, or in the case of not locating a spare, the coil on the relay could be rewound. (I will take care of this replacement.)	Yes
34927	Investigate Main Inlet Pivot Valves Remote Control	RBK: Unit 2 Main Inlet Pivot Valve	01 Inspection/Investigation	8/12/2004	Pivot valve not working in remote modes.	See Craig's notes	Yes
31327	Inspect Solenoid Shutdown Valve on Pivot Valve	RBK: Unit 2 Main Inlet Pivot Valve	01 Inspection/Investigation		The solenoid shutdown valve on the main inlet pivot valve does not seem appropriately sized because the gaskets don't seem to last. We need to determine if this is the case or is there some underlying factor causing the deterioration of the gaskets. The specs on the existing valve are: Burkert(made in Germany) 0340 c 12,0 NBR MS G3/8 PNO.5-16bar 124816G DN12 NPT		No
28667	Investigate Leaky Main Inlet Valve	RBK: Unit 2 Main Inlet Pivot Valve	01 Inspection/Investigation		Main Inlet valve is leaking around the seal. Penstock will be drained in October.		No
28386	RBK2 Main Inlet Valve Inspection	RBK: Unit 2 Main Inlet Pivot Valve	01 Inspection/Investigation	9/15/2003	RBK2 Main Inlet Valve Inspection	main inlet valve is leaking around the seal penstock will be drained in october this problem can be repaired by John Budgett,s crew then This is captured under work order #28667	Yes

RBK: Unit 2 Metering Equipment

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40018	Replace Nexus Meter	RBK: Unit 2 Metering Equipment	05 Repair	2/22/2005	Nexus meter not working properly change out for test Thursday.	Change out & testing took about 2 hrs other time was checking meter day before.	Yes

RBK: Unit 2 Remote Control System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
31356	Investigate Why Remote Control of Pivot Valve Is Not Working	RBK: Unit 2 Remote Control System	05 Repair	3/1/2004		Replaced the limit switch used for indication. Contacts burned off on old switch. Suggest ordering two Allen Bradley's 802T-A with wheel type operators plus another wheel type operator for the now in service limit switch (presently using a whip).	Yes

RBK: Unit 2 Switchgear System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
31976	Repair Hot Spot on Power Cables	RBK: Unit 2 Switchgear System	12 Isolation	3/23/2004	A switching order is required to isolate G2 to make repairs to hot spots on the power cables.		Yes
31976	Repair Hot Spot on Power Cables	RBK: Unit 2 Switchgear System	12 Isolation		As result of recent thermoscanning done by Pat O'Keefe, hot spots were noted and a repair is required.	Time was entered on task 1 for all tasks.	Yes
31976	Repair Hot Spot on Power Cables	RBK: Unit 2 Switchgear System	02 Predictive Maintenance		Thermoscan cables to ensure the repair was successful.	Time was entered on task 1 for all tasks.	Yes

RBK: Unit 2 Turbine Guide Bearing

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
33779	Oil Change Required	RBK: Unit 2 Turbine Guide Bearing	03 Preventive Maintenance (M3)	7/8/2004	We need to change the oil in the Turbine and Lower Guide Bearing pots due to recent results from wear check.	oil change completed on rbk g2. lgb with hydro safe oil oil sample was taken from the drum wear check # is 635085 oil change completed on rbk g2 turbine bearing new hydro safe installed in oil pot wearcheck #635085 sample taken from drum All this work was on RBK-G2	Yes
31911	Investigate Possible Sources for Re-Routing Gland Water Flow	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	6/10/2004	RBK G2 has been experiencing trips on low Gland Water flow and it appears to be due to fluctuations in the scroll case pressure as this is where the gland water supply is taken from. We should investigate alternatives for the supply water to the gland. The current supply does not start until the main valve opens as it is fed off the scroll case, so in other words, not getting flow until the unit starts is fine. The existing supply line is only about a 3/8" line and flow is very low in the first place. I	There was no need to re-route the supply as we determined by adjusting the flow rate back to 3/4 of a gallon per minute.	Yes
28239	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28238	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28237	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28236	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	10/21/2003	RBK2 Bearings Weekly Visual Inspection	ok	Yes
28379	RBK2 Bearings Operational Inspection	RBK: Unit 2 Turbine Guide Bearing	03 Preventive Maintenance (M3)	9/12/2003	RBK2 Bearings Operational Inspection		Yes
28378	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28374	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28373	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
28372	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
26371	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	9/29/2003	RBK2 Bearings Weekly Visual Inspection	Vibration probe not working therefore unable to get vibration reading for activity. Vibration probe not working ; technologist required to make repairs; priority to be set by Jeremy Decker. Captured under work order 26616	Yes
24013	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
24012	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
24011	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
24010	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation		RBK2 Bearings Weekly Visual Inspection		No
21833	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	8/25/2003	RBK2 Bearings Weekly Visual Inspection		Yes
21832	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	7/30/2003	RBK2 Bearings Weekly Visual Inspection	vibration probe not working	Yes
21831	RBK2 Bearings Weekly Visual Inspection	RBK: Unit 2 Turbine Guide Bearing	01 Inspection/Investigation	7/18/2003	RBK2 Bearings Weekly Visual Inspection	OK	Yes
				7/16/2003	RBK2 Bearings Weekly Visual Inspection	only 15 min. required.	Yes

RBK: Unit 2 Turbine Head Cover

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40952	Clean and Paint Head Cover	RBK: Unit 2 Turbine Head Cover	12 Isolation		A switching order is required to carry out cleaning and painting of the head cover.		No
40952	Clean and Paint Head Cover	RBK: Unit 2 Turbine Head Cover	03 Preventive Maintenance (M3)		Tom Hanlon recommends that the head cover be cleaned and painted.		No
31326	Replace Section of Pipe for Inductor Pump	RBK: Unit 2 Turbine Head Cover	05 Repair	2/25/2004	The supply pipe to the inductor pump is leaking and is corroded and needs to be replaced.	This was investigated and to be repaired when the filler system is to be overhauled. A list of materials was noted for the job. Mike Burt has list.	Yes

RBK: Unit 2 Voltage Control System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40408	repair sync controls RBK-G2	RBK: Unit 2 Voltage Control System	05 Repair				No

RBK: Unit 1 Protective Relay System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
40012	Check & Repair Over Current Protection	RBK: Unit1 Protective Relay System	05 Repair		While performing load rejection tests we determined that the overcurrent protection on RBK-G1 trips only G1-B and unit will resync with system after it trips.		No
40012	Check & Repair Over Current Protection	RBK: Unit1 Protective Relay System	05 Repair	1/27/2006	While performing load rejection tests we determined that the overcurrent protection on RBK-G1 trips only G1-B and unit will resync with system after it trips.	A review of the drawings confirmed that the O.C. trip is intended to open the generator breaker only, however if a real O.C. was to occur the unit would have locked out via over speed. The O.C. trip function will be revised to conform with standards when the plant control upgrade is completed. OK	Yes

RBK: Unit 2 Protective Relay System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
24269	Turbine Bearing High Level Alarm	RBK: Unit2 Protective Relay System	01 Inspection/Investigation	9/5/2003	Determine the requirements to allow functioning of PLC high oil level trip on upper bearings and make the necessary recommendations for follow up work including estimated duration of repair and manpower requirements.	Trip is present on low oil level on the turbine, however due to the nature of the original float device for indication the high oil level has been blocked. As far as I can tell an alarm never existed it was always a trip to the machine. Solution to the problem is to have a header system built that will take separate low and high oil trips. Waiting for response from Bill guy on priority. Tried calling and also sent e-mail on September 22/03.	Yes
24231	Investigate Faulty Creep Alarm	RBK: Unit2 Protective Relay System	01 Inspection/Investigation	8/8/2003	RBK-G2 was shut down bt SCC and Machine did not come to a complete stop. Creep alarm did not work to notify of problem. Investigate cause and make recommendations.	Changes to PLC program and installation of 24VDC relay. (Local annunciation of creep was always present but no SCC annunciation was ever connected)	Yes
24231	Investigate Faulty Creep Alarm	RBK: Unit2 Protective Relay System	01 Inspection/Investigation		RBK-G2 was shut down bt SCC and Machine did not come to a complete stop. Creep alarm did not work to notify of problem. Investigate cause and make recommendations.		No

RBK: Water Level Monitoring System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
42381	Install New Equipment	RBK: Water Level Monitoring System	08 Installation	6/13/2005	This system has been reading erratic for some time.	New system installed and calibration filled,see below OK	Yes
42381	Install New Equipment	RBK: Water Level Monitoring System	08 Installation	6/13/2005	This system has been reading erratic for some time.	OK	Yes

RBK: Waterworks System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
51487	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	7/13/2008			No
49275	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	4/13/2008		OK	Yes
47509	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	1/11/2008		OK	Yes
45025	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	10/20/2005		OK	Yes
						Inspections were completed in accordance with Dam Safety Inspection program. Follow work will be entered into Avantis by T>Chislett as separate Work Requests. OK	
44296	Dam Safety Engineering Inspection	RBK: Waterworks System	01 Inspection/Investigation	9/23/2005			Yes
42612	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	8/9/2005			Yes
						large amount of debris & amy,s and vegetation some vegetation at emierg spillway @ rattling forebay dam nees vegetation cut	
40311	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	4/28/2005			Yes
						Recommended Follow Up : Rattling Dam & Spillway Channel : Cut Vegetation.(38740,38741) Amy's Dam : Remove Debris & Cut Vegetation.(38738,38739) Forebay Dam : Cut Vegetation.(38432) Notes: Ensure there is no spill at Rattling Spillway Channel when scheduling work. See work orders above.	
37527	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	1/11/2005			Yes
						Recommended Follow Up : Rattling Dam & Spillway Channel : Cut Vegetation.(38740,38741) Amy's Dam : Remove Debris & Cut Vegetation.(38738,38739) Forebay Dam : Cut Vegetation.(38432) Notes: Ensure there is no spill at Rattling Spillway Channel when scheduling work. See work orders above.	
37527	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	1/11/2005			Yes
						Recommended Follow Up : Rattling Dam & Spillway Channel : Cut Vegetation.(38740,38741) Amy's Dam : Remove Debris & Cut Vegetation.(38738,38739) Forebay Dam : Cut Vegetation.(38432) Notes: Ensure there is no spill at Rattling Spillway Channel when scheduling work. See work orders above.	
37527	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	1/11/2005			Yes
					Gouldings Spillway, required metal posts for signage. We will find in the next 30 days the size of new signs & if we can use metal or wooden posts.		
36304	Install metal posts	RBK: Waterworks System	05 Repair				No
						brush require,s cutting in the spillway channel&the downstream slope on the dam suggested priority 5 Work maybe complete this fall under WVO #36432	
35368	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	10/19/2004			Yes
						brush require,s cutting in the spillway channel&the downstream slope on the dam suggested priority 5 Work maybe complete this fall under WVO #36432	
35388	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	10/19/2004			Yes
33691	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	7/19/2004			Yes
						The concrete sill for the gate structure at Frazer Ocean Dam is broken away & washes down stream; gate is hard to operate. Rattling spillway walkway needs repairs, rattling rustling & two wing brushes on security fence. Amy's Dam: some blockage in outlet channel, a large amount of debris on dam. RBK forebay gatehouse; dam & walkway in poor condition. RBK surge tank: brace missing (new brace on site). Check with Tony Chislett for follow up work. Waiting for response from Tony.	
31795	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	4/14/2004			Yes
31638	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	4/22/2004	Fish Activity Monitoring	unable to check for fish due to high water levels screens na	Yes

RBK: Waterworks System

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
30892	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	3/25/2004	Fish Activity Monitoring	Unable to check trashracks due to water level. Heavy snowfall in area; unable to check areas.	Yes
30472	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	2/25/2004	Fish Activity Monitoring	Unable to check trashrack's due to high water level. Unable to complete all activities due to snow and ice cover in area's.	Yes
29905	Dam Safety Operator Inspection (quarterly)	RBK: Waterworks System	01 Inspection/Investigation	1/26/2004			Yes
29794	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	1/20/2004	Fish Activity Monitoring	Due to high water levels ; unable to check trashrack's. There are no screen's installed in this system ; there fore this activity should be removed from work order.	Yes
29470	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	12/2/2003	Fish Activity Monitoring		Yes
28978	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	11/18/2003	Fish Activity Monitoring		Yes
26761	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	10/28/2003	Fish Activity Monitoring		Yes
24666	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	9/24/2003	Fish Activity Monitoring		Yes
22604	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	8/12/2003	Fish Activity Monitoring		Yes
20960	Fish Activity Monitoring	RBK: Waterworks System	11 Environmental	7/18/2003	Fish Activity Monitoring	OK	Yes

RBK: Amy's Lake Freeboard Dyke No. 1

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
27180	Dam Safety Operator Inspection	RBK:Amy's Lake Freeboard Dyke No. 1	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Yes
27061	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 1	01 Inspection/Investigation	10/24/2003	Storage Dam Site Walkabout		Yes
25038	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 1	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22917	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 1	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Amy's Lake Freeboard Dyke No. 2

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
27181	Dam Safety Operator Inspection	RBK:Amy's Lake Freeboard Dyke No. 2	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Yes
27062	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 2	01 Inspection/Investigation	10/24/2003	Storage Dam Site Walkabout		Yes
25039	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 2	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22918	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 2	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Amy's Lake Freeboard Dyke No. 3

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
27182	Dam Safety Operator Inspection	RBK:Amy's Lake Freeboard Dyke No. 3	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Yes
27063	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 3	01 Inspection/Investigation	10/24/2003	Storage Dam Site Walkabout		Yes
25040	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 3	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22919	Storage Dam Site Walkabout	RBK:Amy's Lake Freeboard Dyke No. 3	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Frozen Ocean Lake Dam

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
29250	Inspect Concrete Sill Under Gate	RBK:Frozen Ocean Lake Dam	01 Inspection/Investigation	10/18/2004	Concrete for sill under the gate is broken away and washed down stream plus the bottom sill is gone. PPM recommends that this not be done until spring, due to water levels at this time.	Completed by Harbour Construction	Yes
27183	Dam Safety Operator Inspection	RBK:Frozen Ocean Lake Dam	01 Inspection/Investigation	10/29/2003	Dam Safety Operator Inspection	Concrete for sill under the gate is broken away and washed down stream plus the bottom sill is gone. 1. SHOULD BE DONE AS SOON AS POSSIBLE BUT DUE TO WATER LEVELS AT THE PRESENT TIME THIS WORK SHOULD BE DONE NEXT SPRING. PRIORITY 5 Work order 29250	Yes

RBK: Rattling Lake Dam

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
52231	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation				No
52223	Stoplog Structure Operational Test	RBK:Rattling Lake Dam	03 Preventive Maintenance (M3)		Stoplog Structure Operational Test		No
51444	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation				No
50991	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	6/14/2006		ok	Yes
50348	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	5/17/2006		OK	Yes
49234	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	4/11/2006		ok	Yes
48440	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	3/20/2006			Yes
48148	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	2/15/2006		OK	Yes
47466	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	1/11/2006			Yes
46792	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	12/20/2005		OK	Yes
45722	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	11/18/2005			Yes
44983	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	10/19/2005		OK	Yes
44207	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	9/18/2005		OK	Yes
43345	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	8/8/2005		OK	Yes
43337	Stoplog Structure Operational Test	RBK:Rattling Lake Dam	03 Preventive Maintenance (M3)	8/18/2005	Stoplog Structure Operational Test	everything ok	Yes
42565	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	7/6/2005		OK	Yes
41748	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	6/30/2005		OK	Yes
41082	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	5/17/2005		OK	Yes
40289	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	4/7/2005		dam snow covered OK	Yes
39156	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	3/11/2005		snow covered OK	Yes
38741	Vegetation Management Required	RBK:Rattling Lake Dam	16 Vegetation Control		Brush clearing required this will be done by outside contractor when set up.		No
38002	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	2/9/2005		dam is snow covered	Yes
37480	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	1/5/2005		Recommended follow up recorded on work order # 37527.	Yes
36994	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	12/23/2004			Yes
35873	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	11/25/2004		ok OK	Yes
35326	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	10/15/2004		OK	Yes
34566	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	9/27/2004		OK	Yes
33959	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	8/27/2004		OK	Yes
33952	Stoplog Structure Operational Test	RBK:Rattling Lake Dam	03 Preventive Maintenance (M3)	8/24/2004	Stoplog Structure Operational Test	OK	Yes
33937	Dam Safety Engineering Inspection (High-1 Category)	RBK:Rattling Lake Dam	01 Inspection/Investigation		Dam Safety Engineering Inspection (High-1 Category)		No
33844	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	7/19/2004			Yes
33002	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	6/18/2004			Yes
32166	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	5/19/2004			Yes
31753	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	4/19/2004			Yes
30933	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	3/31/2004		Heavy snowcover in area.	Yes
30601	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	2/18/2004			Yes
29855	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	1/20/2004		Dam was snowcovered at time of inspection.	Yes
29507	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	12/27/2003			Yes
29044	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	11/27/2003			Yes
27179	Dam Safety Operator Inspection	RBK:Rattling Lake Dam	01 Inspection/Investigation	10/30/2003	Dam Safety Operator Inspection		Yes
27060	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	10/30/2003	Storage Dam Site Walkabout		Yes
25037	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	9/23/2003	Storage Dam Site Walkabout		Yes
22954	Stoplog Structure Operational Test	RBK:Rattling Lake Dam	03 Preventive Maintenance (M3)	8/15/2003	Stoplog Structure Operational Test		Yes
22916	Storage Dam Site Walkabout	RBK:Rattling Lake Dam	01 Inspection/Investigation	8/19/2003	Storage Dam Site Walkabout		Yes

RBK: Steel Section

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
38737	Tighten Leaky Expansion Joint On Penstock	RBK:Steel Section	03 Preventive Maintenance (M3)		As per Byron Hayler, there is a leaky expansion joint in the steel section of the penstock that needs to be tightened. Bill Guy recommends that this is a P4 and would not be able to be started until the spring thaw.		No

RBK: Woodstave Section

Work Order	Work Order Title	Entity Name	Work Type	Date work completed	Description	Closing Comments	Closed (Yes/No)
36452	Repair Penstock Leaks	RBK:Woodstave Section	05 Repair	7/19/2005	About a week work to repair leaks in penstock this will be done by contractor.	h&b construction was on site also No cost of work available.	Yes

**Inspection Reports and Assessments for Rattling Brook Plant
2002 to 2006**

2003 Dam Safety Inspection Report

Rattling Brook Development

EMBANKMENT DAM

Structure :	Frozen Ocean Lake Dam	Date/Time :	2003-11-20, 1200 pm
Inspected by :	G.Humby, T.Chislett, R.Vivian	Water Level :	595.5 ft
Weather :	Cloudy, 6°C	Releases :	Gate full open

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Good condition. Riprap is well graded. No signs of movement/erosion.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Vegetation throughout. No unusual conditions observed.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Dam/spillway abutments in good condition.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Good condition. No evidence of overtopping. No settlement or cracking observed.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

No evidence of seepage / wet areas.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Various problems have been observed with the outlet structure, including;

1. A piece of the concrete gate sill has broken away and has been washed downstream
 2. The gate is difficult to operate and sometimes binds
 3. There is a substantial amount of leakage through the cribbing during periods of high reservoir levels.
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Remarks

The embankment section of the dam is in good condition.

The outlet structure is deteriorated and in need of rehabilitation.



ROCKFILL OVERFLOW SPILLWAY

Structure :	<u>Frozen Ocean Lake Spillway</u>	Date/Time :	<u>2003-11-20, 11:45 am</u>
Inspected by :	<u>G.Humby, T.Chislett, R.Vivian</u>	Water Level :	<u>595.5 ft</u>
Weather :	<u>Cloudy, 6°C</u>	Releases :	<u>Gate full open</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Clear. Riprap is well graded. No vegetation.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Other*)

Riprap is generally well graded. No signs of movement.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good rockfill protection is observed at the spillway/dam interface.

Stilling Basin (*Debris, Walls movement/settlement/joints/erosion*)

N/A

Outlet Channel (*Slope protection, Stability of side slopes, Vegetation/obstructions, Debris in water, Stoplogs condition/operation*)

Clear with no obstructions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Good. The steel cut-off wall is in fair condition. No debris/driftwood.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Approach Channel (*Slides above channel, Stability of side slopes, Log boom, Debris, Slope protection*)

Good. No obstructions.

Remarks

Overall good condition



EMBANKMENT DAM

Structure :	Rattling Lake Dam	Date/Time :	2003-11-19, 3:30 pm
Inspected by :	G.Humby, T.Chislett, R.Vivian	Water Level :	366.65 (FSL=377)
Weather :	Overcast , 0°C	Releases :	N/A

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Good condition. Riprap is well graded. No evidence of movement/slides/beaching. Minor amount of Driftwood. Minor vegetation evident adjacent to the rockfill crest-wall.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Significant vegetation throughout. Slope is steep but stable. A few areas of ponded water.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good transition from dam embankment sections to abutments. No unusual conditions. South abutment has been upgraded (raised) as a homogenous embankment/road.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No unusual conditions. No vegetation. Good protection provided by upstream rockfill crestwall.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Remarks

Overall good condition, with exception of vegetation maintenance required on d/s slope.





CONCRETE SPILLWAY

Structure :	<u>Rattling Lake Spillway</u>	Date/Time :	<u>2003-11-19, 4:00 pm</u>
Inspected by :	<u>G.Humby, T.Chislett, R.Vivian</u>	Water Level :	<u>366.65 (FSL=377)</u>
Weather :	<u>Overcast</u>	Releases :	<u>none</u>

Control Structures (*Crest, Orifices*)

Concrete crest is weathered with some spalling and exposed aggregate.

Gates and Controls (*Type of Gate, General condition, Operation of gates at time of inspection*)

No gate.

Approach Channel (*Debris, Slides over channel, Channel side slope stability, Slope protection*)

Good. No debris. No obstructions to flow. Side slopes are stable.

Walkway (*Condition of Piers, Condition of decking and beams, Condition of rails*)

Walkway timbers are showing signs of deterioration. Steel beams/piers in fair condition.

Stilling Bain (*Debris in basin, Walls movement, Walls settlement*)

Some ponded water. Minor debris.

Outlet Channel (*Slope Protection, Stability of Slopes, Vegetation and other obstructions*)

Side slopes are stable. No obstructions to flow. Minor amount of vegetation (insignificant).

Flashboards (*Condition, Operation*)

Stoplogs are operated on an annual basis.

(i.e., FSL=375 prior to spring runoff, FSL=377 all other times of year.)

Stoplogs appear to be in fair condition. Stoplog support frames have been repaired as identified in previous dam safety reports.

Remarks

none



EMBANKMENT DAM

Structure :	<u>Amy's Lake Dam</u>	Date/Time :	<u>2003-11-19, 2:30 pm</u>
Inspected by :	<u>G.Humby, T.Chislett</u>	Water Level :	<u>366.65 (FSL=377)</u>
Weather :	<u>Sunny , 0°C</u>	Releases :	<u>Min fish flow</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Riprap is sparse, however no evidence of beaching/erosion. Moderate amount of Driftwood.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Moderate amount of vegetation. No evidence of movement of material.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

No unusual conditions. Good rockfill transition from natural abutments to embankment dam.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No unusual conditions. No vegetation. Good protection is provided by the upstream rockfill crestwall.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Debris/driftwood should be removed from the u/s face of the dam.

Remarks





EMBANKMENT DAM

Structure :	Amy's Lake Freeboard Dyke No. 1	Date/Time :	2003-11-19, 2:00 pm
Inspected by :	G.Humby, T.Chislett	Water Level :	366.65 (FSL=377)
Weather :	Sunny , 0°C	Releases :	Min fish flow

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Significant alder growth. Significant amount of Driftwood along lower sections of the upstream slope. Slopes appear to be stable.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Significant alder growth.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Good. No evidence of overtopping. No vegetation.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

No seepage observed.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A

Remarks



EMBANKMENT DAM

Structure :	<u>Amy's Lake Freeboard Dyke No. 2</u>	Date/Time :	<u>2003-11-19, 3:00 pm</u>
Inspected by :	<u>G.Humby, T.Chislett</u>	Water Level :	<u>366.65 (FSL=377)</u>
Weather :	<u>Sunny , 0°C</u>	Releases :	<u>Min fish flow</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

No evidence of slides or other movement. Moderate amount of driftwood.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Vegetation has been cleared, but continues to be a maintenance issue. No unusual conditions.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No evidence of overtopping. Minor amount of vegetation. Good protection is provided by the upstream rockfill crestwall.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

One area of still/ponded water is evident at the downstream toe. No seepage is observed along the downstream slope.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A

Remarks



EMBANKMENT DAM

Structure :	<u>Amy's Lake Freeboard Dyke No. 3</u>	Date/Time :	<u>2003-11-19, 3:00 pm</u>
Inspected by :	<u>G.Humby, T.Chislett</u>	Water Level :	<u>366.65 (FSL=377)</u>
Weather :	<u>Sunny , 0°C</u>	Releases :	<u>Min fish flow</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Adequate rockfill protection is evident. No evidence of movement of materials. Minor amount of Driftwood is present.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Alders appear to have been cut within the past year or so, but continues to re-vegetate. Stable slopes.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No evidence of overtopping. Minor amount of vegetation growth is evident.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A.

Remarks



EMBANKMENT DAM

Structure :	<u>Rattling Brook Forebay Dam</u>	Date/Time :	<u>2003-11-19, 1:00 pm</u>
Inspected by :	<u>G.Humby, T.Chislett</u>	Water Level :	<u>1 ft below FSL</u>
Weather :	<u>Sunny , 2°C</u>	Releases :	<u>-</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Riprap is well graded. No evidence of slides/beaching or other movement of materials. No vegetation evident. Minor amount of driftwood is present near the north abutment.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Significant vegetation (alder growth) is evident throughout. No signs of movement.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good. No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No unusual conditions. Minor/insignificant amount of grassy vegetation. No evidence of overtopping.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

There is a significant amount of ponded water at the d/s toe, however, there is no detectable flow of water.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A.

Remarks

Alder growth along downstream face should be cleared.



ROCKFILL OVERFLOW SPILLWAY

Structure :	<u>Rattling Brook Forebay Spillway</u>	Date/Time :	<u>2003-11-19, 1:30 pm</u>
Inspected by :	<u>G.Humby, T.Chislett</u>	Water Level :	<u>1 ft below FSL</u>
Weather :	<u>Sunny , 2°C</u>	Releases :	<u>-</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Minor amount of driftwood is evident Riprap is well graded.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Other*)

Riprap is in good condition. No vegetation.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good. Riprap protection has been upgraded since previous inspection.

Stilling Basin (*Debris, Walls movement/settlement/joints/erosion*)

N/A

Outlet Channel (*Slope protection, Stability of side slopes, Vegetation/obstructions, Debris in water, Stoplogs condition/operation*)

Clear with no obstructions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

The wooden cut-off wall is significantly deteriorated. Otherwise, the rockfill is in good condition throughout the crest. No vegetation.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed

Approach Channel (*Slides above channel, Stability of side slopes, Log boom, Debris, Slope protection*)

Good. No obstructions to flow.

Remarks



2005 Dam Safety Inspection Report

Rattling Brook Development

EMBANKMENT DAM

Structure :	<u>Frozen Ocean Lake Dam</u>	Date/Time :	<u>2005-09-22, 10:00</u>
Inspected by :	<u>T. Cormier, T. Chislett, T. Hanlon</u>	Water Level :	<u>596.5 (1 ft above LSL)</u>
Weather :	<u>Overcast, 8°C</u>	Releases :	<u></u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Good condition. Riprap is well graded, with no signs of movement. Some accumulation of driftwood.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Minimal amount of alder growth – not a problem at this time,

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good. No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Good condition. No evidence of overtopping.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Good condition. The concrete sill floor was recently refurbished.

Remarks

Overall in good condition.

FSL = 602.0 ft



ROCKFILL OVERFLOW SPILLWAY

Structure :	Frozen Ocean Lake Spillway	Date/Time :	2005-09-22, 10:15 am
Inspected by :	T. Cormier, T. Chislett, T. Hanlon	Water Level :	596.5 ft (1' above LSL)
Weather :	Overcast, 8°C	Releases :	

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Fair condition with accumulation of driftwood.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Other*)

Riprap is generally well graded. No signs of movement.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good rockfill protection is observed at the spillway/dam interface.

Stilling Basin (*Debris, Walls movement/settlement/joints/erosion*)

N/A

Outlet Channel (*Slope protection, Stability of side slopes, Vegetation/obstructions, Debris in water, Stoplogs condition/operation*)

Clear with no obstructions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Excessive accumulation of driftwood.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Approach Channel (*Slides above channel, Stability of side slopes, Log boom, Debris, Slope protection*)

Good. No obstructions.

Remarks

Overall good condition.

Driftwood should be cleared from spillway crest.



EMBANKMENT DAM

Structure :	<u>Rattling Lake Dam</u>	Date/Time :	<u>2005-09-23, 10:00 am</u>
Inspected by :	<u>T.Cormier, T. Chislett, G. Murray</u>	Water Level :	<u>351.9 (FSL=377.7)</u>
Weather :	<u>Overcast , 10°C</u>	Releases :	<u>N/A</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Significant amount of driftwood. Riprap is well graded. No indications of movement of material.

Small amount of vegetation growth.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Extreme amount of vegetation throughout the downstream face (prevents inspection of downstream toe).

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good transition from dam embankment sections to abutments. No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Good Condition. No evidence of overtopping. No damage observed due to vehicular traffic.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

Downstream toe could not be inspected due to vegetation growth.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A

Remarks

Downstream slope should be cleared and re-graded as part of the upcoming capital works improvements.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)



CONCRETE SPILLWAY

Structure :	<u>Rattling Lake Spillway</u>	Date/Time :	<u>2005-09-23, 10:30 am</u>
Inspected by :	<u>T. Cormier, T. Chislett, G. Murray</u>	Water Level :	<u>359.1 (FSL=377.7)</u>
Weather :	<u>Overcast, 10C</u>	Releases :	<u>none</u>

Control Structures (*Crest, Orifices*)

Concrete crest continues to show signs of deterioration due to weathering /aging. Exposed aggregate throughout.

Gates and Controls (*Type of Gate, General condition, Operation of gates at time of inspection*)

N/A.

Approach Channel (*Debris, Slides over channel, Channel side slope stability, Slope protection*)

Clear. No obstructions to flow. One small location of side slope instability – not a problem at this time.

Walkway (*Condition of Piers, Condition of decking and beams, Condition of rails*)

Walkway timbers are showing continuing signs of deterioration. Should be replaced at some locations.

Stilling Bain (*Debris in basin, Walls movement, Walls settlement*)

Significant amount of fractures in bedrock foundation along downstream toe. Structural competence of brace foundation is questionable. Undercutting is evident throughout the concrete/bedrock interface.

Outlet Channel (*Slope Protection, Stability of Slopes, Vegetation and other obstructions*)

Small amount of vegetation – not a problem at this time.

Flashboards (*Condition, Operation*)

Fair condition. Boards are in place up to 377.7 ft.

Abutments (*Condition, Seepage around dam – location/amount*)

No unusual conditions.

Remarks





EMBANKMENT DAM

Structure :	Amy's Lake Dam	Date/Time :	2005-09-21 & 23
Inspected by :	T.Cormier, T.Chislett, G.Murray, B.Guy	Water Level :	351.9 (FSL=377.7)
Weather :	Rain, 10C	Releases :	

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Riprap is sparse throughout most sections of the upstream face. Riprap refurbishment is required and should be completed as part of the upcoming capital works. Some sliding of rockfill into the approach channel was observed. It is recommended that the intake be raised by either extending the concrete wingwall or placing boulders along the channels edge to prevent sliding.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Extreme amount of vegetation growth (difficult to complete a detailed inspection). Re-grading of the slope should be carried out as part of the capital improvements.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

OK.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

No seepage observed due to low reservoir levels.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Accumulation of rockfill should be dredged from the discharge channel to eliminate backwater effects at the tailrace.

Concrete erosion/weathering is evident at the discharge retaining wall - concrete overlay should be considered.

An internal inspection of the outlet tunnel was carried out. Normal signs of aging concrete was observed (i.e. exposed aggregate). Leakage around the sides/top of the gate is observed (see photo).

Remarks

A detailed inspection of the d/s dam slope was not possible due to extreme amount of vegetation growth.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)





EMBANKMENT DAM

Structure :	Amy's Lake Freeboard Dyke No. 1	Date/Time :	2005-09-21, 2:30 pm
Inspected by :	T.Cormier, T.Chislett	Water Level :	351.9 (FSL=377.7)
Weather :	Rain , 10°C	Releases :	

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Significant alder growth. Should be cleared to facilitate inspections. Significant accumulation of driftwood on upstream face of dyke.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Significant alder growth.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Significant alder growth. No evidence of overtopping.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

No seepage observed due to low reservoir levels.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

N/A

Remarks

Vegetation should be cleared.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)



EMBANKMENT DAM

Structure :	<u>Amy's Lake Freeboard Dyke No. 2</u>	Date/Time :	<u>2005-09-21, 3:00 pm</u>
Inspected by :	<u>T.Cormier, T.Chislett</u>	Water Level :	<u>351.9 (FSL=377.7)</u>
Weather :	<u>Rain , 10°C</u>	Releases :	<u></u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Remarks

Excessive amount of alder growth prevents a thorough inspection. Vegetation should be cleared.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)

EMBANKMENT DAM

Structure :	Amy's Lake Freeboard Dyke No. 3	Date/Time :	2003-11-21, 3:00 pm
Inspected by :	G.Humby, T.Chislett	Water Level :	366.65 (FSL=377)
Weather :	Sunny , 0°C	Releases :	Min fish flow

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Riprap in fair condition - requires some regrading. Significant amount of driftwood accumulation.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Remarks

Excessive amount of vegetation growth throughout the upstream face, crest, and downstream face.

Vegetation growth prevents completing a thorough inspection.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)



EMBANKMENT DAM

Structure :	<u>Rattling Brook Forebay Dam</u>	Date/Time :	<u>2005-09-21, 1:30 pm</u>
Inspected by :	<u>T. Cormier, T.Chislett</u>	Water Level :	<u>334.4</u>
Weather :	<u>Rain , 10°C</u>	Releases :	<u>4 MW x 2 units</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Riprap is in good condition - well graded. No signs of movement . Minor vegetation present.

Small amount of driftwood.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Unusual conditions*)

Extreme amount of vegetation is evident throughout. Should be cleared to allow a thorough inspection.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Good. No unusual conditions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

No unusual conditions. No evidence of overtopping.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

Minimum amount of seepage at the d/s toe running in the penstock right of way.

Outlet Works (*Approach & Discharge channels, Structure/Abutments, Leakage, Operation of Gate/Lift*)

Not inspected at this time.

Remarks

Alder growth along downstream face should be cleared.

(Note: Vegetation clearing is scheduled to be completed at this site later in Fall/2005)





ROCKFILL OVERFLOW SPILLWAY

Structure :	<u>Rattling Brook Forebay Spillway</u>	Date/Time :	<u>2005-09-21, 1:45 pm</u>
Inspected by :	<u>T.Cormier, T.Chislett</u>	Water Level :	<u>334.4 ft</u>
Weather :	<u>Rain , 10C</u>	Releases :	<u>-</u>

Upstream Face (*Slide movements, Slope protection, Erosion–beaching, Cracks, Sinkholes, Settlement, Displacement, Debris, Unusual conditions*)

Good. No vegetation.

Downstream Face (*Slide movements, Signs of movements, Cracks, Seepage or wet areas, Other*)

Good. Riprap is stable with very few signs of movement. No vegetation. No driftwood.

Abutments (*Seepage, Cracks/joints/bedding planes, Slides, Signs of movement*)

Minor amount of low lying vegetation. Good riprap protection is evident along abutment embankments.

Stilling Basin (*Debris, Walls movement/settlement/joints/erosion*)

N/A

Outlet Channel (*Slope protection, Stability of side slopes, Vegetation/obstructions, Debris in water, Stoplogs condition/operation*)

Clear with no obstructions.

Crest (*Surface cracking, Settlement, Lateral movement, Camber*)

Wooden cut-off wall continues to show signs of advanced deterioration. Replacement should be considered as part of the upcoming capital refurbishment program.

Seepage and Drainage (*Locations(s), Estimated flow(s), Color (staining), Toe drain and relief wells*)

None observed.

Approach Channel (*Slides above channel, Stability of side slopes, Log boom, Debris, Slope protection*)

Good. No obstructions to flow.

Remarks



PENSTOCK

Structure :	RBK Penstock	Date/Time :	2005-09-22, 3:00 pm
Inspected by :	T. Cormier, T. Chislett	Water Level :	
Weather :	Overcast, 8C	Releases :	

Right of Way (*Vegetation, Drainage ditches, Culverts*)

Vegetation has recently been cleared. Drainage ditches flowing with minimal obstruction.

Condition of Penstock Bed (*Alignment, Settlement*)

Vertical misalignment is evident in some locations as previously reported.

Condition of Pipe (*Type, Cracks, Stresses, Leaks, Bands, Plates, Joints, Other*)

Steel bands are in fair to good condition at upper sections, however more corrosion is evident at lower sections.

Feathered staves are predominant throughout the lower sections of the penstock.

Breakdown of longitudinal wood fibres is evident (staves are collapsing and spongy).

There is a significant amount of leakage along the lower section.

Deterioration of butt joints throughout length of penstock is evident.

Many previously repaired sections (i.e. plates/patches) appear to be failing.

Penstock Supports (*Saddles, Piers, etc.*)

Saddles are in fair condition.

Anchor Blocks (*Condition of concrete, Settlement, Stress cracks, Movement*)

Anchor Blocks are in fair condition with some weathering/spalling of concrete.

Expansion Joints (*Leaks, Stress cracks*)

Significant leak in expansion joint in steel section just upstream of the surge tank.

Penstock Cover (*Condition of backfill, Slope stability*)

N/A

Remarks









RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 02-16-23

Water Level:	598.00
Weather:	SHOWERS CLOUDY
Upstream slope:	Good
Crest:	Good
Vegetation:	Good
Downstream Slope:	Good
Ponded Water:	Good
Gate Structure (include picture):	Good
Gate Opening:	1. inch
Gate Operation:	Good
Spillway Abutments:	Good
Spillway Riprap Upstream (include picture):	Good
Spillway Riprap Downstream (include picture):	Good
Spillway Debris	Good
Downstream Channel:	Good
Comments:	

Rattling Dam and Spillway

Date: 02/10/22

Water Level:	353.30
Weather:	CLOUDY
Upstream Slope (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	Small amount
Ponded Water:	TWO AREAS
Debris:	IN spillway channel
Spillway Concrete:	undermined in one area
Flashboards:	Good
Flashboard and Walkway Supports:	Good
Walkway:	one area bolts missing / plank
Security Fence:	one broken wing
Spillway Channel:	Heavy vegetation
Comments:	Cut off wall used to divert water into Brook was removed by contractor for use as riprap on Rattling dam now when spilling at Rattling water runs through the woods floods large area this also causes water to back up at the toe of Rattling dam

Rattling/Amy's and Freeboard Dams

Date: 02-10-21

Water Level: 353.55
Weather: Cloudy
Upstream Slopes (include picture): LARGE AMOUNT OF VEGETATION
Crest: Good
Downstream Slope: LARGE AMOUNT OF VEGETATION
Vegetation: LARGE AMOUNT
Debris: LARGE AMOUNT
Gate Opening: 45 %
Gate Operation: Good
Gatehouse: Good
Outlet Channel: Concrete needs repairs
Comments: Some blockage in outlet channel.

Forebay Dam & Spillway

Date: 02/10/22

Water Level: 334.50
Weather: Cloudy
Upstream Slope: Good
Downstream Slope: Good
Crest: Good
Vegetation: Small amount
Ponded Water: One area
Gate Operation: Good
Gatehouse: Good
Spillway Crest: Good
Debris: None
Spillway Channel: Large amount of vegetation
Comments:

Penstock

Date: 02-10-25

Weather: Cloudy
Alignment: bad in several areas
Drainage Ditches: needs ditching
Culverts: Good
Bed (erosion): bad in washout area
Woodstaves (include picture): bad in a lot of areas
Cradles: Several broken
Bands: Rusting in several areas

Anchor Blocks (include picture):

Good

Steel Penstock:

Good

Concrete Saddles: Steel

Good

Expansion Joints:

LEAKING SMALL AMOUNT

Comments: A LOT OF BAD WOOD STAVES IN PENSTOCK NEEDS
A LOT OF PLATES INSTALLED LOT OF LEAKS UNABLE TO PLUG
DUE TO BAD WOOD STAVES

Surge Tank

Date: 02-10-22

Weather:

CLOUDY

Foundations:

Good

Anchor Bolts:

Good

Legs:

Good

Bracing:

Good

Ladder:

Good

Outer casing (include picture):

Good

Tank:

AS PER INSPECTION

Inner Riser:

AS PER INSPECTION

Walkway:

SOME RUSTING ON LOWER WALKWAY

Baffles:

AS PER INSPECTION

Cover:

Good

Comments: _____

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 02/12/05

Water Level:	596.80
Weather:	clear
Upstream slope:	Snow covered
Crest:	Snow covered
Vegetation:	none
Downstream Slope:	Snow covered
Ponded Water:	none observed
Gate Structure (include picture):	Good
Gate Opening:	Good
Gate Operation:	Some sticking
Spillway Abutments:	Snow covered
Spillway Riprap Upstream (include picture):	Snow covered
Spillway Riprap Downstream (include picture):	Snow covered
Spillway Debris:	None observed
Downstream Channel:	Good
Comments:	Leakage thru gate structure

Rattling Dam and Spillway

Date: 02/12/20

Water Level:	369.25
Weather:	Sunny
Upstream Slope (include picture):	Snow covered
Crest:	Snow covered
Downstream Slope:	Snow covered
Vegetation:	Some
Ponded Water:	Two Areas
Debris:	In spillway channel
Spillway Concrete:	undermined in one area
Flashboards:	Good
Flashboard and Walkway Supports:	Good
Walkway:	one area bolts missing
Security Fence:	one broken wing
Spillway Channel:	Heavy vegetation
Comments:	Cutoff wall that was in place to guide water to the channel while spilling was removed by a contractor water now backs up to the TOE of the Dam & flow thru the trees before running back into the channel.

Rattling/Amy's and Freeboard Dams

Date: 02/12/20

Water Level: 369.25
Weather: Sunny
Upstream Slopes (include picture): Snow covered
Crest: Snow covered
Downstream Slope: Snow covered
Vegetation: None
Debris: Large amount
Gate Opening: 87%
Gate Operation: Good
Gatehouse: Good
Outlet Channel: Concrete deteriorated
Comments: Some blockage in outlet channel at Amy's

Forebay Dam & Spillway

Date: 02/12/20

Water Level: 334.45
Weather: Sunny
Upstream Slope: Snow covered
Downstream Slope: Snow covered
Crest: Snow covered
Vegetation: Small amount
Ponded Water: One area
Gate Operation: Good
Gatehouse: Good
Spillway Crest: Snow covered
Debris: None
Spillway Channel: Good
Comments:

Penstock

Date: 03/01/06

Weather: Cloudy periods
Alignment: Settlement in several areas
Drainage Ditches: Blocked in several areas
Culverts: Good
Bed (erosion): Snow covered
Woodstaves (include picture): Snow covered
Cradles: Several broken
Bands: Rusting

Anchor Blocks (include picture):

Good

Steel Penstock:

Rusting near anchor block

Steel Saddles:

Good

Expansion Joints:

Leaking small amount

Comments: _____

Surge Tank

Date: 03/01/06

Weather:

Cloudy periods

Foundations:

Good

Anchor Bolts:

Good

Legs:

Good

Bracing:

Good

Ladder:

Good

Outer casing (include picture):

Weather beaten

Tank:

As per inspection

Inner Riser:

As per inspection

Walkway:

Rusting on lower walkway

Baffles:

As per inspection

Cover:

Good

Comments: _____

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 03/04/21

Water Level:	601.26
Weather:	cloudy
Upstream slope:	Good
Crest:	Good
Vegetation:	None
Downstream Slope:	Good
Ponded Water:	None observed
Gate Structure (include picture):	Good
Gate Opening:	closed
Gate Operation:	OK
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	None
Downstream Channel:	Good
Comments:	Some leakage thru gate structure (see picture) Small amount of leakage in several areas of cutoff wall. (see picture)

Rattling Dam and Spillway

Date: 03/04/24

Water Level:	359.50
Weather:	Sunny
Upstream Slope (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	Some
Ponded Water:	2 Areas
Debris:	None
Spillway Concrete:	Snow covered
Flashboards:	Good
Flashboard and Walkway Supports:	Good
Walkway:	one bolt missing
Security Fence:	one broken wing
Spillway Channel:	Good
Comments:	Cutoff wall to divert water into the brook was removed by contractor this causes water to flow out through the trees and back along the toe of the dam while spilling at Rattling.

Rattling/Amy's and Freeboard Dams

Date: 03/04/21

Water Level: 359.70
Weather: Cloudy
Upstream Slopes (include picture): Good
Crest: Good
Downstream Slope: Good
Vegetation: None
Debris: Large Amount
Gate Opening: 59%
Gate Operation: OK
Gatehouse: OK
Outlet Channel: Some blockage
Comments: Some blockage in outlet channel at amy's (see picture)
Deterioration in concrete culvert. (See picture)

Forebay Dam & Spillway

Date: 03/04/21

Water Level: 335.10
Weather: Cloudy
Upstream Slope: Good
Downstream Slope: Good
Crest: Good
Vegetation: Fair Amount
Ponded Water: one Area
Gate Operation: OK
Gatehouse: OK
Spillway Crest: Good
Debris: None
Spillway Channel: Good
Comments: Plank missing from forebay spillway; because
of this forebay spills at approx 334.90

Penstock

Date: 03/04/23

Weather: Cloudy / Showers
Alignment: Settlement in several areas
Drainage Ditches: Blocked in several areas.
Culverts: OK
Bed (erosion): Snow/ice covered
Woodstaves (include picture): Bad in several areas
Cradles: Several broken & settled
Bands: Rusting

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

Steel Saddles:

OK

Expansion Joints:

Small leak / Rusting around seal

Comments: Settlement has increased in area of washout (see pictures)

Surge Tank

Date: 03/04/23

Weather:

Cloudy / Showers

Foundations:

OK

Anchor Bolts:

OK

Legs:

OK

Bracing:

Several bent / one broken

Ladder:

OK

Outer casing (include picture):

Weather beaten

Tank:

AS per inspection

Inner Riser:

AS per inspection

Walkway:

Rusting on lower catwalk

Baffles:

AS per inspection

Cover:

AS per inspection

Comments: The service shed at the bottom of the tank has received extensive damage from falling ice. The service wire was also severed from the shed & was disconnected by line personnel. (See pictures)

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 03-06-10

Water Level:	602.
Weather:	Cloudy
Upstream slope:	good
Crest:	good
Vegetation:	good
Downstream Slope:	good
Ponded Water:	one area
Gate Structure (include picture):	good
Gate Opening:	1. in for fish
Gate Operation:	good
Spillway Abutments:	good
Spillway Riprap Upstream (include picture):	good
Spillway Riprap Downstream (include picture):	good
Spillway Debris	none observed
Downstream Channel:	good

Comments: LEAKING ON BOTH SIDES GATE STRUCTURE. GATE
STRUCTURE SEEMS TO HAVE MOVED GATE IS HARD TO CRANK OPEN
HAVE TO HAND CRANK UNABLE TO OPEN WITH GAS DRILL THIS PROBLEM
STARTED LATELY
Rattling Dam and Spillway

Date: 03-06-05

Water Level:	371.90
Weather:	Cloudy
Upstream Slope (include picture):	good
Crest:	good
Downstream Slope:	good
Vegetation:	none
Ponded Water:	2 areas
Debris:	none
Spillway Concrete:	good
Flashboards:	good
Flashboard and Walkway Supports:	good
Walkway:	need some repairs
Security Fence:	wing wall broken off on both side of spillway
Spillway Channel:	good

Comments: CUT OFF WALL ON SPILLWAY CHANNEL WAS REMOVED
BY CONTRACTOR FOR RIPRAP ON RAZZLING DAM

Rattling/Amy's and Freeboard Dams

Date: 03-06-05

Water Level: 374.90
Weather: Cloudy
Upstream Slopes (include picture): good
Crest: good
Downstream Slope: good
Vegetation: None
Debris: Large Amount on Amy's Dam
Gate Opening: 71 ft
Gate Operation: good
Gatehouse: good
Outlet Channel: Some blockage
Comments: concrete needs repairs on outlet channel

Forebay Dam & Spillway

Date: 03-06-05

Water Level: 334.65
Weather: Cloudy
Upstream Slope: good
Downstream Slope: good
Crest: good
Vegetation: good
Ponded Water: one area
Gate Operation: good
Gatehouse: good
Spillway Crest: good
Debris: None
Spillway Channel: good
Comments:

Penstock

Date: 03-06-05

Weather: Sunny
Alignment:
Drainage Ditches: Needs ditching
Culverts: Good
Bed (erosion): Needs repairs
Woodstaves (include picture): Needs a lot of plates installed
Cradles: Several broken
Bands: Lot of rusting near over

Anchor Blocks (include picture):

Good

Steel Penstock:

Good

Concrete Saddles:

Good

Expansion Joints:

LEAKING SMALL AMOUNT

Comments: PENSTOCK NEEDS A LOT OF RATES INSTALLED LOT OF
JITCHING NEEDS TO BE DONE PENSTOCK NEEDS A LOT OF RUGGING
DONE

Surge Tank

Date: 03-06-25

Weather:

SUNNY

Foundations:

Good

Anchor Bolts:

Good

Legs:

Good

Bracing:

NEEDS ATTENTION

Ladder:

Good

Outer casing (include picture):

Good

Tank:

Good

Inner Riser:

AS PER INSPECTION

Walkway:

RUSTING ON CATWALKS

Baffles:

AS PER INSPECTION

Cover:

Good

Comments: ONE BRACE TAKEN AWAY FROM RISER PIPE BY FALLING ICE
ONE BEAM ON LEGS OF TANK BENT FROM FALLING ICE

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 03/08/07

Water Level:	595.50
Weather:	Cloudy
Upstream slope:	Good
Crest:	Good
Vegetation:	Small amount
Downstream Slope:	Good
Ponded Water:	NONE observed
Gate Structure (include picture):	With higher elevation/leaking on si
Gate Opening:	4 ft.
Gate Operation:	Gate binding
Spillway Abutments:	Good
Spillway Riprap Upstream (include picture):	Good
Spillway Riprap Downstream (include picture):	Good
Spillway Debris	Small amount
Downstream Channel:	Some blockage
Comments:	Concrete for the sill under the gate is broken away and washed downstream plus sill is gone. See pictures

Rattling Dam and Spillway

Date: 03/08/06

Water Level:	353.20
Weather:	Sunny
Upstream Slope (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	Fair Amount
Ponded Water:	Two Areas
Debris:	Small Amount
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	Railing is rusting
Security Fence:	Wings broken on both sides
Spillway Channel:	Good
Comments:	Cutoff wall to divert water into the brook was removed by contractor; causing water to flow through the trees downstream and back along the toe of the dam while spilling at Rattling Spillway

Rattling/Amy's and Freeboard Dams

Date: 03/08/06

Water Level: 353.20
Weather: Sunny
Upstream Slopes (include picture): Good
Crest: Good
Downstream Slope: Good
Vegetation: Fair Amount
Debris: Large Amount At Amy's
Gate Opening: 40%
Gate Operation: OK
Gatehouse: OK
Outlet Channel: Some Blockage
Comments: Deterioration in concrete culvert at Amy's

Forebay Dam & Spillway

Date: 03/08/05

Water Level: 334.40
Weather: Sunny
Upstream Slope: Good
Downstream Slope: Good
Crest: Good
Vegetation: Large Amount
Ponded Water: one area
Gate Operation: OK
Gatehouse: Good
Spillway Crest: Broken plank
Debris: very little
Spillway Channel: Good
Comments: Plank missing from Forebay Spillway.

Penstock

Date: 03/07/30

Weather: Sunny
Alignment: Fair amount of settlement
Drainage Ditches: Blocked in most areas
Culverts: Some blockage
Bed (erosion): Several areas
Woodstaves (include picture): Poor condition in several areas.
Cradles: Broken in several areas
Bands: A lot of rusting on threads.

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

Concrete Saddles:

OK

Expansion Joints:

Leaking small amount

Comments: Alot of settlement in washout area; penstock
requires alot of maintenance

Surge Tank

Date: 03/07/30

Weather:

Sunny

Foundations:

Good

Anchor Bolts:

Good

Legs:

Good

Bracing:

Broken & bent spans

Ladder:

OK

Outer casing (include picture):

OK

Tank:

OK

Inner Riser:

As per inspection

Walkway:

Rusting

Baffles:

As per inspection

Cover:

OK

Comments: Beam between legs of tank bent from falling ice
One span broken & several bent from falling ice.

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 03-10-29

Water Level:	597.60
Weather:	Cloudy
Upstream slope:	Good
Crest:	Good
Vegetation:	Good
Downstream Slope:	Good
Ponded Water:	one AREA
Gate Structure (include picture):	Good
Gate Opening:	Good
Gate Operation:	Good
Spillway Abutments:	Good
Spillway Riprap Upstream (include picture):	Good
Spillway Riprap Downstream (include picture):	Good
Spillway Debris	Good
Downstream Channel:	Good
Comments:	Concrete for the sill under the gate is broken away and washed down stream. bottom sill is also missing

Rattling Dam and Spillway

Date: 03-10-30

Water Level:	367.70
Weather:	Cloudy
Upstream Slope (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	Good
Ponded Water:	two AREAS
Debris:	SMALL AMOUNT
Spillway Concrete:	Good
Flashboards:	Good
Flashboard and Walkway Supports:	Good
Walkway:	RAILING RUSTING
Security Fence:	WINGS broken both sides
Spillway Channel:	Good
Comments:	Cut off wall to divert water into the brook was removed by contractor causing water to flow out through the woods

Rattling/Amy's and Freeboard Dams

Date: 03-10-30

Water Level:	367.70
Weather:	cloudy
Upstream Slopes (include picture):	good
Crest:	good
Downstream Slope:	good
Vegetation:	fair amount
Debris:	large amount
Gate Opening:	48%
Gate Operation:	good
Gatehouse:	good
Outlet Channel:	some blockage
Comments:	concrete needs repairs at Amy's outlet

Forebay Dam & Spillway

Date: 03-10-29

Water Level:	334.30
Weather:	cloudy
Upstream Slope:	Good
Downstream Slope:	Good
Crest:	Good
Vegetation:	Large Amount
Ponded Water:	one area
Gate Operation:	Good
Gatehouse:	Good
Spillway Crest:	Good
Debris:	Small Amount
Spillway Channel:	Good
Comments:	PLANK MISSING FROM forebay spillway

Penstock

Date: 03-10-30

Weather:	cloudy
Alignment:	fair amount of settlement
Drainage Ditches:	needs ditching
Culverts:	some blockage
Bed (erosion):	poor condition in several areas
Woodstaves (include picture):	None installed
Cradles:	good
Bands:	rusting on threads

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

Concrete Saddles:

OK

Expansion Joints:

OK

Comments: new SEAL INSTALLED IN expansion JOINT

Surge Tank

Date: 03-10-29

Weather:

cloudy

Foundations:

good

Anchor Bolts:

good

Legs:

good

Bracing:

bent ONE AREA

Ladder:

good

Outer casing (include picture):

good

Tank:

AS PER INSPECTION

Inner Riser:

AS PER INSPECTION

Walkway:

Rusting

Baffles:

AS PER INSPECTION

Cover:

OK

Comments: _____

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 03-12-02

Water Level:	597.00
Weather:	CLOUDY
Upstream slope:	Good
Crest:	Good
Vegetation:	Good
Downstream Slope:	Good
Ponded Water:	ONE area
Gate Structure (include picture):	Good
Gate Opening:	48 inch
Gate Operation:	GATE HARD TO OPERATE
Spillway Abutments:	Good
Spillway Riprap Upstream (include picture):	Good
Spillway Riprap Downstream (include picture):	Good
Spillway Debris	None
Downstream Channel:	Good
Comments:	GATE HAS BECOME HARD TO OPERATE SEEMS GATE STRUCTURE IS MOVED. CONCRETE FOR BOTTOM SILL FOR GATE IS BROKEN OFF AND WASHED DOWN STREAM

Rattling Dam and Spillway

Date: 03-12-02

Water Level:	370.75
Weather:	cloudy
Upstream Slope (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	OK
Ponded Water:	two areas
Debris:	Small amount
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	Two planks need to be re-installed
Security Fence:	Wings broken on both sides
Spillway Channel:	OK
Comments:	Wing wall replaced by contractor. RAILING ON WALKWAY NEEDS PAINTING

Rattling/Amy's and Freeboard Dams

Date: 03-12-02

Water Level:	370.75
Weather:	cloudy
Upstream Slopes (include picture):	Good
Crest:	Good
Downstream Slope:	Good
Vegetation:	Fair amount
Debris:	Large amount (Amy's)
Gate Opening:	90%
Gate Operation:	Good
Gatehouse:	Good
Outlet Channel:	Fair amount blockage (Amy's)
Comments:	

Forebay Dam & Spillway

Date: 03-12-02

Water Level:	334.60
Weather:	cloudy
Upstream Slope:	Good
Downstream Slope:	Good
Crest:	Good
Vegetation:	Small amount
Ponded Water:	one area
Gate Operation:	OK
Gatehouse:	Good
Spillway Crest:	Good
Debris:	none
Spillway Channel:	Good
Comments:	

Penstock

Date: 03-12-02

Weather:	cloudy
Alignment:	Settlement in several areas.
Drainage Ditches:	Blockage in several areas.
Culverts:	OK
Bed (erosion):	in several areas
Woodstaves (include picture):	Bad in several areas
Cradles:	Several broken
Bands:	Rusted in areas

Anchor Blocks (include picture): OK
Steel Penstock: OK
~~Concrete~~ Saddles: OK
Expansion Joints: Good
Comments: New Seal installed in first expansion
joint up from Surge Tank

Surge Tank

Date: 03-12-02

Weather: Cloudy
Foundations: Good
Anchor Bolts: Good
Legs: Good
Bracing: one missing due to ice damage
Ladder: Good
Outer casing (include picture): Good
Tank: AS PER INSPECTION
Inner Riser: AS PER INSPECTION
Walkway: RUSTING ON CATWALKS
Baffles: AS PER INSPECTION
Cover: Good
Comments: ONE SPAN ON LEGS bent due to ice
DAMAGE

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 04-04-13

Water Level:	598.80
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	NONE
Gate Structure (include picture):	NEEDS REPAIRS
Gate Opening:	NEEDS REPAIRS
Gate Operation:	HARD TO OPERATE
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	NONE
Downstream Channel:	OK
Comments:	BOTTOM SILL IN GATE OPENING MISSING GATE HARD TO OPERATE GATE OPENING SEEMS TO BE SHIFTED

Rattling Dam and Spillway

Date: 04-04-13

Water Level:	363.60
Weather:	SUNNY
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	OK
Ponded Water:	NONE
Debris:	NONE
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	NEEDS MAINTENANCE
Security Fence:	2 CUTOFF WALLS MISSING
Spillway Channel:	OK
Comments:	WALKWAY NEEDS SOME REPAIRS RAILING ON WALKWAY NEEDS PAINTING 2 CUTOFF WALLS BROKEN OFF

Rattling/Amy's and Freeboard Dams

Date: 04-04-13

Water Level: 363.60
Weather: Sunny
Upstream Slopes (include picture): OK
Crest: OK
Downstream Slope: OK
Vegetation: OK
Debris: LARGE AMOUNT
Gate Opening: 68 %
Gate Operation: OK
Gatehouse: OK
Outlet Channel: CONCRETE NEEDS REPAIRS
Comments: Some blockage in outlet channel
LARGE AMOUNT OF DEBRIS ON AMY'S DAM NEEDS TO BE REMOVED

Forebay Dam & Spillway

Date: 04-04-13

Water Level: 334.80
Weather: Sunny
Upstream Slope: OK
Downstream Slope: OK
Crest: OK
Vegetation: OK
Ponded Water: OK
Gate Operation: OK
Gatehouse: OK
Spillway Crest: OK
Debris: NONE
Spillway Channel: OK
Comments: DOORS & DOOR BOXES NEEDS TO BE REPLACED AT
FOREBAY GATEHOUSE WALKWAY NEEDS TO BE REPLACED

Penstock

Date: - - - -

Weather: _____
Alignment: _____
Drainage Ditches: _____
Culverts: _____
Bed (erosion): _____
Woodstaves (include picture): _____
Cradles: _____
Bands: _____

Anchor Blocks (include picture):

Steel Penstock:

Concrete Saddles:

Expansion Joints:

Comments:

Surge Tank

Date: 04-04-14

Weather:

Cloudy

Foundations:

OK

Anchor Bolts:

OK

Legs:

OK

Bracing:

ONE brace missing due to ice damage

Ladder:

OK

Outer casing (include picture):

OK

Tank:

AS PER INSPECTION

Inner Riser:

AS PER INSPECTION

Walkway:

SOME RUSTING

Baffles:

AS PER INSPECTION

Cover:

OK

Comments: new brace on site to be installed on tank

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date:

Water Level: _____
Weather: _____
Upstream slope: _____
Crest: _____
Vegetation: _____
Downstream Slope: _____
Ponded Water: _____
Gate Structure (include picture): _____
Gate Opening: _____
Gate Operation: _____
Spillway Abutments: _____
Spillway Riprap Upstream (include picture): _____
Spillway Riprap Downstream (include picture): _____
Spillway Debris _____
Downstream Channel: _____
Comments: _____

Rattling Dam and Spillway

Date:

Water Level: _____
Weather: _____
Upstream Slope (include picture): _____
Crest: _____
Downstream Slope: _____
Vegetation: _____
Ponded Water: _____
Debris: _____
Spillway Concrete: _____
Flashboards: _____
Flashboard and Walkway Supports: _____
Walkway: _____
Security Fence: _____
Spillway Channel: _____
Comments: _____

Rattling/Amy's and Freeboard Dams**Date:**

Water Level: _____

Weather: _____

Upstream Slopes (include picture): _____

Crest: _____

Downstream Slope: _____

Vegetation: _____

Debris: _____

Gate Opening: _____

Gate Operation: _____

Gatehouse: _____

Outlet Channel: _____

Comments: _____

Forebay Dam & Spillway**Date:**

Water Level: _____

Weather: _____

Upstream Slope: _____

Downstream Slope: _____

Crest: _____

Vegetation: _____

Ponded Water: _____

Gate Operation: _____

Gatehouse: _____

Spillway Crest: _____

Debris: _____

Spillway Channel: _____

Comments: _____

Penstock**Date:** 11-08-2004Weather: CloudyAlignment: Settlement in several areasDrainage Ditches: Blockage in several areasCulverts: okBed (erosion): Several areasWoodstaves (include picture): Bad in areasCradles: Several brokenBands: Threads rusting

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

~~Concrete~~ Saddles:

OK

Expansion Joints:

Good

Comments: Construction in area where TCH crosses over
penstock to replace bridge. (See pictures)

Surge Tank

Date:

Weather:

Foundations:

Anchor Bolts:

Legs:

Bracing:

Ladder:

Outer casing (include picture):

Tank:

Inner Riser:

Walkway:

Baffles:

Cover:

Comments: _____

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 04-07-15

Water Level:	595.50
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	NONE
Gate Structure (include picture):	OK
Gate Opening:	OK
Gate Operation:	hard to operate
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris:	NONE
Downstream Channel:	OK
Comments:	BOTTOM SILL IN gate opening IS MISSING Gate hard to operate

Rattling Dam and Spillway

Date: 04-07-19

Water Level:	360.50
Weather:	overcast
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	Large amount
Ponded Water:	NONE
Debris:	NONE
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	NEEDS SOME REPAIRS
Security Fence:	2 wing WALL MISSING
Spillway Channel:	OK
Comments:	Large Amount of Vegetation on downstream slope Large Amount of Vegetation in the spillway channel

Rattling/Amy's and Freeboard Dams**Date:** 04-07-19

Water Level: 350.60
Weather: overcast
Upstream Slopes (include picture): OK
Crest: OK
Downstream Slope: OK
Vegetation: Large amount
Debris: Large amount at amy's dam
Gate Opening: 35%
Gate Operation: OK
Gatehouse: OK
Outlet Channel: Some blockage.
Comments: Large Amount of vegetation on the upstream
and downstream at amy's dam Large Amount of vegetation
on the crest in two sections of the dam

Forebay Dam & Spillway**Date:** 04-07-19

Water Level: 334.15
Weather: overcast
Upstream Slope: OK
Downstream Slope: OK
Crest: OK
Vegetation: OK
Ponded Water: Large amount downstream
Gate Operation: One area
Gatehouse: OK
Spillway Crest: OK
Debris: None
Spillway Channel: OK
Comments: Debris need ~~removed~~

Penstock**Date:**

Weather:
Alignment:
Drainage Ditches:
Culverts:
Bed (erosion):
Woodstaves (include picture):
Cradles:
Bands:

Anchor Blocks (include picture):

Steel Penstock:

Concrete Saddles:

Expansion Joints:

Comments:

Surge Tank

Date: 04-07-19

Weather:

SUNNY

Foundations:

OK

Anchor Bolts:

OK

Legs:

OK

Bracing:

ONE BRACE MISSING

Ladder:

OK

Outer casing (include picture):

OK

Tank:

AS PER INSPECTION

Inner Riser:

AS PER INSPECTION

Walkway:

SOME RUSTING

Baffles:

AS PER INSPECTION

Cover:

OK

Comments:

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 04-10-08

Water Level:	597.50
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	OK
Gate Structure (include picture):	OK
Gate Opening:	OK
Gate Operation:	OK
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	OK
Downstream Channel:	OK
Comments:	WORK ONGOING BY CONTRACTOR

Rattling Dam and Spillway

Date: 04-10-19

Water Level:	374.10
Weather:	OVERCAST
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	LARGE AMOUNT
Ponded Water:	ONE AREA
Debris:	NONE
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	OK
Security Fence:	OK
Spillway Channel:	LARGE AMOUNT OF VEGETATION
Comments:	

Rattling/Amy's and Freeboard Dams

Date: 15/10/2004

Water Level: 373.50
Weather: cloudy
Upstream Slopes (include picture): Good
Crest: Good
Downstream Slope: Good
Vegetation: Large Amount
Debris: Large Amount
Gate Opening: 33%
Gate Operation: OK
Gatehouse: Good
Outlet Channel: Some Blockage
Comments: Large Amount Debris at Amy's

Forebay Dam & Spillway

Date: 07/10/2004

Water Level: 334.50
Weather: Cloudy
Upstream Slope: Good
Downstream Slope: Good
Crest: Good
Vegetation: Large Amount Downstream
Ponded Water: One Area
Gate Operation: OK
Gatehouse: Needs Two New Doors
Spillway Crest: OK
Debris: None
Spillway Channel: OK
Comments:

Penstock

Date: 14/10/2004

Weather: Cloudy
Alignment: Settlement in areas
Drainage Ditches: Blockage in several areas
Culverts: OK
Bed (erosion): Erosion in several areas
Woodstaves (include picture): Bad in several areas
Cradles: Several Broken
Bands: Threads rusting

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

Steel Saddles:

OK

Expansion Joints:

Some Leakage

Comments: Roadbed brush covered in several areas.

Surge Tank

Date:

Weather:

Foundations:

Anchor Bolts:

Legs:

Bracing:

Ladder:

Outer casing (include picture):

Tank:

Inner Riser:

Walkway:

Baffles:

Cover:

Comments:

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 2005-01-11

Water Level: 602.20
Weather: Cloudy
Upstream slope: OK
Crest: OK
Vegetation: None
Downstream Slope: OK (Snow covered)
Ponded Water: None observed
Gate Structure (include picture): Appears OK (Ice/Snow covered)
Gate Opening: Closed
Gate Operation: Did not check
Spillway Abutments: Still leakage (Snow covered)
Spillway Riprap Upstream (include picture): Ice / Snow covered
Spillway Riprap Downstream (include picture): Snow covered
Spillway Debris: Fair amount
Downstream Channel: OK
Comments: Did not check gate operation at this time because of ice conditions. Fair amount of debris on spillway; will determine if follow up is required in spring.

Rattling Dam and Spillway

Date: 2005-01-05

Water Level: 376.0
Weather: Cloudy Periods
Upstream Slope (include picture): Good
Crest: Good
Downstream Slope: Good
Vegetation: Large Amount
Ponded Water: One Area
Debris: None
Spillway Concrete: Support block cracked (see picture)
Flashboards: OK
Flashboard and Walkway Supports: OK
Walkway: One section loose
Security Fence: OK
Spillway Channel: Large Amount of Vegetation
Comments: Follow up to remove vegetation after spring run-off.

Rattling/Amy's and Freeboard Dams

Date: 2005-01-05

Water Level: 376.00
Weather: Cloudy Periods
Upstream Slopes (include picture): Good
Crest: Good
Downstream Slope: Good
Vegetation: Large Amount
Debris: Large Amount
Gate Opening: 38%
Gate Operation: OK
Gatehouse: OK
Outlet Channel: Some Blockage
Comments: Large Amount of Debris At Amy's Should
be a Follow up in Spring. Also cut Vegetation in Spring
Summer

Forebay Dam & Spillway

Date: 2005-01-05

Water Level: 334.70
Weather: Cloudy periods
Upstream Slope: Good
Downstream Slope: Good
Crest: Good
Vegetation: Large Amount Downstream
Ponded Water: One Area
Gate Operation: OK
Gatehouse: Needs two new doors
Spillway Crest: OK
Debris: None
Spillway Channel: OK
Comments: Should Follow up cutting vegetation in
Spring or Summer

Penstock

Date: 2005-01-05

Weather: Cloudy/Light Snow
Alignment: Settlement in areas
Drainage Ditches: Blockage in several areas
Culverts: OK
Bed (erosion): Snow covered
Woodstaves (include picture): Snow/Ice covered
Cradles: Several Broken
Bands: Threads rusting

Anchor Blocks (include picture): OK
 Steel Penstock: OK
 Steel Saddles: OK
 Expansion Joints: Some Leakage in one
 Comments: Should Follow up in Spring or Summer

Surge Tank

Date: 2005-01-11

Weather: Cloudy / light snow
 Foundations: OK
 Anchor Bolts: OK
 Legs: OK
 Bracing: OK
 Ladder: OK
 Outer casing (include picture): OK
 Tank: As per inspection by contractor.
 Inner Riser: " " " " "
 Walkway: " " " " "
 Baffles: " " " " "
 Cover: " " " " "
 Comments: Resting on lower catwalk -

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 05-04-15

Water Level:	598.50
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	NONE
Downstream Slope:	OK
Ponded Water:	ONE AREA
Gate Structure (include picture):	OK
Gate Opening:	CLOSED
Gate Operation:	OK
Spillway Abutments:	SKILL LEAKING
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	LARGE AMOUNT
Downstream Channel:	OK
Comments:	

Rattling Dam and Spillway

Date: 05-04-26

Water Level:	368.15
Weather:	CLOUDY
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	LARGE AMOUNT
Ponded Water:	ONE AREA
Debris:	NONE
Spillway Concrete:	SUPPORT BLOCK CRACKED
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	ONE SECTION LOOSE
Security Fence:	OK
Spillway Channel:	LARGE AMOUNT OF VEGETATION
Comments:	VEGETATION NEEDS CUTTING

Rattling/Amy's and Freeboard Dams

Date: 05-04-26

Water Level: 368.15
Weather: Cloudy
Upstream Slopes (include picture): OK
Crest: OK
Downstream Slope: OK
Vegetation: OK
Debris: Large Amount
Gate Opening: Large Amount
Gate Operation: 688
Gatehouse: OK
Outlet Channel: Some blockage
Comments: Large Amount of debris & vegetation at Amy's
Debris needs to be burnt or removed

Forebay Dam & Spillway

Date: 05-04-26

Water Level: 334.00
Weather: Cloudy
Upstream Slope: OK
Downstream Slope: OK
Crest: OK
Vegetation: OK
Ponded Water: Large Amount Downstream
Gate Operation: One Area
Gatehouse: OK
Spillway Crest: OK
Debris: OK
Spillway Channel: OK
Comments: Vegetation need cutting

Penstock

Date:

Weather: _____
Alignment: _____
Drainage Ditches: _____
Culverts: _____
Bed (erosion): _____
Woodstaves (include picture): _____
Cradles: _____
Bands: _____

Rattling/Amy's and Freeboard Dams**Date:**

Water Level: _____

Weather: _____

Upstream Slopes (include picture): _____

Crest: _____

Downstream Slope: _____

Vegetation: _____

Debris: _____

Gate Opening: _____

Gate Operation: _____

Gatehouse: _____

Outlet Channel: _____

Comments: _____

Forebay Dam & Spillway**Date:**

Water Level: _____

Weather: _____

Upstream Slope: _____

Downstream Slope: _____

Crest: _____

Vegetation: _____

Ponded Water: _____

Gate Operation: _____

Gatehouse: _____

Spillway Crest: _____

Debris: _____

Spillway Channel: _____

Comments: _____

Penstock**Date:** 05-04-26Weather: SUNNYAlignment: SETTLEMENT IN AREASDrainage Ditches: BLOCKAGE SEVERAL AREASCulverts: OKBed (erosion): SNOW ICE COVEREDWoodstaves (include picture): OKCradles: SEVERAL BROKENBands: RUSTING IN SEVERAL AREAS

Anchor Blocks (include picture):

OK

Steel Penstock:

OK

Concrete Saddles:

OK

Expansion Joints:

SMALL LEAK

Comments:

Surge Tank

Date: 05-04-26

Weather:

SUNNY

Foundations:

OK

Anchor Bolts:

OK

Legs:

OK

Bracing:

OK

Ladder:

OK

Outer casing (include picture):

OK

Tank:

AS PER INSPECTION

Inner Riser:

11 11 12 11 11

Walkway:

11 11 12 11 11

Baffles:

11 11 11 11 11

Cover:

11 11 11 11 11

Comments: Some Rusting on lower riser

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 05-08-08

Water Level:	595.50
Weather:	Cloudy
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	NONE
Gate Structure (include picture):	OK
Gate Opening:	48 inches
Gate Operation:	hard to open
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	SMALL AMOUNT
Downstream Channel:	OK
Comments:	gate hard to operate has to be cranked open by hand most of the way

Rattling Dam and Spillway

Date: 05-08-09

Water Level:	354.95
Weather:	SUNNY
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	LARGE AMOUNT
Ponded Water:	1 area
Debris:	NONE
Spillway Concrete:	Block cracked on over support
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	OK
Security Fence:	OK
Spillway Channel:	LARGE amount of vegetation
Comments:	

Rattling/Amy's and Freeboard Dams

Date: 05-07-13

Water Level: 360.70
Weather: Cloudy
Upstream Slopes (include picture): ok
Crest: ok
Downstream Slope: ok
Vegetation: Large amount
Debris: Large amount
Gate Opening: 90%
Gate Operation: ok
Gatehouse: ok
Outlet Channel: Some blockage
Comments: Large amount of vegetation on the upstream and downstream slopes. Large amount of debris upstream

Forebay Dam & Spillway

Date: 05-07-13

Water Level: 334.65
Weather: Sunny
Upstream Slope: ok
Downstream Slope: ok
Crest: ok
Vegetation: Large amount
Ponded Water: one area
Gate Operation: ok
Gatehouse: ok
Spillway Crest: ok
Debris: None
Spillway Channel: ok
Comments: Large amount of vegetation on downstream slope

Penstock

Date:

Weather: _____
Alignment: _____
Drainage Ditches: _____
Culverts: _____
Bed (erosion): _____
Woodstaves (include picture): _____
Cradles: _____
Bands: _____

Anchor Blocks (include picture):

Steel Penstock:

Concrete Saddles:

Expansion Joints:

Comments:

Surge Tank

Date: 05-08-09

Weather:

SUNNY

Foundations:

OK

Anchor Bolts:

OK

Legs:

OK

Bracing:

OK

Ladder:

OK

Outer casing (include picture):

OK

Tank:

AS PER INSPECTION

Inner Riser:

AS PER INSPECTION

Walkway:

SOME RUSTING ON LOWER CASE WALK

Baffles:

AS PER INSPECTION

Cover:

OK

Comments:

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 06-01-11

Water Level:	597.50
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	ONE AREA
Gate Structure (include picture):	OK
Gate Opening:	48 inches
Gate Operation:	OK
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	SMALL AMOUNT
Downstream Channel:	OK
Comments:	

Rattling Dam and Spillway

Date: 06-01-11

Water Level:	358.20
Weather:	SUNNY
Upstream Slope (include picture):	OK
Crest:	OK
Downstream Slope:	OK
Vegetation:	OK
Ponded Water:	NONE OBSERVED
Debris:	NONE
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	OK
Security Fence:	OK
Spillway Channel:	VEGETATION NEEDS CUTTING
Comments:	

Rattling/Amy's and Freeboard DamsDate: 06-01-11

Water Level: 358.20
Weather: SUNNY
Upstream Slopes (include picture): OK
Crest: OK
Downstream Slope: OK
Vegetation: OK
Debris: OK
Gate Opening: 30%
Gate Operation: OK
Gatehouse: OK
Outlet Channel: Some blockage @ Amy's
Comments: _____

Forebay Dam & SpillwayDate: 06-06-11

Water Level: 334.10
Weather: SUNNY
Upstream Slope: OK
Downstream Slope: OK
Crest: OK
Vegetation: OK
Ponded Water: OK
Gate Operation: OK
Gatehouse: OK
Spillway Crest: OK
Debris: OK
Spillway Channel: OK
Comments: _____

Penstock

Date: _____

Weather: _____
Alignment: _____
Drainage Ditches: _____
Culverts: _____
Bed (erosion): _____
Woodstaves (include picture): _____
Cradles: _____
Bands: _____

Anchor Blocks (include picture):

Steel Penstock:

Concrete Saddles:

Expansion Joints:

Comments:

Surge Tank

Date: 06-01-11

Weather:

Foundations:

Anchor Bolts:

Legs:

Bracing:

Ladder:

Outer casing (include picture):

Tank:

Inner Riser:

Walkway:

Baffles:

Cover:

Comments:

SUNNY

OK

OK

OK

OK

OK

OK

AS PER INSPECTION

AS PER INSPECTION

SOME RUSTING ON BOTH WALKWAYS

OK

OK

Penstock

Date: 06-01-11

Weather:

SUNNY

Alignment:

Some settlement in washout area

Drainage Ditches:

Need ditching

Culverts:

OK

Bed (erosion):

Some in washout area

Woodstaves (include picture):

OK

Cradles:

OK

Bands:

Some rusting

Form # 776

10/26/99

Anchor Blocks (include picture):

Steel Penstock:

OK

~~Concrete Saddles:~~

OK

Expansion Joints:

OK

Comments:

one leaking

RATTLING BROOK OPERATOR'S DAM SAFETY INSPECTION CHECKLIST

Frozen Ocean Lake Dam

Date: 06-04-13

Water Level:	599.00
Weather:	SUNNY
Upstream slope:	OK
Crest:	OK
Vegetation:	OK
Downstream Slope:	OK
Ponded Water:	NONE
Gate Structure (include picture):	OK
Gate Opening:	OK
Gate Operation:	OK
Spillway Abutments:	OK
Spillway Riprap Upstream (include picture):	OK
Spillway Riprap Downstream (include picture):	OK
Spillway Debris	LARGE AMOUNT
Downstream Channel:	OK
Comments:	

Rattling Dam and Spillway

Date: 06-04-11

Water Level:	356.85
Weather:	SUNNY
Upstream Slope (include picture):	OK
Crest:	SNOW COVERED
Downstream Slope:	OK
Vegetation:	NONE
Ponded Water:	NONE
Debris:	NONE
Spillway Concrete:	OK
Flashboards:	OK
Flashboard and Walkway Supports:	OK
Walkway:	OK
Security Fence:	OK
Spillway Channel:	OK
Comments:	

Rattling/Amy's and Freeboard Dams

Date: 06-04-11

Water Level:

Weather:

Upstream Slopes (include picture):

Crest:

Downstream Slope:

Vegetation:

Debris:

Gate Opening:

Gate Operation:

Gatehouse:

Outlet Channel:

Comments:

356-85

SUNNY

OK

SNOW COVERED

SNOW COVERED

OK

SNOW COVERED

85%

OK

OK

Some blockage @ Amy S

Forebay Dam & Spillway

Date: 06-04-11

Water Level:

Weather:

Upstream Slope:

Downstream Slope:

Crest:

Vegetation:

Ponded Water:

Gate Operation:

Gatehouse:

Spillway Crest:

Debris:

Spillway Channel:

Comments:

334.60

SUNNY

SNOW COVERED

SNOW COVERED

SNOW COVERED

NONE

ONE AREA

OK

OK

NEEDS ATTENTION

NONE

OK

Penstock

Date:

Weather:

Alignment:

Drainage Ditches:

Culverts:

Bed (erosion):

Woodstaves (include picture):

Cradles:

Bands:

Anchor Blocks (include picture):

Steel Penstock:

Concrete Saddles:

Expansion Joints:

Comments:

Surge Tank

Date: 06-04-11

Weather:

Foundations:

Anchor Bolts:

Legs:

Bracing:

Ladder:

Outer casing (include picture):

Tank:

Inner Riser:

Walkway:

Baffles:

Cover:

Comments:

SUNNY

OK

OK

OK

OK

OK

OK

AS PER INSPECTION

AS PER INSPECTION

SOME RUSTING ON BOTH WALKWAYS

AS PER INSPECTION

OK

Rattling/Amy's and Freeboard Dams

Date:

Water Level:

Weather:

Upstream Slopes (include picture):

Crest:

Downstream Slope:

Vegetation:

Debris:

Gate Opening:

Gate Operation:

Gatehouse:

Outlet Channel:

Comments:

Forebay Dam & Spillway

Date:

Water Level:

Weather:

Upstream Slope:

Downstream Slope:

Crest:

Vegetation:

Ponded Water:

Gate Operation:

Gatehouse:

Spillway Crest:

Debris:

Spillway Channel:

Comments:

Penstock

Date: 06-04-17

Weather:

Alignment:

Drainage Ditches:

Culverts:

Bed (erosion):

Woodstaves (include picture):

Cradles:

Bands:

RAININGSOME SETTLEMENTREQUIRES DITCHINGOKSOME IN WASHOUT AREASEVERAL BAD LOCATIONSOKSOME RUSTING NEAR OVERPASS

**Outage Reports for Rattling Brook Plant
for Unit 1 and Unit 2**

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G1 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1081	Bearings	2003-02-18	2003-02-18	s.o.#126820to change bearing oil
1099	Instrumentation / Controls	2003-02-26	2003-02-26	adjust alarm setting on cooling water.
1100	Cooling system	2003-02-26	2003-02-26	Check cooling water line and clean strainers
1118	Unknown	2003-03-03	2003-03-03	Unit tripped and locked out
1119	Instrumentation / Controls	2003-03-04	2003-03-06	out of service due to faulty turbine oil temp probe Probe replaced
1121	Generator	2003-03-04	2003-03-04	so 126923 to megger unit
1132	Bearings	2003-03-13	2003-03-19	Turbine bearing temperature trip
1167	Surge Tank	2003-04-04	2003-04-05	Unit shut to repair surge tank
1244	Bearings	2003-05-07	2003-05-07	to change turbine bearing oilS/O 83734
1377	Turbine	2003-07-09	2003-07-09	Gland water pressure dropped
1485	Instrumentation / Controls	2003-08-26	2003-08-26	pit flood alarm replaced flow value on RBK-G1 gate cover
1523	Generator	2003-09-24	2003-09-24	SO 127916 for brush main
1570	Generator Power Transformer	2003-10-14	2003-10-15	S/O # 128008 in effect to retire RBK-T1
1571	Penstock	2003-10-14	2003-10-18	S/O # 128038 dewater and inspect penstock
1572	Surge Tank	2003-10-18	2003-10-20	S/O #84235 to dewater penstock and check leaking manhole cover in surge tank
1588	Turbine	2003-10-27	2003-10-28	To repair broken grease line to head cover on G1
1705	Generator	2003-12-10	2003-12-10	brush gear maintenance
1714	Trash Racks	2003-12-12	2003-12-12	s/o 128287 to remove debris & old heater's fr rbk f/b trashracks
1770	Generator Power Transformer	2004-01-08	2004-01-08	personel working on t1 caused the trip

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G1 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1886	Bearings	2004-03-09	2004-03-11	S/O # 128656 to enable oil change on lower guide bearing
1912	Generator	2004-03-24	2004-03-24	RBK-G1 was isolated for brush gear maintenance under S/O # 128701.
1938	Generator	2004-03-31	2004-04-02	S.O.# 128574 in effect to perform cleaning on lower bracket.
1950	Not Applicable	2004-04-06	2004-04-06	RBK-G1 isolated for inspection & measurements on PT's , CT'S and other equipment. S.O.#128759
2109	Generator	2004-06-30	2004-06-30	BRUSH GEAR MAINTENANCE ON RBK-G1
2117	Cooling system	2004-07-02	2004-07-02	Unit shut due to Cooling water alarm and PPM back in country.
2120	Cooling system	2004-07-04	2004-07-04	cooling alarm at 1059 no answer to operators Scc called for shut trouble with cooling G/flow Follow up on work request 3091.
2141	Generator	2004-07-22	2004-07-26	RBK-G1 is out of service due to high level on condensation. Generator has heaters installed and is tarped.
2185	Generator	2004-08-18	2004-11-25	so 129440 for Capital Project - stator rewind
2481	Generator	2005-01-05	2005-01-05	RBK-G1 shut down to check brushes.Noisey.□
2485	Exciter	2005-01-07	2005-01-07	S/O # 130088 to perform brush gear mtce.
2548	Instrumentation / Controls	2005-02-10	2005-02-10	s.o.#130200 TO DO ELECTRICAL & MECHANICAL ENGINEERING ASSESSMENT OF RATTLING BROOK PLANT & TO CHECK NEXUS METERING
2556	Turbine	2005-02-15	2005-02-15	To inspect runners
2572	Not Applicable	2005-02-17	2005-02-17	off for main on G2
2574	Not Applicable	2005-02-17	2005-02-17	off for main on G2. ok
2600	Exciter	2005-03-14	2005-03-14	s/o 130330 to do brush gear maintenance. This is regular scheduled maintenance no follow up req'd.
2625	Bearings	2005-03-30	2005-03-30	Unit shut for low bearing oil level. Levels adjusted and unit available. No follow up req'd. No oil was leaked from unit.
2732	Cooling system	2005-05-31	2005-05-31	to clean strainers no follow up reqd
2836	Unknown	2005-07-23	2005-07-23	unit lockout also both T1 & T2 breakers. no trouble found power restored
2854	Generator Power Transformer	2005-08-11	2005-08-11	S.O.# 130955 in effect to investigate and repair an oil leak in a low voltage bushing on RBK-T1. Also to investigate problem with temperature gauge. Repairs made
2878	Governor	2005-08-25	2005-08-25	unit out of service for brush gear maintenance as per SO 131003
2922	Penstock	2005-09-23	2005-09-23	0830 toRBK: S/O # 131166 in effect to inspect Amy's gate/culvert/outlet channel and tailrace for RBK plant.

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G1 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
2962	Bearings	2005-10-26	2005-10-26	1119 to 1515RBK: G1 taken off line to replace oil in lower guide bearing. regular maintenance
2965	Governor	2005-11-01	2005-11-01	to check Gov. motor. Mike burt is creating a work order for the governor motor repairs.
3036	Generator	2005-12-01	2005-12-01	so 131507
3181	Trash Racks	2006-01-22	2006-01-24	ice build up
3251	Not Applicable	2006-03-09	2006-03-09	paint around G2
3257	Unknown	2006-03-10	2006-03-10	S.O.#131815 in effect to isolate RBK-G1 for scheduled maintenance.
3275	Unknown	2006-03-28	2006-03-28	0854 to 1529S.O.#131914 in effect to perform scheduled maintenance on RBK-G1.ok
3323	Penstock	2006-05-10	2006-05-10	S.O.# 130998 in effect to partially de-water RBK penstock below leak to make repairs and install plate.repaired leak
3333	Bearings	2006-05-15	2006-05-15	Thrust bearing oil changed under S/O # 87623.RBK-G1: Shutdown due to High thrust bearing temperature.
3342	Cooling system	2006-05-16	2006-05-16	to clean big strainor

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G1 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1118	Unknown	2003-03-03	2003-03-03	Unit tripped and locked out
1119	Instrumentation / Controls	2003-03-04	2003-03-06	out of service due to faulty turbine oil temp probe Probe replaced
1132	Bearings	2003-03-13	2003-03-19	Turbine bearing temperature trip
1167	Surge Tank	2003-04-04	2003-04-05	Unit shut to repair surge tank
1377	Turbine	2003-07-09	2003-07-09	Gland water pressure dropped
1485	Instrumentation / Controls	2003-08-26	2003-08-26	pit flood alarm replaced flow value on RBK-G1 gate cover
1572	Surge Tank	2003-10-18	2003-10-20	S/O #84235 to dewater penstock and check leaking manhole cover in surge tank
1588	Turbine	2003-10-27	2003-10-28	To repair broken grease line to head cover on G1
1770	Generator Power Transformer	2004-01-08	2004-01-08	personel working on t1 caused the trip
2117	Cooling system	2004-07-02	2004-07-02	Unit shut due to Cooling water alarm and PPM back in country.
2120	Cooling system	2004-07-04	2004-07-04	cooling alarm at 1059 no answer to operators Scc called for shut trouble with cooling G/flow Follow up on work request 3091.
2625	Bearings	2005-03-30	2005-03-30	Unit shut for low bearing oil level. Levels adjusted and unit available. No follow up req'd. No oil was leaked from unit.
2836	Unknown	2005-07-23	2005-07-23	unit lockout also both T1 & T2 breakers. no trouble found power restored
3181	Trash Racks	2006-01-22	2006-01-24	ice build up
3333	Bearings	2006-05-15	2006-05-15	Thrust bearing oil changed under S/O # 87623.RBK-G1: Shutdown due to High thrust bearing temperature.

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1026	Instrumentation / Controls	2003-01-19	2003-01-19	unit tripped off on brush temp temp okay
1046	Cooling system	2003-01-31	2003-01-31	Tripped on upper guide cooling
1055	Cooling system	2003-02-06	2003-02-06	RBK-G2 tripped on upper guide cooling water. □ RBK-G2 Alarm
1082	Governor	2003-02-19	2003-02-20	S/O # 126852Repair leak on governor
1122	Turbine	2003-03-04	2003-03-04	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1123	Turbine	2003-03-05	2003-03-05	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1124	Turbine	2003-03-05	2003-03-05	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1125	Cooling system	2003-03-05	2003-03-05	Unit tripped and locked out. □ cooling water flow
1126	Turbine	2003-03-05	2003-03-05	Unit off for water glan meter replacement
1148	Generator	2003-03-20	2003-03-21	Unit locked outUnit meggered before placing on line
1168	Instrumentation / Controls	2003-04-01	2003-04-02	Unit tripped and locked out on Master Shut Down
1169	Surge Tank	2003-04-04	2003-04-05	Unit shut to repair surge tank
1335	Generator	2003-06-16	2003-06-16	Unit tripped and locked outUnit tripped on slip ring temperature
1573	Penstock	2003-10-14	2003-10-18	S/O # 128038 dewater and inspect penstock
1574	Surge Tank	2003-10-18	2003-10-20	S/O # 84235 to dewater penstock and check leaking manhole cover in surge tank Part of inspection work
1646	Cooling system	2003-11-19	2003-11-19	alarm on cooling G1 PMP notified & G2 locked out

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1647	Cooling system	2003-11-19	2003-11-19	
1648	Generator	2003-11-19	2003-11-20	Unit tripped due to load limits at 100% on both units, and starving units of water.
1660	Cooling system	2003-11-24	2003-11-24	Unit shut down to clean cooling water strainers. Tom Hanlon reports this unit must be shut down to complete this work or the unit will trip off line.
1709	Cooling system	2003-12-12	2003-12-12	unit tripped and g2 alarm on. Unit tripped on upper cooling water fail.
1710	Bearings	2003-12-11	2003-12-11	S.O.# 84473 to replace lower guide bearing oil and cooling water piping on RBK-G2.
1715	Trash Racks	2003-12-12	2003-12-12	s/o 128287 to remove debris & old heater's fr rbk f/b trashracks
1741	Cooling system	2003-12-26	2003-12-26	unit tripped and alarm on.Cooling water alarm.
1771	Generator Power Transfor	2004-01-08	2004-01-08	personel working on t1 caused the trip
1892	Cooling system	2004-03-11	2004-03-11	Unit tripped on gland cooling water.
1910	Generator	2004-03-23	2004-03-23	RBK-G2 was isolated for brush gear maintenance under S/O # 128704. RBK-G2 was isolated to re-tape power cable to unit under S/O # 128693.
1921	Cooling system	2004-03-27	2004-03-27	Unit tripped on low cooling water flow.
1932	Generator	2004-03-29	2004-03-30	S.O.# 128575 in effect to perform cleaning on lower bracket.
2073	Cooling system	2004-06-06	2004-06-06	The unit tripped on thrust bearing, low cooling water. Trip is set to trip at 16 gal/min. This happens from time to time on the cooling water systems.Possibly the water control valves are creeping with vibration. We will try tightening the gland nuts and u
2122	Generator	2004-07-05	2004-07-05	RBK-G2 was shut down for brush gear maintenance under S/O # 129184.
2124	Bearings	2004-07-08	2004-07-08	S.O.#85367 in effect to change oil on lower guide & thrust bearing on RBK-G2.
2157	Generator	2004-08-01	2004-08-01	unit RBK-G2 failed to synchronize
2164	Turbine	2004-08-04	2004-08-04	RBK-G2 tripped and locked out. Tom Hanlon notified. Unit tripped on overspeed.
2166	Unknown	2004-08-06	2004-08-11	operator at plant call for start from scc unit when on line but tripped
2180	Cooling system	2004-08-14	2004-08-16	UNIT FAILED TO START- TURBINE COOLING WATER ALARM RESET
2191	Cooling system	2004-08-22	2004-08-22	RBK-G2-Alarm activated while trying to start unit. Byron Hayter notified. Turbine bearing water was the cause. Alarm reset and unit put on line.
2192	Cooling system	2004-08-23	2004-08-23	tried to place unit RBK-G2 on line, discrete command close timed out activated. Unit tripped on turbine cooling water.
2294	Cooling system	2004-10-14	2004-10-14	failed to start due to turbine cooling water
2295	Turbine	2004-10-16	2004-10-16	unit would not start remotely due to trip on turbine cooling alarm No follow up req'd
2300	Main Inlet Valve	2004-10-20	2004-10-20	check main valve
2328	Generator	2004-10-31	2004-10-31	to allow contractor to enter draft tube of RBK-G1 and re-shim the running. No follow up req'd

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Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
2345	Generator	2004-11-08	2004-11-08	unit taken off line to allow contractor to make adjustments to RBK-G1. no follow up req'd.
2369	Cooling system	2004-11-22	2004-11-22	repairs to cooling water system. No follopw up Req'd
2409	Bearings	2004-12-10	2004-12-10	unit tripped on upper guide thrust bearing. Unit cooling water flow rates continue to cuase trips.
2549	Instrumentation / Controls	2005-02-10	2005-02-10	s.o.#130200 TO DO ELECTRICAL & MECHANICAL ENGINEERING ASSESSMENT OF RATTILING BROOK PLANT & TO CHECK NEXUS METERING
2557	Turbine	2005-02-15	2005-02-15	To inspect runners
2573	Generator	2005-02-17	2005-02-17	so 86188 and 86195 to repair leak in draft tube
2579	Instrumentation / Controls	2005-02-22	2005-02-22	RBK-G2 taken off line to replace nexus meter.No follow up req'd new meter checked ok.
2602	Exciter	2005-03-15	2005-03-15	Brush Gear maintenance. No followup req'd. regular maintenance
2603	Generator	2005-03-15	2005-03-17	unit will not sync. will check in morning This afternoon we had a problem synchronizing RBK-G2. Since we need only one machine now, it was decided to leave this until the morning when we will have Rick mercer and Kevin Gill troubleshoot this. Please do no
2708	Cooling system	2005-05-21	2005-05-21	unit tripped on Gland water flow strainers cleaned no follow up reqd.
2710	Cooling system	2005-05-23	2005-05-23	General alarm activated and unit tripped. Tom Hanlon notified. Unit tripped on gland water flow.
2733	Cooling system	2005-05-31	2005-05-31	to clean strainers no follow up reqd
2764	Governor	2005-06-13	2005-06-13	unit tripped while blowing off govenor
2817	Bearings	2005-07-15	2005-07-15	S.O.# 130826 in effect to change oil on RBK-G2 thrust and upper guide bearing.No follow up required
2818	Bearings	2005-07-15	2005-07-15	Unit tripped but never locked out.Unit tripped on upper guide bearing high oil level. Drained some oil.
2823	Cooling system	2005-07-16	2005-07-16	RBK-G2 tripped. Byron Hayter notified. Unit tripped on gland water flow. Flow adjusted and unit available.
2837	Unknown	2005-07-23	2005-07-23	UNIT LOCKED OUT AS WELL AS RBK-T1-B1 AND B2. No trouble found.Power restored, all appeared normal.
2855	Generator Power Transferr	2005-08-11	2005-08-11	S.O.# 130955 in effect to investigate and repair an oil leak in a low voltage bushing on RBK-T1. Also to investigate problem with temperature gauge.repairs made and RTD ordered for temperature guage
2923	Penstock	2005-09-23	2005-09-23	0830 toRBK: S/O # 131166 in effect to inspect Amy's gate/culvert/outlet channel and tailrace for RBK plant.
2953	Generator	2005-10-16	2005-10-19	lead burnt of from windings to contrl box

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
2972	Governor	2005-11-02	2005-11-04	1327 toRBK: S/O # 86973 in effect to check governor oil pump.
3050	Exciter	2005-12-07	2005-12-07	S.O.#131508 in effect to isolate RBK-G2 for brush gear maintenance.
3171	Trash Racks	2006-01-22	2006-01-25	ice build up
3245	Generator	2006-03-07	2006-03-10	S.O. # 131771 in effect to clean and paint head cover on RBK-G2.regular maintenance
3255	Unknown	2006-03-10	2006-03-10	S.O.#131821 in effect to isolate RBK-G2 for scheduled maintenance.
3266	Generator	2006-03-22	2006-03-22	RBK: S/O # 131913 in effect to perform brush gear maintenance on RBK-G2.
3324	Penstock	2006-05-10	2006-05-10	S.O.# 130998 in effect to partially de-water RBK penstock below leak to make repairs and install plate.
3343	Cooling system	2006-05-16	2006-05-16	clean big strainer

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Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1026	Instrumentation / Controls	2003-01-19	2003-01-19	unit tripped off on brush temp temp okay
1046	Cooling system	2003-01-31	2003-01-31	Tripped on upper guide cooling
1055	Cooling system	2003-02-06	2003-02-06	RBK-G2 tripped on upper guide cooling water.□ RBK-G2 Alarm
1122	Turbine	2003-03-04	2003-03-04	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1123	Turbine	2003-03-05	2003-03-05	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1124	Turbine	2003-03-05	2003-03-05	Unit tripped and locked out.Unit tripped on Turbibe Vibration
1125	Cooling system	2003-03-05	2003-03-05	Unit tripped and locked out.□ cooling water flow
1148	Generator	2003-03-20	2003-03-21	Unit locked outUnit meggered before placing on line
1168	Instrumentation / Controls	2003-04-01	2003-04-02	Unit tripped and locked out on Master Shut Down
1169	Surge Tank	2003-04-04	2003-04-05	Unit shut to repair surge tank
1335	Generator	2003-06-16	2003-06-16	Unit tripped and locked outUnit tripped on slip ring temperature
1574	Surge Tank	2003-10-18	2003-10-20	S/O # 84235 to dewater penstock and check leaking manhole cover in surge tank Part of inspection work
1646	Cooling system	2003-11-19	2003-11-19	alarm on cooling G1 PMP notified & G2 locked out
1647	Cooling system	2003-11-19	2003-11-19	
1648	Generator	2003-11-19	2003-11-20	Unit tripped due to load limits at 100% on both units, and starving units of water.
1709	Cooling system	2003-12-12	2003-12-12	unit tripped and g2 alarm on. Unit tripped on upper cooling water fail.
1741	Cooling system	2003-12-26	2003-12-26	unit tripped and alarm on.Cooling water alarm.
1771	Generator Power Transformer	2004-01-08	2004-01-08	personel working on t1 caused the trip
1892	Cooling system	2004-03-11	2004-03-11	Unit tripped on gland cooling water.

Power Plant Availability Detail Records

Date: 2006-06-30

RBK: Rattling Brook G2 - Hydro

Record	Asset Name	Out Of Service Date	Return To Service Date	Description
1921	Cooling system	2004-03-27	2004-03-27	Unit tripped on low cooling water flow.
2073	Cooling system	2004-06-06	2004-06-06	The unit tripped on thrust bearing, low cooling water. Trip is set to trip at 16 gal/min. This happens from time to time on the cooling water systems. Possibly the water control valves are creeping with vibration. We will try tightening the gland nuts and u
2157	Generator	2004-08-01	2004-08-01	unit RBK-G2 failed to synchronize
2164	Turbine	2004-08-04	2004-08-04	RBK-G2 tripped and locked out. Tom Hanlon notified. Unit tripped on overspeed.
2166	Unknown	2004-08-06	2004-08-11	operator at plant call for start from scc unit when on line but tripped
2180	Cooling system	2004-08-14	2004-08-16	UNIT FAILED TO START- TURBINE COOLING WATER ALARM RESET
2191	Cooling system	2004-08-22	2004-08-22	RBK-G2-Alarm activated while trying to start unit. Byron Hayter notified. Turbine bearing water was the cause. Alarm reset and unit put on line.
2192	Cooling system	2004-08-23	2004-08-23	tried to place unit RBK-G2 on line, discrete command close timed out activated. Unit tripped on turbine cooling water.
2294	Cooling system	2004-10-14	2004-10-14	failed to start due to turbine cooling water
2295	Turbine	2004-10-16	2004-10-16	unit would not start remotely due to trip on turbine cooling alarm No follow up req'd
2409	Bearings	2004-12-10	2004-12-10	unit tripped on upper guide thrust bearing. Unit cooling water flow rates continue to cuase trips.
2708	Cooling system	2005-05-21	2005-05-21	unit tripped on Gland water flow strainers cleaned no follow up reqd.
2710	Cooling system	2005-05-23	2005-05-23	General alarm activated and unit tripped. Tom Hanlon notified. Unit tripped on gland water flow.
2764	Governor	2005-06-13	2005-06-13	unit tripped while blowing off govenor
2818	Bearings	2005-07-15	2005-07-15	Unit tripped but never locked out. Unit tripped on upper guide bearing high oil level. Drained some oil.
2823	Cooling system	2005-07-16	2005-07-16	RBK-G2 tripped. Byron Hayter notified. Unit tripped on gland water flow. Flow adjusted and unit available.
2837	Unknown	2005-07-23	2005-07-23	UNIT LOCKED OUT AS WELL AS RBK-T1-B1 AND B2. No trouble found. Power restored, all appeared normal.
2953	Generator	2005-10-16	2005-10-19	lead burnt of from windings to contrl box
3171	Trash Racks	2006-01-22	2006-01-25	ice build up