

December 7, 2016

The Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon
Director Corporate Services & Board Secretary

Dear Ms. Blundon:

**Re: The Board's Investigation and Hearing into Supply Issues and Power Outages on the
Island Interconnection System – Winter Readiness Planning Report – Update**

Further to the Board's correspondence of October 13, 2016, please find enclosed the original plus 12 copies of Hydro's report entitled *A Report to the Board of Commissioners of Public Utilities Regarding 2016-17 Winter Readiness Planning - Update*.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Tracey L. Pennell
Senior Counsel, Regulatory

TLP/bs

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey Stirling Scales
Sheryl Nisenbaum – Praxair Canada Inc.
Roberta Frampton Benefiel – Grand Riverkeeper Labrador

Dennis Browne, Q.C. – Consumer Advocate
Thomas O' Reilly, Q.C. – Cox & Palmer
Larry Bartlett – Teck Resources Limited
Danny Dumaesque

*Investigation and Hearing into Supply Issues and Power Outages on the
Island Interconnected System*

**An Update to the Board of Commissioners of Public Utilities
Regarding 2016-17 Winter Readiness Planning
As of November 30, 2016**

December 7, 2016

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1. BACKGROUND AND INTRODUCTION

On September 13, 2016, the Board of Commissioners of Public Utilities (the Board) requested that Hydro file a report outlining its Winter Readiness Planning for the 2016-2017 season (Annual Winter Readiness Report). Hydro's Annual Winter Readiness Report was filed with the Board on September 30, 2016 for 2016-2017. On October 13, 2016, the Board requested that Hydro update its Annual Winter Readiness Report on October 30 and November 30. In order to enable Hydro to provide the Board with a complete assessment of Hydro's winter readiness status as of December 1, which is Hydro's internal deadline for Winter Readiness, Hydro requested that its final report be submitted on December 7. The Board granted Hydro's request for 2016. This is Hydro's final update to the Annual Winter Readiness Report (the December Update Report). All data in this report is as of November 30, 2016.

This December Update Report addresses the following items as requested by the Board:

1. The status of Annual Work Plan items, in the format previously provided to the Board, for Hydro's generating plants and transmission and terminal stations, including the completion date; outstanding items to complete; and any risks to completion or as a result of failure to complete;
2. A description and schedule for all outstanding 2016 capital projects for Hydro's generating plant and transmission and terminal stations, including progress on completion status to date and expected completion date;
3. The identification of all equipment and plant testing to be carried out in advance of the winter period (generation plant, emergency diesels, black start generators, fire systems, transmission system equipment), including progress on completion status to date;
4. The planned generation outage schedule for the period September to December 31, 2016, including an explanation for any planned outages extending beyond December 1, 2016;
5. An update of critical spares assessment and procurement;

6. The forecast loads and expected generation capacity and reserves (setting out the basis for calculation) for the upcoming winter, as of December 1, 2016, and including capacity assistance agreements in place or planned; and
7. An identification of any risks that could impact the winter readiness of assets as of December 1, 2016 and associated contingency plans.

2. ANNUAL WORK PLAN STATUS

Hydro's Annual Work Plan integrates all planned activities for the year related to the corrective maintenance, preventive maintenance, and capital project support that are critical to providing customers with safe, reliable electricity. Hydro regularly measures and tracks the progress of its Annual Work Plan execution in comparison with plan, down to the level of individual work plan items.

This November Update Report produces a consolidated summary of actual Annual Work Plan progress for the entire plan (first chart in each set) and the winter readiness sub-activities (second chart in each set), versus the plan, as of November 30, 2016 for each of the following areas of operations:

1. Holyrood Thermal Generating Station
 - a. Three generating units and Balance of Plant, including black start diesels.
2. Gas Turbines
 - a. Holyrood Combustion Turbine;
 - b. Hardwoods; and
 - c. Stephenville.
3. Hydraulic Generation
 - a. Bay d'Espoir;
 - b. Cat Arm;
 - c. Hind's Lake;
 - d. Paradise River;
 - e. Upper Salmon; and

- 1 f. Granite Canal.
- 2 4. Transmission and Terminal Stations
- 3 a. Transmission; and
- 4 b. Terminal Stations.
- 5

6 Each chart includes the completed and remaining Annual Work Plan and winter readiness
7 activities, as well as a progress bar indicating the planned task completion target to date.

8 A text box to the right of each winter readiness chart indicates Hydro's forecasted completion
9 status as of November 30, 2016 in relation to the Annual Work Plan winter readiness activities
10 using the Red/Yellow/Green coding:

- 11 • Green: completion remains on target, or mitigation plans are in place to ensure
12 successful completion.
- 13 • Yellow: caution – successful completion is off target, and additional recovery planning
14 and mitigation actions are required.
- 15 • Red: target will not be fully met.
- 16

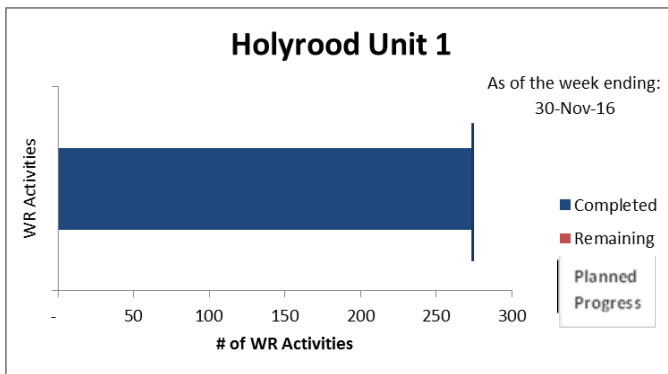
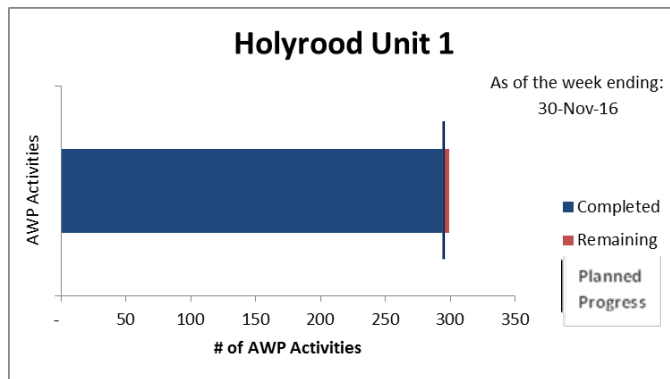
17 Relevant highlights are also provided.

18

19 **2.1 Holyrood Thermal Generating Station**

20 The status of the Annual Work Plan and winter readiness work at Holyrood is summarized in
21 the charts below¹. All of the winter readiness activities are 100% complete for Holyrood. As
22 with any generation asset, routine maintenance activities are completed at Holyrood
23 throughout winter on time or condition basis to ensure assets perform throughout winter.

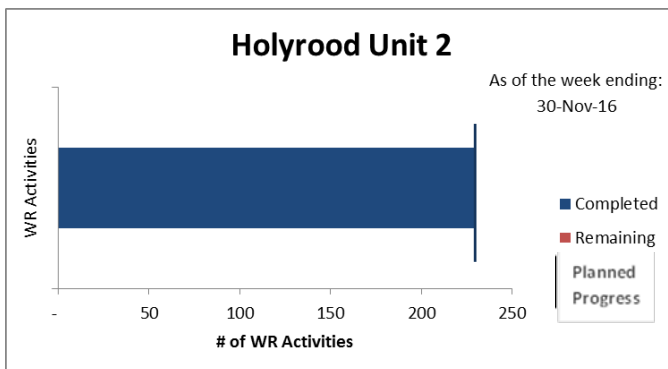
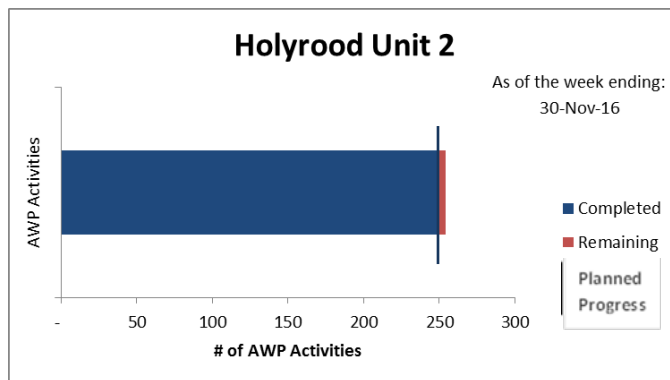
¹ Annual Work Plan and Winter Readiness noted as AWP and WR, respectively, in the following charts.



Forecast Completion Status: (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

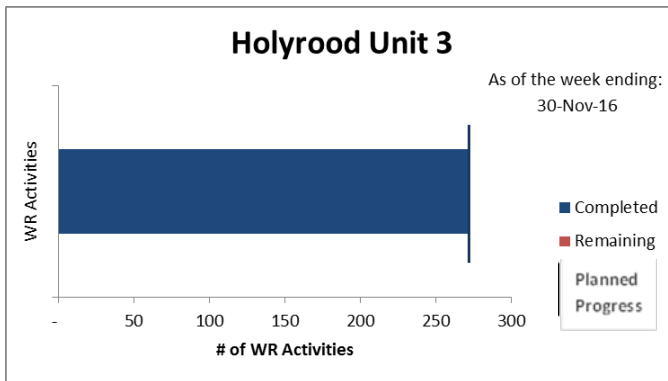
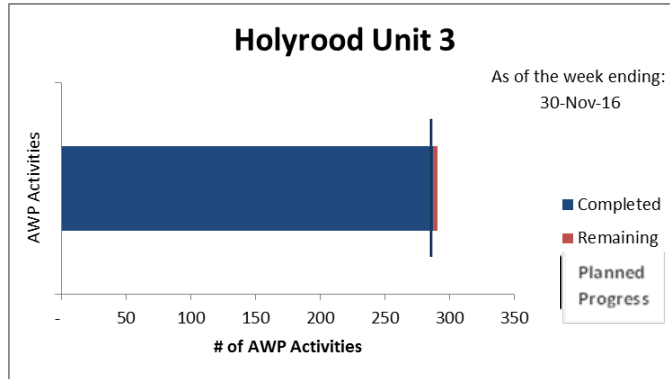
- Overall AWP completion is 98% to date
- All Winter Readiness activities are 100% complete.



Forecast Completion Status: (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

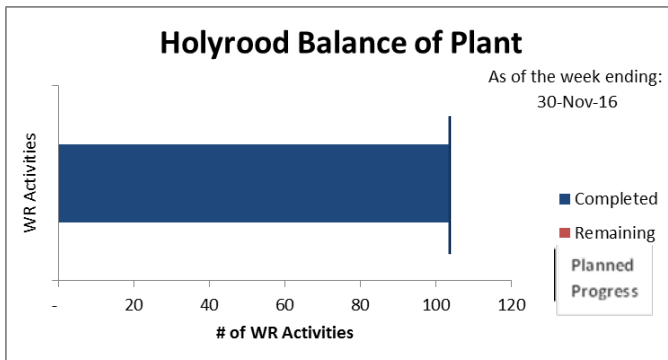
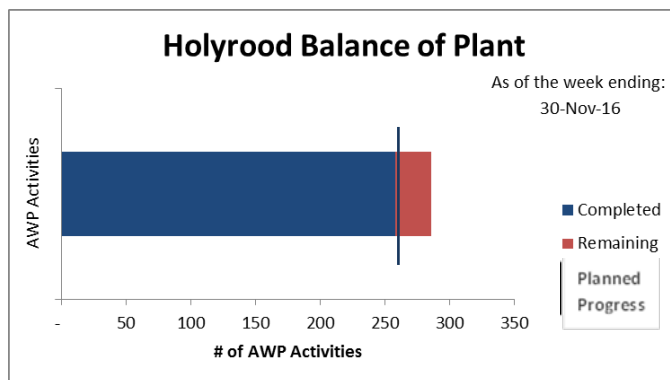
- Overall AWP completion is 98% to date
- All Winter Readiness activities are 100% complete.



Forecast Completion Status: (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion is 99% to date
- All Winter Readiness activities are 100% complete.



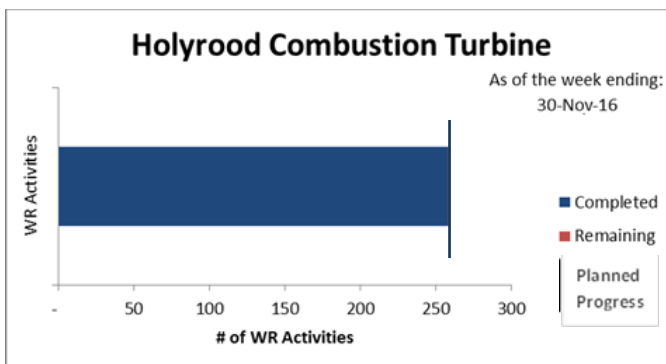
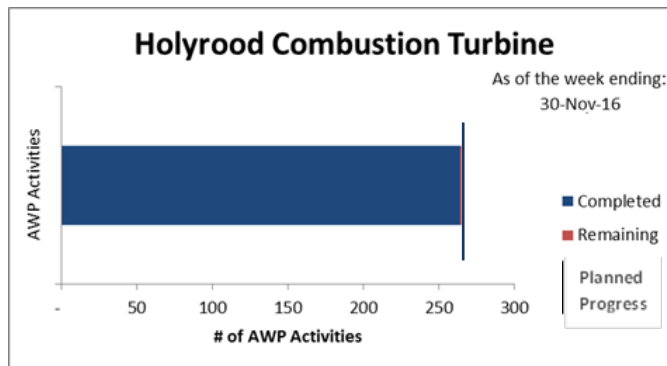
Forecast Completion Status: (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP program completion is 90% to date
- All Winter Readiness activities are 100% complete.

2.2 Gas Turbines

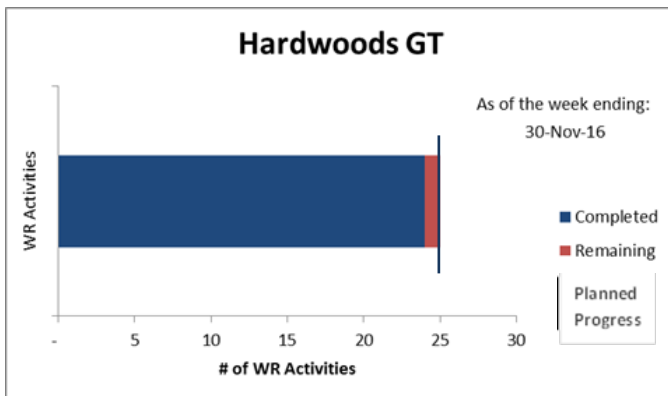
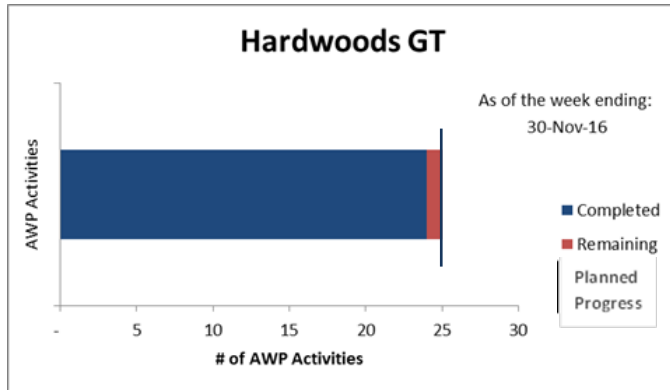
The current status of the Annual Work Plan and winter readiness execution at the Holyrood Combustion Turbine, and the Hardwoods and Stephenville gas turbines is summarized in the following charts. 99.6% of the Annual Work Plan and winter readiness work has been completed for the Holyrood Combustion Turbine. Only one activity, black start of the combustion turbine, remains incomplete. For Hardwoods, 96% of the Annual Work Plan and winter readiness activities are complete, with only the black start of the gas turbine outstanding. Black start tests for Holyrood and Hardwoods are planned for completion as soon as an opportunity permits, anticipated within two weeks. For Stephenville, 85% of the annual work plan and winter readiness activities were complete by November 30, with 93% completion by December 6. Only the black start test, similar to Holyrood and Hardwoods, and the annual inspection of the fire suppression system remain. The black start test will be completed post commissioning of the newly installed engine, and the inspection of the fire suppression system will be during the week of December 12.



Forecast Completion Status: (R/Y/G): Yellow

Comments (e.g. ahead, behind, recovery plan):

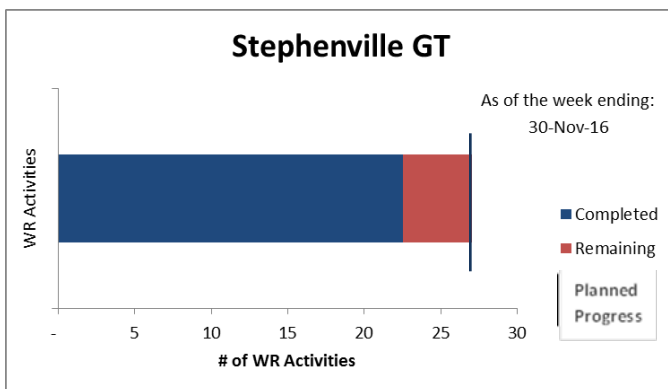
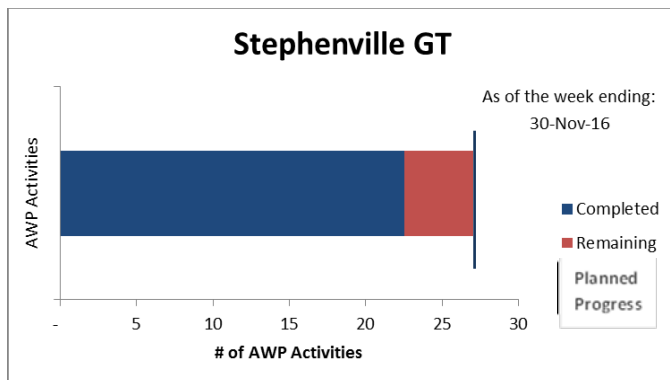
- Overall AWP completion is 99.6%
- All Winter Readiness activities are 96% complete.
- Black start testing remains outstanding due to engine overhaul and will be conducted as soon as an opportunity permits.



Forecast Completion Status: (R/Y/G): Yellow

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion is 96%
- All Winter Readiness activities are 96% complete.
- Black start testing remains outstanding due to engine installation and will be conducted as soon as an opportunity permits.
- HWD's GT was returned to service on December 6 at 50MW.



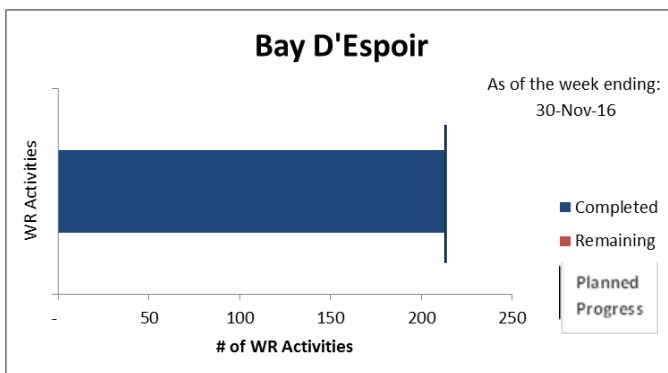
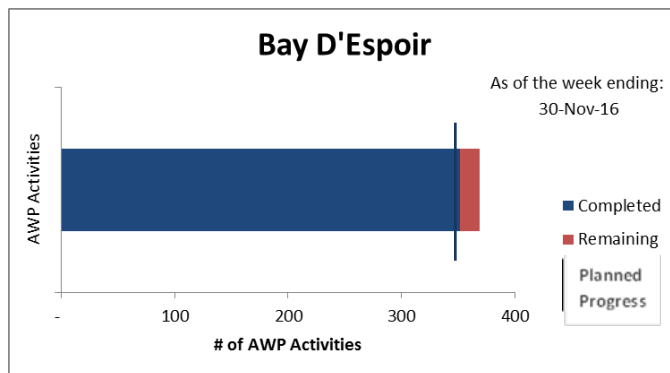
Forecast Completion Status (R/Y/G): Yellow

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion is 85% to date
- All Winter Readiness activities are 85% complete.
- As of December 7, AWP and WR at 93% complete, with two remaining items:
- Black start planned as soon as an opportunity permits after engine commissioning
- Annual fire system inspection during week of December 12

2.3 Hydraulic Units

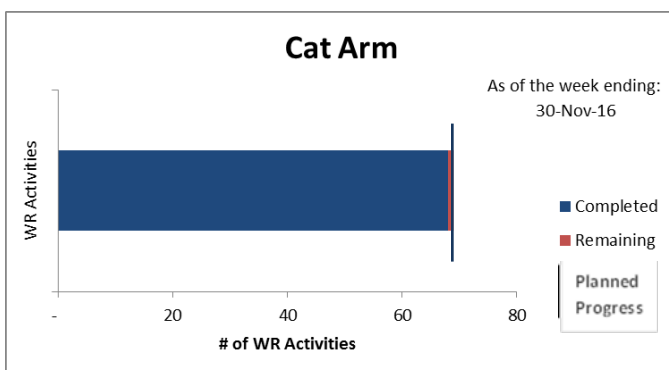
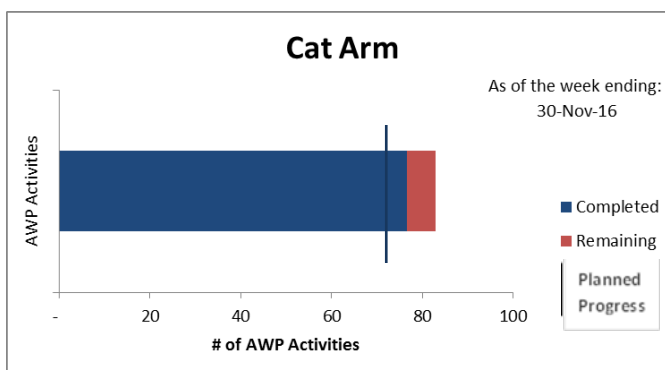
The current status of the Annual Work Plan and winter readiness execution at Bay d’Espoir and other hydraulic generation facilities is summarized in the following charts. Given recent system events (damage from Hurricane Matthew and Bay d’Espoir Penstock 1 weld failure, both of which are discussed further in Section 8), Annual Work Plan execution timing has been reviewed and modified this fall to ensure that critical work activities are still completed as required. One Cat Arm capital project has to be carried over to 2017, with details described in Section 8 and Appendix A, note 16. Two Hinds Lake Winter Readiness activities were delayed while employees addressed a bearing cooler issue at Star Lake, but were completed on December 7.



Forecast Completion Status (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

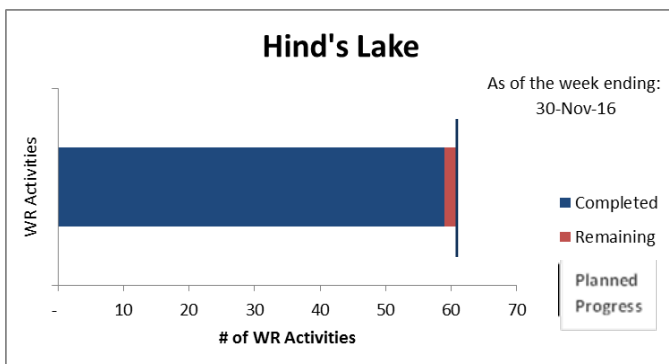
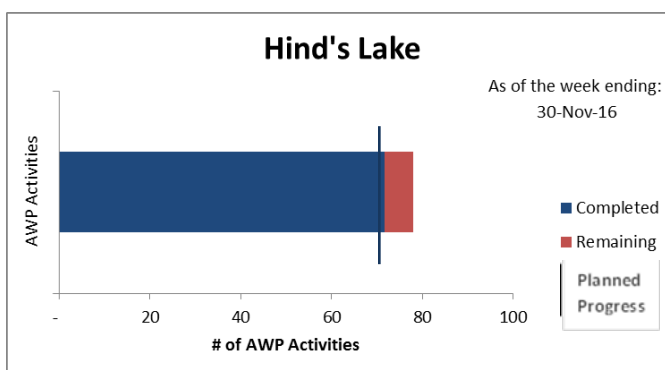
- Overall AWP completion is 95% to date.
- All Winter Readiness activities are 100% complete.



Forecast Completion Status (R/Y/G): Red

Comments (e.g. ahead, behind, recovery plan):

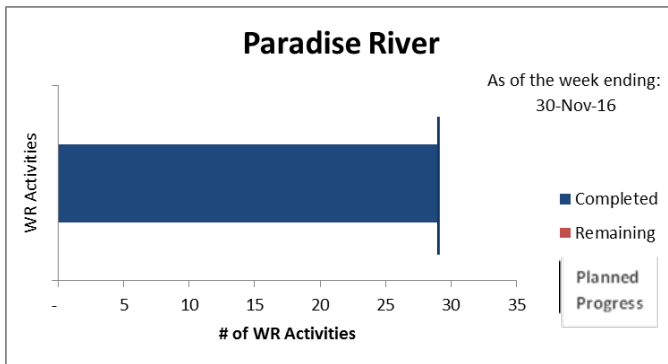
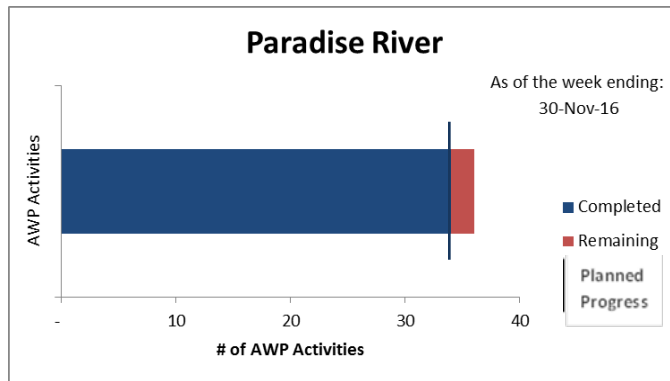
- Overall AWP completion is 93% to date.
- Status noted as red due to 1 winter readiness item related to a capital project that will be carried over to 2017; however, work completed mitigates the risk and Hydro expects no significant risk to the system. Refer to Section 8 and Appendix A, note 16.



Forecast Completion Status (R/Y/G): Yellow

Comments (e.g. ahead, behind, recovery plan):

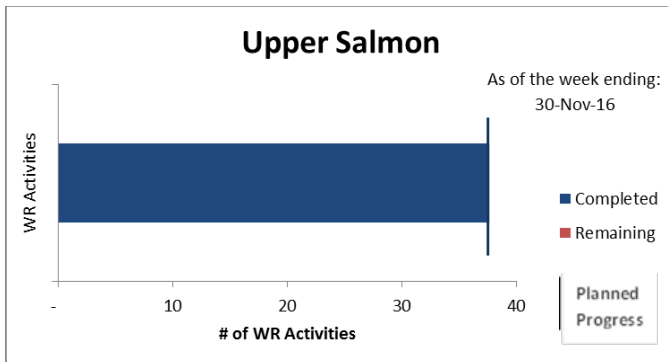
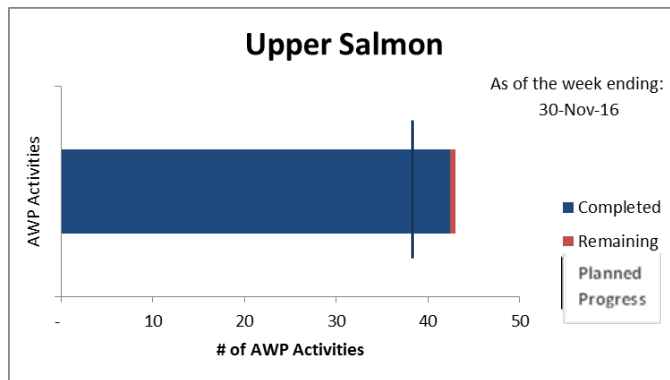
- Overall AWP completion is 92% to date
- Two winter readiness activities are incomplete as of November 30 due to an issue with a bearing cooler at Star Lake, but were completed December 7.



Forecast Completion Status (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

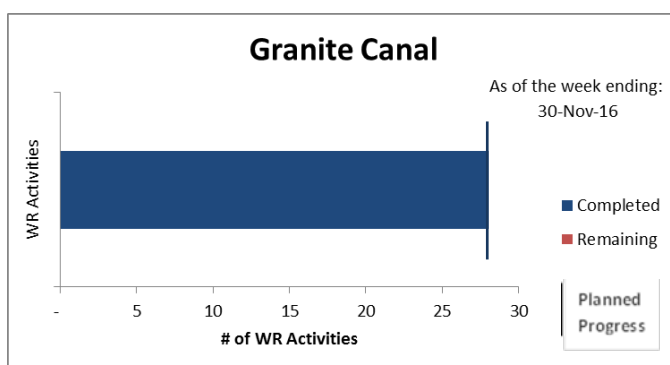
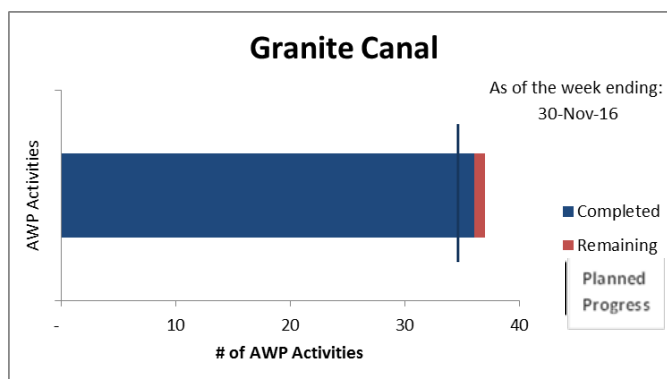
- Overall AWP completion is 94% to date.
- All Winter Readiness activities are 100% complete.



Forecast Completion Status (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion is 98% to date.
- All Winter Readiness activities are 100% complete.



Forecast Completion Status (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion is 97% to date.
- All Winter Readiness activities are 100% complete.

2.4 Transmission and Terminal Stations

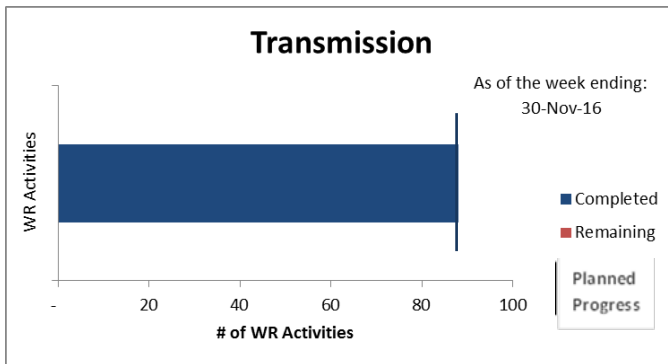
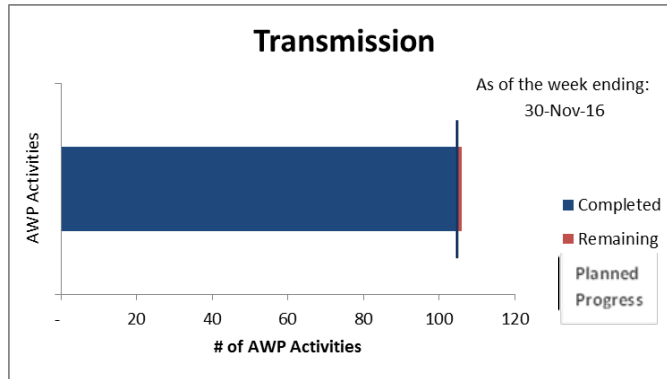
The current status of the Annual Work Plan and winter readiness execution for both transmission line and terminal station facilities on the Island Interconnected System (IIS) (Northern, West and East regions) is summarized in the charts below. All winter readiness activities in Transmission are complete. Fifteen winter readiness items in the Terminal Stations remain incomplete, as follows:

- Preventive maintenance on the Massey Drive B1B5 disconnect switch could not be carried out due to issues on a separate 69 kV disconnect switch. The B1B5 switch was exercised (opened and closed) and fully inspected with no issues identified. The preventive maintenance work for this switch will be carried over to 2017 with low risk of any issues during operation.
- Four other preventive maintenance activities in Massey Drive Station were incomplete as of November 30 due to other higher priority work; however, these work tasks have been scheduled for the week of December 5.

- 1 • Two maintenance activities on the spare T4 transformer in Holyrood were delayed due
2 to the higher priority work and Sunnyside lightning incident investigation on Breaker
3 B3L19; however, these work tasks have been scheduled for the week of December 5.
- 4 • Two actions for relay preventive maintenance activities at the Hardwoods and
5 Sunnyside Terminal Stations had to be delayed for the higher priority Hardwoods
6 engine installation and the Sunnyside lightning incident investigation on Breaker
7 B3L19, and were rescheduled for the week of December 5.
- 8 • Two relay preventive maintenance activities for Granite Canal, including the terminal
9 station and generator relays, were delayed until Bay d’Espoir generating Units 1 and 2
10 were returned to service after the penstock refurbishment was completed. These two
11 actions were completed on December 4.
- 12 • Two preventive maintenance activities at the Hawkes Bay Terminal Station were
13 delayed given that system conditions did now allow for the work to be completed.
14 These tests have been rescheduled for completion during the week of December 5.
- 15 • The annual fall settings for the Bay d’Espoir Terminal Station 2, Transformer T10 and
16 T12, could not be completed due to other higher priority work and will be completed
17 by December 16.
- 18 • The final action item for Terminal Stations is testing of the Change Island’s Sub Station
19 Transformer Oil, and plans will be made for an outage to perform this work. This
20 activity is targeted for completion in December.

21

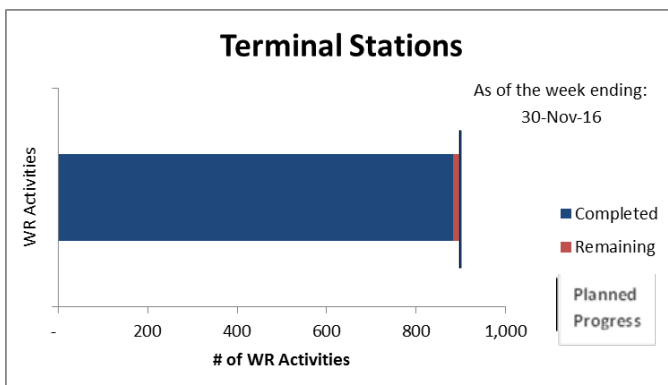
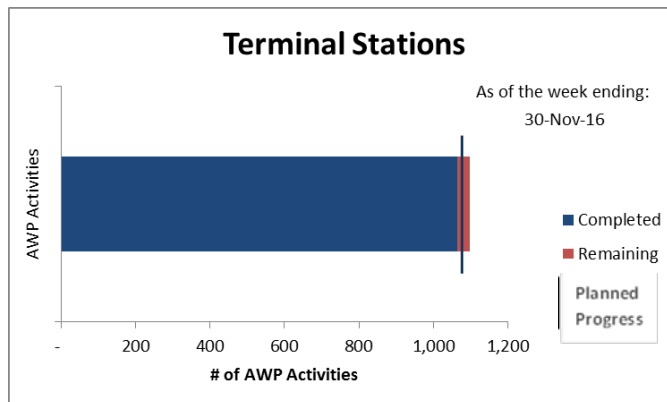
22 As shown, there are 15 outstanding actions in the terminal stations group that were
23 incomplete as of November 30, with all but one low risk item scheduled for completion over
24 the next couple of weeks.



Forecast Completion Status (R/Y/G): Green

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion status is 99%
- All Winter Readiness activities are 100% complete.



Forecast Completion Status (R/Y/G): Red

Comments (e.g. ahead, behind, recovery plan):

- Overall AWP completion status is 97%
- Status noted as red due to 1 activity carried over to 2017; however, this item is a low risk of failure
- 14 other incomplete winter readiness activities have been noted above, with completion prior to year-end.

3. STATUS OF WITNER READINESS CAPITAL PROJECTS

Appendix A of this update identifies the 2016 capital projects that include scope related to 2016-17 winter readiness, and indicates the status of each. Table 3.1 summarizes the status of the winter readiness components of these projects by asset category.

TABLE 3.1 2016 Capital Projects with Winter Readiness Scope				
Asset Category	Complete	Outstanding	Deferred ²	Total
Thermal Generation	11	0	0	11
Hydraulic Generation	8	1	1 ³	10
Gas Turbine Generation	3	1	0	4
Transmission	2	0	0	2
Terminal Stations	7	1	3 ⁴	11
Various (Critical Spares)	0	1	0	1
TOTAL	31	4	4 ^{3&4}	39

Since the filing of its Annual Winter Readiness Report on October 30, 2016, an additional 7 winter readiness projects have been completed and placed in service, totalling 31 of the 39 capital projects that included winter readiness scope.

Under the Hydraulic Generation Asset Category, the outstanding winter readiness work is associated with one unforeseen project – Access Roads Refurbishment (Bay d’Espoir). A small amount of scope (4 out of 34 washouts) remains beyond November 30. Two out of the four washouts were completed on December 6. The final two washouts are being prepped for culvert installation and planned for completion by December 15. Under the Gas Turbine Generation Asset Category, the outstanding winter readiness work is associated with one

² Only small work scopes of the four projects noted are deferred and not the entire project. Refer to relevant notes indicated for each project.

³ Reference note 16 in Appendix A.

⁴ Reference Section 8 and notes 9B, 11B and 13B in Appendix A. Note that only small work scopes are carried over.

1 supplemental project - Gas Generator Engine Refurbishment (Hardwoods and Stephenville).
2 Hardwoods work was completed on December 6, with Stephenville work planned for
3 completion by December 12. Under the Terminal Station Asset Category, the winter readiness
4 work for the project Upgrade Terminal Station Protection and Control associated with Stony
5 Brook Transmission Line 130L was completed on December 2. Finally, under the capital spares
6 category, three high-voltage bushings are expected to be delivered December 15 under this
7 capital project. Refer to Section 6 for additional detail.

8
9 Under the Hydraulic Generation Asset Category, the winter readiness work for the Station
10 Service Breaker Replacement Project for Cat Arm Generating Station has been rescheduled to
11 2017. The work that is being deferred is the upgrade of the programmable logic controller (PLC)
12 for the station service breaker. The primary scope of this project was the replacement of the
13 breaker which was completed in 2015. The PLC upgrade was scheduled for 2016 during the
14 planned outage to Cat Arm Units 1 and 2. That planned outage was compressed as a result of
15 the need for emergency refurbishment of Penstock 1 in Bay d'Espoir starting in the fall of 2016
16 and because there is a maximum amount of generation that can be removed from service on
17 the Island Interconnected System at any one time. The risk of completing the PLC upgrade
18 portion of the project in a compressed 2016 outage was weighed against the risk of carrying the
19 project over to 2017 and it was determined that moving the project to 2017 was the least risk
20 from a winter readiness perspective. The risk of failure through the winter with the existing PLC
21 is low as the plant operation is typically steady state through the winter period. In the unlikely
22 event of failure, the new PLC is ready for installation or the breaker can be operated in manual
23 mode.

24
25 There are some elements of work in the Terminal Station Asset Category that have been
26 deferred to 2017. These are mostly a result of unforeseen events including damage from
27 Hurricane Matthew, vandalism at three terminal stations and the unavailability of Bay d'Espoir
28 Units 1 and 2 due to the requirement to refurbish their penstock. The deferred work includes
29 transformer oil refurbishments at 2 of 8 terminal stations; 1 of 10 breaker refurbishments; and

3 of 35 instrument transformer replacements. While this work has been deferred, Hydro does not anticipate that this will impact reliability of the Island Interconnected System for the winter 2016-2017. Details regarding the cause of the deferrals, as well the risk and mitigation through the winter are provided in the Notes accompanying the table in Appendix A.

Overall, Hydro's capital program in 2016 is on track for a high completion rate of the winter readiness work contained within the projects. Hydro continues to closely coordinate its overall work plan and manage associated risks as we enter the winter of 2016-2017.

4. PLANT AND EQUIPMENT TESTING

In its thermal and hydraulic generation facilities, Hydro follows a structured checklist for planning and documenting its testing and inspection of plant and equipment from a winter readiness perspective.

In its transmission, terminal station and gas turbine operations, Hydro relies on its Annual Work Plan process to plan and track its winter readiness testing and inspection of these assets. The AWP in these areas include planned preventative maintenance (PM) activities, as well as corrective maintenance (CM) items, both of which involve inspection and testing. Planned PMs, CMs, and any other activities pertaining to winter readiness are flagged inside the respective Annual Work Plans, and are therefore tracked separately to ensure prioritization and completion.

4.1 Thermal Generation

Winter readiness testing of generating equipment in Thermal generation is focused primarily around annual unit maintenance outages. Following annual outages, units are run up, synchronized, and all systems are verified before operating status is determined and preparedness is confirmed. Unit load tests are performed at this time as well.

1 The winter readiness testing protocol includes the testing of appropriate Balance of Plant
2 components, as well as the black start diesels and confirming their ability to black start the
3 Holyrood Plant.

4
5 The current status of equipment/plant testing for Thermal Generation is indicated in Appendix
6 B of this Report, with all activities complete consistent with the generation outage schedule
7 shown in Appendix D.

9 **4.2 Hydraulic Generation**

10 Winter readiness testing of generating equipment and balance of plant in Hydraulic Generation
11 is completed using the same process as for Thermal Generation as described in section 4.1
12 above.

13
14 The current status of equipment/plant testing for Hydraulic Generation is indicated in Appendix
15 C of this report with all winter readiness activities complete consistent with the generation
16 outage schedule shown in Appendix D.

18 **4.3 Transmission and Terminal Stations**

19 As noted above, the Annual Work Plans for both Transmission and Terminal Stations are
20 predominantly comprised of PMs and CMs, which involve inspection and testing. Examples of
21 winter readiness activities that are included in the Annual Work Plan work scopes include the
22 following:

- 23 a) Transformer PMs and CMs;
- 24 b) Annual exercises on all high voltage circuit breakers;
- 25 c) Exercise of 230 kV circuit breakers from protection during PM inspections;
- 26 d) Infrared scans at all terminal stations;
- 27 e) Annual ultrasonic leak testing on all terminal station air systems; and
- 28 f) Annual helicopter patrol of transmission lines prior to the winter season.

Annual Work Plan charts which include winter readiness activities are shown in section 2.4 of this report, including details regarding winter readiness activities, including one carry over to 2017 and 14 other activities in the terminal stations group that will be completed prior to year end.

4.4 Gas Turbines – Holyrood, Hardwoods and Stephenville

Examples of winter readiness testing activities that are included in the Annual Work Plan work scopes and maintenance plans for the Hardwoods, Stephenville and Holyrood gas turbines include the following:

- a) PMs and CMs for major components and auxiliary systems;
- b) Black start testing;
- c) Monthly operational testing; and
- d) Execution of capital upgrades and refurbishment.

Annual Work Plan charts which include winter readiness activities are shown in section 2.2 of this report. Black start testing is anticipated to be completed on all gas turbine units when the opportunity permits, anticipated to be within two weeks.

5. GENERATION OUTAGE SCHEDULES

Hydro's 2016 Master Generation Outage Schedule for the period November 27 to December 31, 2016 is attached to this Report as Appendix D. This Schedule includes no planned generation outages beyond November 30, 2016. The actual execution of this year's work resulted in several outages extending into December; however, at the time of writing of this report, the only outstanding generation outage was Stephenville Gas Turbine, which is expected in service by December 12. Also, at the time of writing this report, the firm capacity of Exploits generation assets is about 5 MW less than the 63 MW firm provision. The Exploits generation assets continue to come on-line after the water damage suffered during Hurricane Matthew. Grand Falls Unit 4 (28.5MW) is expected on-line prior to mid-December, which will bring the expected generation availability well above the 63 MW target.

Hydro's critical spares status leading into the 2016-17 winter season is noted below. For the Thermal Generation (Appendix E), Hardwoods and Stephenville Gas Turbines (Appendix F), and Hydro Generation (Appendix G), 98.6% of items are in stock and the remaining 17 items are on order (1.4%).

The spares list for the Holyrood CT is detailed in Appendix F and includes both operational and critical spares. Greater than 50% of these spares are in stock, including the high priority items. Of the remainder, 37 are on order, and 134 are in the procurement process awaiting quotes from vendors. The procurement process continues to acquire these items.

6. CRITICAL SPARES

Hydro's critical spares status leading into the 2016-17 winter season is noted below. For the Thermal Generation (Appendix E), Hardwoods and Stephenville Gas Turbines (Appendix F), and Hydro Generation (Appendix G), 98.6% of items are in stock and the remaining 17 items are on order (1.4%).

The spares list for the Holyrood CT is detailed in Appendix F and includes both operational and critical spares. Greater than 50% of these spares are in stock, including the high priority items. Of the remainder, 37 are on order, and 134 are in the procurement process awaiting quotes from vendors. The procurement process continues to acquire these items.

Spares for 11 critical components at Island Interconnected generation stations were identified as capital spares in 2015, and approved in Board Order P.U. 24(2015). Ten of these spares were received after last year's December 1, 2015 Winter Readiness Report. As noted in the 2015 Winter Readiness Report, the high voltage bushings for Unit 3 had a longer lead time and would not be available until late 2016. These bushings are scheduled for delivery by December 15, 2016. Refer to comment 14A in Appendix A – Status of 2016 Capital Projects Related to Winter Readiness.

7. FORECASED LOADS, CAPACITY AND RESERVES

Table 7.1 has been updated to reflect Hydro's most recent forecasts of customer loads and system power requirements for 2016-17 as expected for the winter season with Island capacity reflecting the return to service of the Hardwoods GT, Stephenville GT, and the remainder of Exploits firm capacity in the first half of December. The forecasts used as the basis for Hydro's September 30, 2016 Winter Readiness report and Hydro's October 30th update are included for comparison.

The updated forecast indicates a minor decrease in peak load, over the October 30, 2016 report, resultant from updated transmission loss modelling, as conveyed in Hydro's Energy Supply Risk Assessment, filed with the Board on November 30, 2016.

The Capacity at Peak in Table 7.1 includes the most recent information for system gross continuous unit ratings, as provided by Hydro's System Operations department. Note that the Capacity at Peak includes 7.6 MW of capacity assistance provided by Vale as demonstrated in the annual test conducted on November 24, 2016. This results in a capacity at peak of 2006 MW. In the September and October filings, Vale capacity assistance had been included at the 2015 test value of 10.8 MW, resulting in a capacity at peak of 2009 MW.

The calculated percent reserve margin remains at 17%, once assets are returned to service as expected.

Hydro's capacity and reserve forecasts continue to include 90 MW of capacity assistance, achieved via additional generation and load curtailment under the capacity assistance agreements Hydro currently has in place.

Table 7.1 indicates Hydro's forecasts for the 2016-17 winter season.

TABLE 7.1 Forecasts of Peak Load, Capacity and Reserves – 2016-17							
		Sept 30 Report		Oct 30 Update		Expected Winter Availability	
A	IIS Peak Load – P90	1,801 MW		1,803 MW		1,800 MW	
B	Subtract: Curtailable Load (-90 MW)	1,711 MW		1,713 MW		1,710 MW	
C	Capacity at Peak ⁵	1,994 MW		2,009 MW		2,006 MW	
	Reserves (C-B)	283 MW	17%	296 MW	17%	296 MW	17%

1
2 Additionally, as detailed in its Energy Supply Risk Assessment filed November 30, 2016, Hydro
3 has identified that the securing of 10 MW of incremental curtailable load on the Avalon
4 Peninsula would be beneficial in advance of the in-service of TL267. Hydro is in the late stages
5 of negotiation for such agreements and anticipates submitting an application to the Board for
6 the same in the near future. Table 7.2 indicates Hydro's forecasts for the 2016-17 winter season
7 with an incremental 10 MW of curtailable load.
8

TABLE 7.2 Forecasts of Peak Load, Capacity and Reserves – 2016-17									
		Sept 30 Report (incl. 15 MW additional curtailable load)		Oct 30 Update (incl. 15 MW additional curtailable load)		As of Dec 1 (incl. 10 MW additional curtailable load)		Expected mid-Dec (incl. 10 MW additional curtailable load)	
A	IIS Peak Load – P90	1,801 MW		1,803 MW		1,800 MW		1,800 MW	
B	Subtract: Curtailable Load (-105 MW)	1,696 MW		1,698 MW		1,700 MW		1,700 MW	
C	Capacity at Peak	1,994 MW		2,009 MW		1900 MW		2,006 MW	
	Reserves (C-B)	298 MW	18%	311 MW	18%	200 MW	12%	306 MW	18%

⁵ Hydro notes that the two wind farms on the IIS are not included in this reserve capacity but are additions to this value each day as environmental conditions permit.

1 **8. RISKS AND RISK MITIGATION**

2 In the last couple of months, three significant events resulted in projects being added to
3 Hydro's 2016 Capital and maintenance programs. These include: 1) Bay d'Espoir Penstock 1
4 weld failures, 2) Hurricane Matthew impacts, and 3) station grounding vandalism. Hydro
5 modified the execution of its programs to address these events, as detailed below, in order to
6 mitigate the level of risk exposure to winter readiness.

7
8 **8.1 Capital Work**

9 Upon review of the Annual Work Plan, four 2016 capital projects were affected by the above
10 noted events to a point where small components of the project work has to be carried over to
11 2017. In all cases, risk assessment and appropriate mitigation has been carried out to minimize
12 impact, and Hydro is not anticipating any operational issues during the 2016/2017 winter
13 season related to delay in completion of these components. The details can be found in notes
14 9A, 11A, 13A and 16 in Appendix A.

15
16 **8.2 Gas Turbine Refurbishments**

17 Failure at the Hardwoods and Stephenville gas turbine facilities in the winter of 2016 resulted in
18 damage to one of the two Hardwoods gas turbine engines and one of the two Stephenville gas
19 turbine engines. This necessitated an overhaul of these engines. Refurbishment work has been
20 completed; however, delay at the out of province test facility consumed the available float in
21 the schedule for both Stephenville and Hardwoods. The engines arrived in Newfoundland and
22 were being installed; however, an auto-synchronization issue at Hardwoods hampered the
23 installation schedule. This issue was corrected, but the engines installation continued into
24 December. The Hardwoods engine was fully commissioned and operational on December 6,
25 restoring Hardwoods generation capacity to 50 MW. The commissioning of the Stephenville
26 engine continues with an expected in-service date of December 12.

8.3 Bay d’Espoir Penstock 1 Refurbishment

Bay d’Espoir Penstock 1 serving Units 1 and 2 experienced two longitudinal weld failures, the first in May, 2016 and the second in September, 2016. Detailed condition assessment on the penstock identified the requirement to refurbish 700 m of penstock weld, including grinding out the affected weld material, testing of the ground out area, and re-welding the affected areas, followed by a final weld inspection. Hydro initiated a major refurbishment program that was carried out until late November to replace these affected welds, and was completed with both Units 1 and 2 returning to service prior to the winter readiness deadline. Given that Bay d’Espoir Units 1 and 2 are unavailable during this time, a refocusing of the execution of the Annual Work Plan has been initiated to ensure that the Annual Work Plan activities can be completed. This refocusing effort has affected the work activities required for the Cat Arm, Hinds Lake and Upper Salmon facilities. The planned outage in Cat Arm Unit 2 had to be reduced, and therefore some non-critical winter readiness work items were not completed as planned. These items do not require an outage, and were completed in November. The Hinds Lake outage was shortened to accommodate the system constraints, and therefore some non-critical capital work has been deferred as noted above, and a couple of planned required maintenance activities will be completed during the first week of December. Because of the Penstock 1 refurbishment program had initially moved the work at Upper Salmon ahead in the schedule to accommodate the modified execution plan, damage from Hurricane Matthew cut off access to the plant, as discussed below, further modifying the plan.

8.4 Damage Caused by Hurricane Matthew

On October 11, Hurricane Matthew tracked over the south coast of Newfoundland, depositing a significant rainfall event exceeding 200 mm, and causing extensive damage to 34 river and stream crossings in the Bay d’Espoir and Upper Salmon access road system. Although the original response to the Penstock 1 refurbishment program resulted in acceleration of the capital and maintenance work at Upper Salmon, damage from Hurricane Matthew cut off access to the facility, and the planned capital work, as detailed above, had to be deferred to 2017. These deferred activities will not affect the winter readiness of this facility. The

1 maintenance activities that are required to be completed under outage were completed as
2 required for December 1, 2016.

3
4 **9. CONCLUSION**

5 The results of Hydro's current review of the year-to-date completion status of its annual work
6 plan for its island interconnected system assets indicate that there have been adjustments
7 made to accommodate various events outside the company's control; however, the majority of
8 the remaining winter readiness work is on track for December 1, 2016, with some necessary
9 capital carry-over to 2017 due to the recent significant events, and some winter readiness items
10 left to be completed in early December. As of November 30, all Hydro generation assets, with
11 the exception of the two refurbished engines at Hardwoods and Stephenville, are on-line, with
12 Hardwoods returning to service on December 6 and Stephenville planned for December 12. Any
13 adjustments in schedule for delayed and carry-over items are understood and low risk. Hydro
14 will continue to track any remaining required winter readiness activities and take appropriate
15 action where needed.

APPENDIX A

Status of 2016 Capital Projects Related to Winter Readiness

2016-17 Winter Readiness - Update

HYDRO ISLAND INTERCONNECTED SYSTEM - CAPITAL WINTER READINESS PROJECTS - STATUS

Asset Category	Project Description	Expected In Service Date (for 2016 Winter Readiness Scope) September 30 Update	Expected In Service Date (for 2016 Winter Readiness Scope) October 30 Update	Expected In Service Date (for 2016 Winter Readiness Scope) November 30 Update
Thermal Generation	Turbine Generator Overhaul - Unit 3 - Holyrood	Complete	Complete	Complete
Thermal Generation	Overhaul Unit 2 Cooling Water Pump - East - Holyrood	Complete	Complete	Complete
Thermal Generation	Overhaul Unit 2 Extraction Pump - North - Holyrood	Complete	Complete	Complete
Thermal Generation	Overhaul Unit 1 Boiler Feed Pump - West - Holyrood	11/1/2016	Complete	Complete
Thermal Generation	Rewind Rotor and Install Flux Probe - Unit 3 - Holyrood	Complete	Complete	Complete
Thermal Generation	Replace Excitation Transformers - Holyrood	11/1/2016 Note 1	11/1/2016 Note 1A	Complete
Thermal Generation	Purchase of 12 MW Diesel Generators - Holyrood	Complete	Complete	Complete
Thermal Generation	Replace Boiler Tubes - Unit 1 & 2 - Holyrood	11/1/2016 Note 2	Complete	Complete
Thermal Generation	Boiler Reheater Tubes - Unit 2 - Holyrood (Unforeseen)	Complete	Complete	Complete
Thermal Generation	Boiler Reheater Tubes - Unit 1 - Holyrood (Unforeseen)	Complete	Complete	Complete
Thermal Generation	Replace Air Receivers & Compressors - St. Anthony Diesel Plant	10/21/2016	Complete	Complete
Hydraulic Generation	Overhaul and Inspection - Unit 6 - Bay d'Espoir	Complete	Complete	Complete
Hydraulic Generation	Thrust Bearing Refurbishment - Units 1-6 - Bay d'Espoir	Complete	Complete	Complete
Hydraulic Generation	Overhaul and Inspection Unit 7 - Bay d'Espoir	Complete	Complete	Complete
Hydraulic Generation	Replace Generator Cooling Water Piping - Hinds Lake	11/26/2016	11/12/2016 Note 15	Complete
Hydraulic Generation	Replace Vibration Monitoring System - Unit 7 - Bay d'Espoir	Complete	Complete	Complete
Hydraulic Generation	Turbine Rehabilitation of Unit 4 - Bay d'Espoir	Complete	Complete	Complete
Hydraulic Generation	Station Service Breaker Replacement - Cat Arm	10/28/2016	2017 Note 16	2017
Hydraulic Generation	Upgrade Work - Units 1 & 2 - Cat Arm	10/22/2016	Complete Note 17	Complete Note 17A
Hydraulic Generation	Penstock 1 Refurbishment - Bay d'Espoir (Unforeseen)	N/A	12/1/2016 Note 18	Complete
Hydraulic Generation	Access Roads Refurbishment - Bay d'Espoir (Unforeseen)	N/A	12/15/2016 Note 19	Note 19A
Gas Turbines	Snow Door Overhaul - Hardwoods	Complete	Complete	Complete
Gas Turbines	Upgrade Gas Turbine Plant Life Extension - Stephenville	11/4/2016 Note 3	Complete	Complete
Gas Turbines	Gas Generator Engine Refurbishment - Hardwoods & Stephenville	11/28/2016 Note 4	11/29/2016 Note 4A	12/05/2016 Note 4B
Gas Turbines	Combustion Turbine Inspection and Overhaul - Holyrood	11/19/2016 Note 5	11/18/2016	Complete
Transmission	Perform Wood Pole Management Program - Various Sites	11/15/2016 Note 6	Complete	Complete
Transmission	Insulator Replacement - TL203	Complete	Complete	Complete
Terminal Stations	Replace Interrupter Breaker B3L50 - Bottom Brook	Complete	Complete	Complete
Terminal Stations	Exciter Refurbishment - Corner Book Frequency Convertor	10/28/2016	10/28/2016	Complete
Terminal Stations	Replace Batteries & Chargers - Various Sites	11/15/16 Note 7	11/15/2016 Note 7A	Complete
Terminal Stations	Upgrade Terminal Stations Protection & Control - Various Sites	11/15/2016	11/30/2016 Note 20	Note 20A
Terminal Stations	Replace Disconnects - 2015-2016 - Various Sites	10/18/2016 Note 8	Complete	Complete
Terminal Stations	Upgrade Power Transformers - Various Areas	11/15/2016 Note 9	Note 9A	Note 9B
Terminal Stations	Replace Surge Arrestors - Various Areas	10/21/2016 Note 10	Complete	Complete
Terminal Stations	Replace Instrument Transformers - Various Areas	10/18/2016 Note 11	11/11/2016 Note 11A	Note 11B
Terminal Stations	Upgrade Aluminum Support Structures - Holyrood	10/27/2016	11/4/2016 Note 21	Complete
Terminal Stations	Upgrade Circuit Breakers 2015-2016 - Various Sites	10/16/2016 Note 12	Complete	Complete
Terminal Stations	Upgrade Circuit Breakers 2016-2020 - Various Sites	11/15/2016 Note 13	11/15/2016 Note 13A	Note 13B
Various	Purchase Critical Spares - Generating Stations	12/1/2016 Note 14	12/15/2016 Note 14A	12/15/2016

NOTES

1 - The 2016 winter readiness scope of work is to replace excitation transformers on Units 1 and 2 at Holyrood. The work is complete for Unit 2. The work is in progress for Unit 1.

1A - The construction work is complete for Unit 1. Final commissioning will be completed when Unit 1 is brought back into operation.

2 - This is a supplemental project approved by the Public Utilities Board on June 10, 2016. The 2016 winter readiness scope of work includes boiler tube replacements for Units 1 and 2 at Holyrood. The work is complete for Unit 2. The work is in progress for Unit 1.

3 - The 2016 winter readiness scope of work includes: main lube oil glycol system replacement; and exhaust stack repairs. The main lube oil glycol system replacement is complete. The exhaust stack repairs are in progress.

4 - This is a supplemental project approved by the Public Utilities Board on June 15, 2016. The 2016 winter readiness scope of work includes the refurbishment of one engine for Hardwoods and one engine for Stephenville. Both engines are presently at the repair facility. Hardwoods is expected to be in service on November 22, 2016 and Stephenville is expected to be in service on November 28, 2016.

4A - There is a slight change to the in-service dates. Hardwoods is expected to be in service on November 24, 2016 and Stephenville is expected to be in service on November 29, 2016.

4B - The work at the repair facility is complete and both engines have been returned to the sites. The construction work at Hardwoods is complete. Final commissioning is delayed due to an unforeseen issue with unit synchronization. Resources are on site working to resolve the issue. The work at Stephenville is in progress with expected completion on December 5, 2016.

5 - This is a supplemental project approved by the Public Utilities Board on September 23, 2016. The 2016 winter readiness scope of work includes a combustor inspection and overhaul of the Combustion Turbine at Holyrood. The project is in the planning and procurement phase and is expected to be completed by November 19, 2016.

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6 - The 2016 winter readiness scope of work includes work on six transmission lines. The work for five transmission lines is complete. The remaining work, for TL201, is expected to be complete by November 15, 2016.

7 - The 2016 winter readiness scope of work includes the replacement of battery banks at two sites and the replacement of chargers at three sites. One battery bank and one charger have been replaced. The remaining battery bank to be replaced is at Buchans and the remaining chargers to be replaced are at Plum Point and Western Avalon. All of these are expected to be in service by November 15, 2016.

7A - The battery charger at Plum Point is complete. The work at Buchans and Western Avalon remains on schedule.

8 - The 2016 winter readiness scope includes the replacement of fourteen disconnect switches, of which ten are complete. The remaining four, located at Come By Chance and Hardwoods, are expected to be completed by October 18, 2016.

9 - The 2016 winter readiness scope of work includes transformer refurbishments at eight terminal stations and the replacement of two transformers at Bay d'Espoir and Cat Arm. Transformer refurbishments at six terminal stations are complete and the new Bay d'Espoir transformer is in service. The two remaining refurbishments are located at Upper Salmon and Hinds Lake and are expected to be completed by November 15, 2016. The new Cat Arm transformer is on site and installation is in progress with an expected in service date of October 28, 2016.

9A - The new Cat Arm transformer is now in service. The refurbishment of the transformer at Upper Salmon has been rescheduled to 2017 due to road washouts from Hurricane Matthew and the inability to get people and equipment to site during the planned outage. System conditions prevent the rescheduling of this outage in 2016. The refurbishment work was to process the oil to improve oil quality and therefore reduce the probability of dielectric failure. The risk and appropriate mitigation through this winter is being assessed. At Hinds Lake, internal cleaning and oil processing was planned for the two unit transformers. However, the outage window has been significantly shortened as a result of a revised generation outage schedule. The generation outage schedule was revised in order to schedule emergency refurbishment for Bay d'Espoir Penstock 1. The shortened outage means that the oil will be processed for only one of the two transformers at Hinds Lake. To reduce the risk on the second transformer, an inspection and cleaning was performed by Hydro, which is deemed to be sufficient to mitigate the risk of failure during the 2016/2017 winter season. The internal cleaning and oil processing on the second transformer will be rescheduled to 2017.

9B - Oil processing was successfully completed for one of the two transformers at Hind's Lake. Inspection and cleaning was completed on the second transformer at Hind's Lake with no issues. The remaining work for the second transformer has been re-scheduled to 2017. A significantly shortened outage window became available at Upper Salmon which permitted some limited transformer oil processing to mitigate the failure risk during the 2016/2017 winter season.

10 - The 2016 winter readiness scope of work includes the replacement of nine surge arrester sets at seven locations. Eight of the surge arrester sets have been replaced. The ninth surge arrester set is for Stony Brook and is expected to be in service by October 21, 2016.

11 - The 2016 winter readiness scope of work includes the replacement of 35 instrument transformers at 12 locations. To date, 21 instrument transformers have been replaced. The remaining 14 instrument transformers to be replaced are at Holyrood, Stephenville, Massey Drive, ~~Cat Arm~~, Stony Brook, Howley and Hardwoods. All of these are expected to be in service by October 18, 2016. (Corrections noted in colour.)

11A – An additional 8 instrument transformers are now in service for a total of 29 of 35 in service. Of the remaining 6, 3 are expected to be completed in 2016 and 3 have been deferred to a future year. Two of the three deferrals resulted from pre-construction inspections that revealed that the instrument transformers are in acceptable condition to extend their replacement to a future year. Delays were incurred with the start of the Howley instrument transformer replacement as a result of the unavailability of labour resources and the mobile substation, due to grounding vandalism damage restoration in three substations. The mobile substation could not be removed safely from the South Brook Terminal Station. Without the mobile substation, an 8-hour customer outage would be required to complete the work. It has been decided to defer this work beyond 2016 to align with other work at Howley and the availability of the mobile substation. The risk and appropriate mitigation through this winter is being assessed. The remaining three instrument transformers to be replaced in 2016 are at Holyrood and are scheduled to be in service by November 4, 2016.

11B - The three remaining instrument transformers at Holyrood are installed and in service. For Howley, the instrument transformer failure risk will be mitigated by performing monthly infrared scans and, in the unlikely event of a failure of this instrument transformer, Hydro will be construction-ready to replace it.

12 - The 2016 winter readiness scope of work includes the replacement or refurbishment of twelve breakers. The work is complete for eleven breakers. The twelfth breaker is at Bay d'Espoir and is expected to be in service by October 16, 2016.

13 - The 2016 winter readiness scope of work includes the assessment, replacement or refurbishment of ten breakers. The work for six breakers is complete. The remaining locations are Howley, Bear Cove, Plum Point and the Corner Brook Frequency Converter. The last of these is expected to be in service by November 15, 2016.

13A - The remaining work at Bear Cove, Plum Point and Corner Brook Frequency Converter is on schedule. Delays were incurred with the start of the Howley breaker refurbishment work as a result of unavailability of labour resources and the mobile substation, due to grounding vandalism damage restoration in three substations. The mobile substation could not be removed safely from the South Brook Terminal Station. Without the mobile substation, an 8-hour customer outage would be required to complete the work. It has been decided to defer this work beyond 2016 to align with other work at Howley and the availability of the mobile substation. In the event of a premature failure, parts will be readily available to perform emergency replacement.

13B - The remaining work at Bear Cove, Plum Point and Corner Brook Frequency Converter is complete.

14 - This is a supplemental project approved by the Public Utilities Board in July 2015 for the procurement of various critical spare components for several hydraulic, thermal and gas turbine generating facilities. All spare components have been received with the exception of high voltage bushings for Unit 3 at Holyrood. These bushings are expected to be received by December 1, 2016.

14A - The vendor has revised the delivery date for the Holyrood Unit 3 spare high voltage bushings to December 15, 2016.

15 - The 2016 winter readiness scope is to replace cooling water piping. The original outage for this work was three weeks in duration. That planned outage has been compressed to 10 days as a result of the need for emergency refurbishment of Penstock 1 in Bay d'Espoir starting in the fall of 2016. The work plan has been adjusted to complete the work within the new outage window. There is risk that not all of the piping will be replaced in 2016 due to this reduced outage duration. The construction crew will focus on the piping in the most critical condition.

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16 - The 2016 winter readiness scope is to upgrade the programmable logic controller (PLC) for the station service breaker. This work is rescheduled to 2017. The primary scope of this project was replacement of the breaker which was completed in 2015. The PLC upgrade was scheduled for 2016 during the planned outage to Cat Arm Units 1 and 2. That planned outage was compressed as a result of the need for emergency refurbishment of Penstock 1 in Bay d'Espoir starting in the fall of 2016. The risk of completing this project in a compressed 2016 outage was weighed against the risk of carrying the project over to 2017 and it was determined that moving the project to 2017 is the least risk from a winter readiness perspective. The risk of failure through the winter with the existing PLC is low as the plant operation is typically steady state through the winter period. In the unlikely event of failure, the new PLC is ready for installation.

17 - This is a 2016-2017 project which includes replacement of the deflector servomotors for Cat Arm Units 1 and 2. The deflector servomotor for each unit allows deflector plates to track next to the needle valve water jets in the turbine area. During an emergency shut down of the unit, the deflector plates move in front of the needle valves preventing water from hitting the turbine buckets. The 2016 winter readiness scope in this project was to replace the deflector servomotor for Cat Arm Unit 2 with the available spare deflector servomotor, to prove its function prior to ordering two replacement servomotors for installation in 2017. The spare servomotor was installed but exhibited excessive leakage during commissioning. The spare servomotor was removed and the original servomotor has been re-installed with new seals and is in service for the winter. The leaking from the spare servomotor is being investigated and will allow Hydro to incorporate a solution into the new servomotors next year. The risk and appropriate mitigation through this winter is being assessed.

17A - The original servo motor was rebuilt with new seals installed prior to being put back into service. Based on previous operating experience, it is expected to operate throughout the winter without issue. In the meantime, we are working with the manufacturer to correct issues with the new servo motor for installation in 2017.

18 - This is an urgent and unforeseen project as per the notification to the Public Utilities Board on October 14, 2016. The 2016 winter readiness scope is to refurbish the substandard penstock welds. Contractor mobilization is in progress. The December 1 in-service date is preliminary and subject to revision once the pace of the welding is established.

19 - This is an urgent and unforeseen project as per the notification to the Public Utilities Board on October 14, 2016. The 2016 winter readiness scope is to refurbish roads that were washed out due to Hurricane Matthew on October 10, 2016. The work is in progress. The December 15 in service date is preliminary and subject to revision once the work scope and resource plans are further defined.

19A - The work scope is defined and resources are in place. All work is expected to be complete by December 15. The scope includes the refurbishment of 34 washouts of which 30 are complete. Two of the remaining 4 washouts are impassable but near completion. The other 2 are impassable and near completion but an alternate route is available.

20 - The 2016 winter readiness scope is: (1) the upgrade of breaker fail protection systems at Bay d'Espoir Terminal Station 1; and (2) the upgrade of line protection equipment for Transmission Lines 133L and 130L at Stony Brook Terminal Station. Construction is substantially complete and completion is dependant on securing the required equipment outages. The remaining work at Bay d'Espoir has been delayed by 17 days as a result of a revised generation outage schedule. The generation outage schedule was revised in order to schedule emergency refurbishment for Bay d'Espoir Penstock 1. The remaining work at Bay d'Espoir for this project has been rescheduled to be completed during individual daily outages beginning November 7 and continuing until December 2. The required outage for work at Stony Brook associated with 133L is on schedule for October 24 to November 13. The required outage for work at Stony Brook associated with 130L has been delayed and is now scheduled for November 14 to 30. This delay is a result of a separate outage in progress for Newfoundland Power's work on 132L, which is delayed. (Both outages cannot proceed at the same time.) None of these outages will result in customer impact.

20A - The upgrade of breaker fail protection systems at Bay d'Espoir Terminal Station 1 is in progress with 2 of 11 breakers completed. Further delays were experienced due to delayed in-service of an LCP breaker at Bay D'Espoir Terminal Station 1. The remaining work at Bay d'Espoir for this project has been rescheduled to be completed during individual daily outages by December 22. The upgrade of line protection equipment for Transmission Line 133L at Stony Brook Terminal Station is complete. The completion of line protection equipment upgrade for Transmission Line 130L at Stony Brook Terminal Station has been delayed slightly to Dec. 2, 2016.

21 - The winter readiness scope is to upgrade aluminum supports for five structures at Holyrood Terminal Station. The work is in progress with a revised completion date of November 4, 2016. Minor delays were experienced due to the addition of one structure identified during the pre-construction survey as well as the need to modify some of the temporary support structures to suit field conditions.

APPENDIX B

Status of Winter Readiness Testing of Plant and Equipment
Holyrood Thermal Generating Station
As of November 30, 2016

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Plant:

Following Annual outages, Unit is run up, Synchronized and all Systems verified before Operating Status determined, as per ECC, prior to coming Winter Operating Season to ensure preparedness. A Unit Load Test is performed at this time.	✓	✓	✓	N/A
Black Start Test of the black start diesel systems is performed prior to the Winter Operating Season.	N/A	N/A	N/A	✓
Perform Megger testing of 600 volt motors prior to the Winter Operating Season.	✓	✓	✓	✓

Safety:

Boiler Service Pressure Test performed as required by Regulator.	✓	✓	✓	N/A
Safety Valves testing as required.	✓	✓	✓	N/A
Boiler Operational Off-Line High / Low Drum Level Trip Tests.	✓	✓	✓	N/A
Breaker & Disconnect Operation verified by Ops. Dept. & Whitbourne Crew.	✓	✓	✓	N/A

Service Air and Instrument Air Systems:

All Stationary Air Compressors available.	N/A	N/A	N/A	✓
Air Compressor operational checks performed (e.g. oil levels, cooling water, etc.)	N/A	N/A	N/A	✓
Air Compressor STBY / Sequencing capability.	N/A	N/A	N/A	✓

Raw and Makeup Water System:

Quarry Brook Dam Integrity.	N/A	N/A	N/A	✓
Raw Water Sump Water Supply Control Valve operational.	N/A	N/A	N/A	✓
Raw Water Pumps operational.	N/A	N/A	N/A	✓
Adequate supply of Chemicals (1172, 1179, Polymer, etc.).	N/A	N/A	N/A	✓
1172, 1179, Polymer Injection Pumping Sets, Pumps, valves, lines, agitators, etc. operational.	N/A	N/A	N/A	✓
Portable Diesel Pump check of Emergency Plant Water Supply from Quarry Brook Dam.	N/A	N/A	N/A	✓
Adequate & Readily available supply of Hoses for the Portable Diesel Pump from Quarry Brook Dam to Plant.	N/A	N/A	N/A	✓

Raw and Makeup Water System & Water Treatment Plant:

Instrumentation & Controls operational.	N/A	N/A	N/A	✓
Analytical Rack Sample Cooler Filters cleaned/replaced as required.	✓	✓	✓	N/A
Analytical Rack Sample Coolers cooling water in service.	✓	✓	✓	N/A
Two (2) Sample cooling water pumps availability.	N/A	N/A	N/A	✓

Clarifier:

Clarifier Recirculator, VFD Motor, VFD Controller.	N/A	N/A	N/A	✓
Clarifier Recirculator Scraper.	N/A	N/A	N/A	✓
Clarifier Badger Meter and Clearwell Instrumentation.	N/A	N/A	N/A	✓

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Sand Filters:

Sand Filters (#s 1, 2 & 3) Resin integrity.	N/A	N/A	N/A	✓
Sand Filters (#s 1, 2 & 3) Valve Operation (Normal & Backwashing, etc.).	N/A	N/A	N/A	✓
Two (2) Clearwell Pumps available.	N/A	N/A	N/A	✓

Demineralization System:

Cation & Anion Trains (A, B & C) Resin integrity.	N/A	N/A	N/A	✓
Adequate supply of Chemicals (Caustic Soda, Sulphuric Acid, 1172, 1179, Polymer, etc.).	N/A	N/A	N/A	✓
Sulphuric Acid & Caustic Soda Transfer Pumps, valves, lines, etc.	N/A	N/A	N/A	✓
Sulphuric Acid & Caustic Soda Regeneration Sets, Pumps, valves, lines, etc.	N/A	N/A	N/A	✓

Reserve Feedwater System, 'RFW':

RFW Transfer Pump Oil Normal Operating Level.	✓	✓	✓	N/A
RFW Transfer Pumps operational.	✓	✓	✓	N/A

Circulating Water 'CW' and Screen Wash System:

Vacuum Seal Pits operational.	✓	✓	✓	N/A
All CW Travelling Screens Operational.	✓	✓	✓	N/A
CW Pump Motorized discharge valves 'Manual' & 'Auto', 'Cracked' Position operation verified.	✓	✓	✓	N/A
CW Pump Motors Oil Normal Operating Level,	✓	✓	✓	N/A
CW Pumps operational.	✓	✓	✓	N/A
CW Pump Discharge Vacuum Breakers operational.	✓	✓	✓	N/A
CW Travelling Screens Wash Pumps operational.	✓	✓	✓	N/A
Condenser Flushed.	✓	✓	✓	N/A
Condenser Backwashed.	✓	✓	✓	N/A
General Service 'GS' Coolers Backwashed, cleaned, etc.	✓	✓	✓	N/A
Turbine / Generator 'TG' Coolers Backwashed, cleaned, etc.	✓	✓	✓	N/A
Vacuum Pump Coolers Backwashed, cleaned, etc.	✓	✓	✓	N/A

Boiler:

Pre-Outage Valve Survey conducted of Boiler Drains.	✓	✓	✓	N/A
Service pressure test on boiler for tube leaks.	✓	✓	✓	N/A

Condenser Air Extraction System:

Vacuum Pumps available & tested for STBY 'Auto-Start'.	✓	✓	✓	N/A
Vacuum Pump Seal Water Tank water level controller operational.	✓	✓	✓	N/A
Vacuum Pump Seal Water Pump operational.	✓	✓	✓	N/A
Condenser Vacuum Breakers operational.	✓	✓	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

High Pressure 'HP' Feedwater System:

Boiler Feed Pumps:

Boiler Feed Pumps available.	✓	✓	✓	N/A
Boiler Feed Pump Oil Tank Normal Operating Level and checked for moisture content.	✓	✓	✓	N/A
Boiler Feed Pump Auxiliary Oil Pumps available.	✓	✓	✓	N/A
Boiler Feed Pump Suction Valves & Limit Switches.	✓	✓	✓	N/A
Boiler Feed Pump Emergency Gland Seal Injection Pump available.	✓	✓	✓	N/A
Boiler Feed Pump Emergency Gland Seal Pump Oil Normal Operating Level.	✓	✓	✓	N/A
Boiler Feed Pump Gland Seal Water available from the Emergency Pump and Condensate Extraction Pumps.	✓	✓	✓	N/A
Boiler Feed Pump Gland Seal Water Control Valve operational.	✓	✓	✓	N/A
Boiler Feed Pump Gland Seal Water Drains Tank Level Float Operated Valve operational (Units 1 & 2).	✓	✓	N/A	N/A
Boiler Feed Pump Gland Seal Water Transfer Pumps operational (Units 1 & 2).	✓	✓	N/A	N/A
Boiler Feed Pump Gland Seal Water Drains Tank Level Control Valve operational (Unit 3).	N/A	N/A	✓	N/A
Boiler Feed Pump Gland Seal Water Transfer Pumps operational (Unit 3).	N/A	N/A	✓	N/A
Boiler Feed Pump Recirculation Control Valves operational.	✓	✓	✓	N/A
Boiler Feed Pump Motorized Discharge Pilot & Main Valves operational.	✓	✓	✓	N/A
Low Load Feedwater Isolator & Control Valves operational.	✓	✓	✓	N/A
Main Feedwater Isolator & Control Valves operational.	✓	✓	✓	N/A
High Pressure Heater Motorized Valves (Inlet, Outlet & Bypass) checked for proper operation, sequencing, etc.	✓	✓	✓	N/A

Miscellaneous:

Economizer 'Manual' Operated Valve operational.	✓	✓	✓	N/A
Economizer Motorized Recirculation Valve operational (Unit 3).	N/A	N/A	✓	N/A
Boiler Drum Level Instrumentation operational.	✓	✓	✓	N/A
HP Heater Bled Steam Check Valves operational.	✓	✓	✓	N/A
Start-up Desuperheater Steam & Water valving operation / position verified (Unit 3).	N/A	N/A	✓	N/A
Main Steam & Reheat Steam Desuperheater Spray Water Isolators & Control Valves operational.	✓	✓	✓	N/A
Auxiliary Steam Desuperheater Spray Water Control Valve operational (Unit 3).	N/A	N/A	✓	N/A

Low Pressure 'LP' Feedwater System:

Condenser:

Condenser Hotwell Make-Up / Surplus Control Valves operation verified.	✓	✓	✓	N/A
Condenser Hotwell Make-Up Motorized Isolating Valve operation verified (Unit 3).	N/A	N/A	✓	N/A
Condenser Dye test for leaks, as required.	✓	✓	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Ammonia & Control System:

Adequate Supply in place.	✓	✓	✓	N/A
Pumps operational.	✓	✓	✓	N/A
Control Instrumentation operational.	✓	✓	✓	N/A

Condensate Extraction Pumps:

Condensate Extraction Pumps available.	✓	✓	✓	N/A
Condensate Extraction Pump Motors Bearing Oil Normal Operating Level.	✓	✓	✓	N/A
Condensate Extraction Pump Motor Cooling Water available (Unit 3).	N/A	N/A	✓	N/A

Condensate Polishers:

Resin integrity verified.	✓	✓	✓	N/A
Two (2) Polishers Rinsed and available.	✓	✓	✓	N/A
Valve Operation (Normal & Regenerating, etc.).	✓	✓	✓	N/A
Regeneration System Skids available (valving, pumps, blowers, tanks. Etc.).	✓	✓	✓	N/A
Condensate Polisher Bypass Control Valve operational.	✓	✓	✓	N/A

Low Pressure Heaters:

Low Load Recirculation Control Valve operation.	✓	✓	✓	N/A
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Deaerator:

Deaerator Normal Operating Level	✓	✓	✓	N/A
Deaerator Steam Coil operational.	✓	✓	✓	N/A
Deaerator Pegging Steam operational.	✓	✓	✓	N/A
Deaerator Low Level Trip Test	✓	✓	✓	N/A

Miscellaneous:

Condenser Flash Tank Control Valve operation / position.	✓	✓	✓	N/A
Turbine Low Pressure Exhaust Hood Spray Motorized Valve operation.	✓	✓	✓	N/A
Start-up Desuperheater Steam & Water valving operational (Units 1 & 2).	✓	✓	N/A	N/A
LP Heater Bled Steam Check Valves operational.	✓	✓	✓	N/A

Bled Steam and Heater Drains System:

LP and HP Instrumentation and Control operational.	✓	✓	✓	N/A
LP and HP Heater Level Control operational.	✓	✓	✓	N/A
Low Pressure 'LP' Heater Condensate Drains Pumps operational.	✓	✓	✓	N/A
#4 High Pressure 'HP' Heater Condensate Drains Pump operational.	✓	✓	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Air and Flue Gas System:

Instrumentation and Control operational.	✓	✓	✓	N/A
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Forced Draft 'FD' Fans and Air Dampers:

Two (2) FD Fans available.	✓	✓	✓	N/A
Bearing Oil Normal Operating Level.	✓	✓	✓	N/A
Cooling Water on to Fans.	✓	✓	✓	N/A
Stroke Variable Inlet Vanes, 'VIVs'.	✓	✓	✓	N/A
Stroke Discharge Dampers.	✓	✓	✓	N/A
FD Fan Motor Variable Speed Drives operational.	✓	✓	✓	N/A
All Burner Auxiliary Air Dampers/Positioners operation (Units 1 & 2).	✓	✓	N/A	N/A
All Elevation Air Flow Dampers/ Positioners operation (Unit 3).	N/A	N/A	✓	N/A

Rotary Air Heaters:

Rotary Air Heaters operational.	✓	✓	✓	N/A
Rotary Air Heaters Bearing Oil (Top & Bottom) Normal Operating Level.	✓	✓	✓	N/A
Rotary Air Heaters Bearing Cooling Water On.	✓	✓	✓	N/A
Rotary Air Heaters Electric Motor Drives operational.	✓	✓	✓	N/A
Rotary Air Heaters Air Supply to Air Heater Air Motor Drives Open.	✓	✓	✓	N/A
Rotary Air Heaters Start-up of Air Motor Drive upon loss of AC Power Supply to the normal operating Electric Drive Motor.	✓	✓	✓	N/A
Rotary Air Heaters Steam Supply Control Valves operational. (*Note: Two Steam Supplies on (Units 1 & 2)).	✓	✓	✓	N/A
Rotary Air Heaters Sootblowers operational.	✓	✓	✓	N/A

Boiler Sootblowing System:

Sootblower Control Panel operational.	✓	✓	✓	N/A
Sootblowers Steam Supply Control Valve operational.	✓	✓	✓	N/A
Sootblowers Overhauled during Annual Outage Verify operation (e.g. Rotation, Travel Advancing/Retracting from Furnace, leaks, etc.) first time Unit is placed on Line.	✓	✓	✓	N/A

Light Fuel Oil System:

Hydro Pad operational.	✓	✓	✓	N/A
Light Oil Pumps available.	✓	✓	✓	N/A
Pumps, Valves (including Control & Trip), lines, strainers, pressure (locally & UCB).	✓	✓	✓	N/A
Check Light Oil Supply & Return Lines to / from Plant respectively.	✓	✓	✓	N/A
Suction Strainers cleaned with covers secured.	✓	✓	✓	N/A
Ignitors cleaned, securely in place with associated lines securely fastened.	✓	✓	✓	N/A
Ignitors all checked for operation during Unit Start-up (e.g. Ignitor Control Box, Valve Operation, Lighting, etc.).	✓	✓	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Fuel Oil Delivery System, Auxiliary Steam & Fuel Oil Piping System:

Adequate Heavy Oil Storage.	N/A	N/A	N/A	✓
Heavy Oil Piping from Dock to Tankfarm, Tankfarm to Plant Day Tank and Day Tank to Heavy Oil Sets.	N/A	N/A	N/A	✓
Adequate Light Oil Storage.	N/A	N/A	N/A	✓
Light Oil Piping from Road Tanker Transfer Pump to Tanks and from Tanks to Light Oil Sets in Plant.	N/A	N/A	N/A	✓
All Storage Tanks Suction Heaters available when required.	N/A	N/A	N/A	✓
All Storage Tanks Flatform Heaters available when required.	N/A	N/A	N/A	✓
Auxiliary Steam for Suction Heaters available.	N/A	N/A	N/A	✓
Auxiliary Steam for Flatform Heaters available.	N/A	N/A	N/A	✓
Auxiliary Steam for Heat Tracing available.	N/A	N/A	N/A	✓
Electrical Heat Tracing for Fuel Oil Lines available.	N/A	N/A	N/A	✓
Day Tank Supply Line Trip Valve Tested.	N/A	N/A	N/A	✓
Day Tank available to receive oil.	N/A	N/A	N/A	✓
Day Tank steam coil available.	N/A	N/A	N/A	✓

Fuel (Heavy) Oil System:

Fuel Oil Heating Sets:	✓	✓	✓	N/A
Fuel Oil Heaters available.	✓	✓	✓	N/A
Fuel Oil Heaters cleaned and inspected.	✓	✓	✓	N/A
Steam Supply to Heavy Oil Set Heaters available as required.	✓	✓	✓	N/A
Fuel Oil Heaters Temperature Steam Control Valve operational.	✓	✓	✓	N/A
Suction Strainers cleaned (including standby & extras) with covers secured.	✓	✓	✓	N/A
Fuel Oil Accumulator operational.	✓	✓	✓	N/A
Fuel Oil Pumps available.	✓	✓	✓	N/A
Pumps 'Auto-Start' check Off-Line.	✓	✓	✓	N/A
Header Pressure Control Valve operational.	✓	✓	✓	N/A
Fuel Oil Meter operational.	✓	✓	✓	N/A

Fuel Oil Supply Control, Trip, Long & Short Recirculation Valves:

Fuel Oil Supply Control Valve operational.	✓	✓	✓	N/A
Fuel Oil Trip Valve operational.	✓	✓	✓	N/A
Fuel Oil Long Recirculation Valve operational (Units 1 & 2).	✓	✓	N/A	N/A
Fuel Oil Short Recirculation Valve operational (Units 1 & 2).	✓	✓	N/A	N/A
Elevation Fuel Oil Trip Valves operational (Unit 3).	N/A	N/A	✓	N/A
Elevation Fuel Oil Minimum Supply Control Valves operational (Unit 3).	N/A	N/A	✓	N/A
Elevation Fuel Oil Supply Control Valves operational (Unit 3).	N/A	N/A	✓	N/A
Main Fuel Oil Recirculation Valve operational (Unit 3).	N/A	N/A	✓	N/A
Elevation Recirculation Valves operational (Unit 3).	N/A	N/A	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Burners:

All Burners cleaned, securely in place with associated lines securely fastened.	✓	✓	✓	N/A
All Burners checked for operation during Unit Start-up (e.g. Advancing / Retracting, Valve Operation, Lighting, etc.).	✓	✓	✓	N/A
All Burner Tilts checked for operation (Units 1 & 2).	✓	✓	N/A	N/A

General Service 'GS' System:

GS Heat Exchangers Backwashed, cleaned, etc.	N/A	N/A	✓	N/A
Stage I GS Plate Cooler Strainers cleaned.	✓	✓	N/A	N/A
Stage I GS 'Auto-Clean' Strainer operational.	✓	✓	N/A	N/A
Stage I GS Duplex Strainers cleaned.	✓	✓	N/A	N/A
GS Pump Suction Strainers cleaned.	✓	✓	✓	N/A
GS Pump Oil Normal Operating Level.	✓	✓	✓	N/A
GS Pumps available & tested for STBY 'Auto-Start'.	✓	✓	✓	N/A

Turbine / Generator 'TG' Auxiliary Cooling System:

TG Head Tank Normal Operating Level.	✓	✓	✓	N/A
Turbine Lube Oil Coolers operational.	✓	✓	✓	N/A
TG Heat Exchangers Backwashed, cleaned, etc.	✓	✓	✓	N/A
TG Pump Oil Normal Operating Level.	✓	✓	✓	N/A
TG Pumps available & tested for STBY 'Auto-Start'.	✓	✓	✓	N/A

Turbine Generator 'TG' System:

Hydraulic System Units 1& 2:

Hydraulic System Accumulators operational.	✓	✓	N/A	N/A
Hydraulic System Storage Tank Normal Operating Level and checked for moisture content.	✓	✓	N/A	N/A
Hydraulic System Storage Tank air purging of moisture in place.	✓	✓	N/A	N/A
Hydraulic Set Primary, Secondary Filter indications ok.	✓	✓	N/A	N/A
Two (2) Hydraulic Fluid Pumps availability.	✓	✓	N/A	N/A
Hydraulic Pump Auto Start Testing.	✓	✓	N/A	N/A
Two (2) Hydraulic Fluid Pump Coolers availability.	✓	✓	N/A	N/A

Valves:

Turbine Main Stop Valve Testing (Units 1 & 2).	✓	✓	N/A	N/A
Turbine Two (2) Main Stop Valves Testing (Unit 3).	N/A	N/A	✓	N/A
Turbine 'Left-Hand' & 'Right Hand' Reheat Stop & Intercept Control Valve Testing verified.	✓	✓	✓	N/A
Turbine Six (6) Main Control Valve operation (Units 1 & 2).	✓	✓	N/A	N/A
Turbine Four (4) Main Control Valve operation (Unit 3).	N/A	N/A	✓	N/A
Turbine Blowdown Valve operation.	✓	✓	✓	N/A

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Lubricating System:

Lube Oil Tank Normal Operating Level and checked for moisture content.	✓	✓	✓	N/A
Lube Oil Tank Oil Centrifuge operational (Unit 3).	N/A	N/A	✓	N/A
Portable Centrifuge operational.	✓	✓	✓	N/A
Lube Oil Tank Vapor Extractor operation.	✓	✓	✓	N/A
Bowser Oil Conditioner Vapor Extractor Operation (Units 1 & 2).	✓	✓	N/A	N/A
Two (2) AC Lube Oil pumps available & tested for STBY 'Auto-Start' (Units 1 & 2)	✓	✓	N/A	N/A
DC Pump Testing & Starting from UCB (Units 1 & 2).	✓	✓	N/A	N/A
Verify Discharge Pressure of EACH AC Lube Oil Pumps (Locally & UCB) (Units 1 & 2).	✓	✓	N/A	N/A
Verify Discharge Pressure of DC Lube Oil Pump (Locally & UCB) (Units 1 & 2).	✓	✓	N/A	N/A
Jacking Oil Pump Testing & Starting from UCB (Unit 3).	N/A	N/A	✓	N/A
Verify Discharge Pressure of Jacking Oil Pump (Locally & UCB).	N/A	N/A	✓	N/A
Auxiliary Oil Pump 'AOP' Testing & Starting from UCB & Turbine Lube Oil Tank (Unit 3).	N/A	N/A	✓	N/A
Verify Discharge Pressure of AOP Pump (Locally & UCB) (Unit 3).	N/A	N/A	✓	N/A
AC Pump Testing & Starting from UCB & Turbine Lube Oil Tank (Unit 3).	N/A	N/A	✓	N/A
Verify Discharge Pressure of AC Flushing Oil Pump (Locally & UCB) (Unit 3).	N/A	N/A	✓	N/A
DC Pump Testing & Starting from UCB & Turbine Lube Oil Tank (Unit 3).	N/A	N/A	✓	N/A
Verify Discharge Pressure of DC Flushing Oil Pump (Locally & UCB) (Unit 3).	N/A	N/A	✓	N/A
Barring / Turning Gear Low Oil Pressure Trip Test.		✓	✓	N/A

Barring / Turning Gear:

Turning Gear operation verified.	✓	✓	✓	N/A
Perform trip test of Turning Gear.	✓	✓	✓	N/A

Miscellaneous:

Steam Seal Regulator operational.	✓	✓	✓	N/A
Operational On-Line / Off-Line Overspeed Trip Tests.	✓	✓	✓	N/A

Hydrogen 'H2' & Carbon Dioxide 'CO2' System:

H2 and CO2 systems in operation.	N/A	N/A	N/A	✓
Adequate H2 Bulk Packs on hand.	N/A	N/A	N/A	✓
CO2 Adequate Bulk Packs on hand.	N/A	N/A	N/A	✓

S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

Status of Test			
Unit 1	Unit 2	Unit 3	BoP

Generator:

Generator Exciter Operation checked Off & On Line.	✓	✓	✓	N/A
Seal Oil System tested with 'Air' on Generator in preparation for Leak Testing.	✓	✓	✓	N/A
Seal Oil Regulator operational.	✓	✓	✓	N/A
AC Seal Oil pumps available & tested for STBY 'Auto-Start' (Units 1 & 2).	✓	✓	N/A	N/A
AC Seal Oil Pump available (Unit 3).	N/A	N/A	✓	N/A
DC Seal Oil Pump available & tested for STBY 'Auto-Start'.	✓	✓	✓	N/A
Seal Oil Vacuum Pumps available.	✓	✓	✓	N/A
Vacuum Tank Level Control operational.	✓	✓	✓	N/A
Leak Testing Performed prior to 'Gassing Up' Generator.	✓	✓	✓	N/A
Purity, Dew Point, etc. Instrumentation operation verified.	✓	✓	✓	N/A

Powerhouse and Switchyard Single Line:

Plant 129V System:

129 V Battery Banks checked Stage I & II.	✓	✓	✓	N/A
129V Battery Chargers checked Stage I & II.	✓	✓	✓	N/A

Plant 258V System:

258V Battery Banks checked Stage I & II.	✓	✓	✓	N/A
258V Battery Chargers checked Stage I & II.	✓	✓	✓	N/A

Plant Uninterrupted Power Supplies 'UPS':

Number's 1, 2, 3 & 4 'UPS' Power Supplies including Batteries, Cooling Fans, etc., checked.	✓	✓	✓	N/A
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Emergency Diesel Generators:

Stage I & II Emergency Diesel Generators Tested for Emergency Stop.	✓	✓	✓	N/A
Stage I & II Emergency Diesel Generators Tested for Manual & Auto-Start Operation along with Auto Breaker Closure as well as Emergency Manual Closing of Breakers.	✓	✓	✓	N/A
Diesel Bus Tie Breaker, 'DBT' operation verified.	✓	✓	✓	N/A

Holyrood Main Powerhouse:

Back-Up ECC and Guardhouse Propane Generator.	N/A	N/A	N/A	✓
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Plant Air Conditioning System:

Control & Relay Rooms.	N/A	N/A	N/A	✓
Uninterrupted Power Supply 'UPS' #1 Room.	N/A	N/A	N/A	✓
Generator Excitation and 'UPS' #s 2, 3 & 4 Room (Unit 3).	N/A	N/A	N/A	✓

Plant Heating Steam:

All Systems operational for when required.	N/A	N/A	N/A	✓
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S/U - Final confirmation completed during Start Up. When possible, test also completed during annual outage.

✓ - Test completed

N/A - Not Applicable

APPENDIX C

Status of Winter Readiness Testing of Plant and Equipment
Hydraulic Generation
As of November 30, 2016



Status of Test								
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Bop PH 1	BoP PH 2

Following Annual outages, Unit is run up, Synchronized and all Systems verified before Operating Status determined, as per ECC, prior to coming Winter Operating Season to ensure preparedness. A Unit Load Test is performed at this time.	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Black Start Test of the black start systems is performed prior to the Winter Operating Season. Station service transfers alternate sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓

Spherical Valves:

Turbine Main Stop Valve Testing	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A
Turbine Main Stop Valve Operational	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A

Service Air , Instrument Air Systems Compressors:

All Stationary Air Compressors available.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
Air Compressor operational checks performed (e.g. oil levels, cooling water, etc.)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
Air Compressor STBY / Sequencing capability./Lead Lag/Standby	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
HP compressors available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
LP compressor available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
Instrumentation Control and Alarms operational.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓

TG Cooling Water Systems:

Cooling water pumps available	✓	✓	✓	✓	✓	✓	N/A	✓	N/A
Emergency Cooling water available Penstock Supply	✓	✓	✓	✓	✓	✓	N/A	✓	✓
Cooling water system available	✓	✓	✓	✓	✓	✓	✓	✓	✓
TG Pumps available & tested for Auto/manual Start.	✓	✓	✓	✓	✓	✓	N/A	✓	N/A
Shaft seal sytem available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
CW Pump Motorized discharge valves 'Manual' & 'Auto', 'Cracked' Position operation verified. GCI /HIk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rotary Strainer inspected and available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Status of Test								
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Bop PH 1	BoP PH 2

Turbine Generator Governor System:

Hydraulic System Accumulators operational.	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Governor System Testing	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Governor System Available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Hydraulic pump(s) available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Hydraulic Pump Gov Auto Start Testing.	✓	✓	✓	✓	✓	✓	✓	N/A	N/A

Generator:

Generator Exciter Operation checked Off & On Line.	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Generator Exciter Available.	✓	✓	✓	✓	✓	✓	✓	N/A	N/A

Lubricating System:

Portable Centrifuge operational.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Portable oil Pump (Jacking)	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Oil level system generator metering available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Oil level system turbine metering available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
AC High pressure Jacking Oil Pump available automatic	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A	N/A

Switchtard /Terminal Station

Breakesrs and Disconnects Operatiopnal	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Breaker & Disconnect Operation verified by Ops. Dept. & TRO Bishops Falls .	✓	✓	✓	✓	✓	✓	✓	N/A	N/A

Intake

Water elevation	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Trashrack system	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Gate operation	✓	✓	✓	✓	✓	✓	✓	N/A	N/A

Surge Tank

Heating system	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
Alarm Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A

Spillway

Water elevation	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
Gate Heating /Ice Away unit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
Gate operation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
Emergency(back-up) Desiel Generator	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Emergency lift operation and tested	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A



Status of Test								
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Bop PH 1	BoP PH 2

Battery Banks And Battery Chargers

Plant 129V System:

129 V Battery Banks checked	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
129 V Battery Chargers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
129 V battery Banks Available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓

Plant 48V System:

48V Battery Banks checked	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
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Plant Uninterrupted Power Supplies 'UPS':

'UPS' Power Supplies (Inverter NWS).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
--------------------------------------	-----	-----	-----	-----	-----	-----	-----	---	-----

Emergency Diesel Generators:

Emergency Diesel Generators Tested for Emergency Stop.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
Emergency Diesel Generators Tested for Manual & Auto-Start Operation along with Auto Breaker Closure as well as Emergency Manual Closing of Breakers.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A
Alternate AC sources available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
Station Services Available	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
Transfer alternate source	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓

Plant Air Conditioning System:

Control Rooms.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Communications Rooms	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A

Plant Heating Steam:

All Systems operational for when required.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓
--	-----	-----	-----	-----	-----	-----	-----	---	---



Status of Test										
Cat Arm			HLK		USL		GCL		PRV	
Unit 1	Unit 2	Bop PH	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop

Following Annual outages, Unit is run up, Synchronized and all Systems verified before Operating Status determined, as per ECC, prior to coming Winter Operating Season to ensure preparedness. A Unit Load Test is performed at this time.	✓	✓	N/A	✓	✓	✓	N/A	✓	N/A	✓	N/A
Black Start Test of the black start systems is performed prior to the Winter Operating Season. Station service transfers alternate sources	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spherical Valves:											
Turbine Main Stop Valve Testing	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Turbine Main Stop Valve Operational	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Service Air , Instrument Air Systems											
Compressors:											
All Stationary Air Compressors available.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air Compressor operational checks performed (e.g. oil levels, cooling water, etc.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air Compressor STBY / Sequencing capability./Lead Lag/Standby	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP compressors available	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A
LP compressor available	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Instrumentation Control and Alarms operational.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



Status of Test										
Cat Arm			HLK		USL		GCL		PRV	
Unit 1	Unit 2	Bop PH	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop

TG Cooling Water Systems:

Cooling water pumps available	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
Emergency Cooling water available	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
Penstock Supply	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cooling water system available	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TG Pumps available & tested for Auto/manual Start.	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
Shaft seal sytem available	N/A	N/A	N/A	✓	✓	✓	N/A	✓	✓	✓	✓
CW Pump Motorized discharge valves 'Manual' & 'Auto', 'Cracked' Position operation verified.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotary (Water)Strainer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Turbine Generator Governor System:

Hydraulic System Accumulators operational.	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Governor System Testing	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Governor System Available	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Hydraulic pump(s) availble	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Hydraulic Pump Gov Auto Start Testing.	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A

Generator:

Generator Exciter Operation checked Off & On Line.	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
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Lubricating System:

Portable Centrifuge operational.	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Portable oil Pump (Jacking)	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Oil level system generator metering	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
Oil level system turbine metering	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	N/A
AC High pressure Jacking Oil Pump available automatic	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	N/A	N/A

Miscellaneous:

✓	✓		✓		✓						
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Status of Test											
Cat Arm			HLK		USL		GCL		PRV		
Unit 1	Unit 2	Bop PH	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	N/A	N/A	N/A	✓	N/A	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	✓	N/A	N/A	N/A	N/A	N/A	N/A	
	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	
	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	
	✓	✓	N/A	✓	N/A	✓	N/A	✓	N/A	✓	
	N/A	N/A	N/A	✓	N/A	✓	N/A	✓	✓	N/A	
	N/A	N/A	N/A	✓	N/A	✓	N/A	✓	N/A	N/A	
	N/A	N/A	N/A	✓	N/A	✓	N/A	✓	N/A	N/A	
	N/A	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A	N/A	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	



Status of Test										
Cat Arm			HLK		USL		GCL		PRV	
Unit 1	Unit 2	Bop PH	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop	Unit 1	Bop

Emergency Diesel Generators Tested for Manual & Auto-Start Operation along with Auto Breaker Closure as well as Emergency Manual Closing of Breakers.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alternate AC sources available	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Station Services Available	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transfer alternate source	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plant Air Conditioning System:											
Control Rooms.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Communications Rooms	N/A	N/A	✓	N/A	✓	✓	✓	N/A	✓	✓	✓
Plant Heating Steam:											
All Systems operational for when required.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

APPENDIX D

Master Generation Outage Schedule
November 27 to December 31, 2016

2016 Planned Generation Outage Schedule [*]							
	Month	November	December				Scheduled Annual
	Week Starting	27	4	11	18	25	Maintenance Outages
Unit	MW						
Holyrood - G1	170						Sep 05 - Nov 01
Holyrood - G2	170						Jun 16 - Sep 14
Holyrood - G3	150						Apr 15 - Aug 11, Aug 26 - Oct 09
Bay d'Espoir - G1 ¹	76.5						Apr 03 - Jun 02
Bay d'Espoir - G2 ¹	76.5						Apr 03 - Apr 18, May 21 - Jun 02
Bay d'Espoir - G3	76.5						Jun 05 - Aug 10
Bay d'Espoir - G4	76.5						Jun 05 - Sep 13
Bay d'Espoir - G5	76.5						Apr 24 - May 09, Aug 29 - Oct 14
Bay d'Espoir - G6	76.5						May 10 - Jun 28
Bay d'Espoir - G7	154.4						Jun 30 - Aug 25
Upper Salmon	84						Nov 21 - Nov 26
Granite Canal ²	40						Aug 14 - Aug 25, Nov 29 - Dec 02
Hinds Lake	75						Oct 31 - Nov 13
Cat Arm 1	67						Aug 31 - Oct 25
Cat Arm 2	67						Oct 16 - Oct 23
Paradise River ³	8						Apr 24 - May 05, Sep 23 - Oct 01
Hardwoods GT ⁴	50						Jul 18 - Aug 30
Stephenville GT ⁵	50						Jun 06 - Aug 04, Nov 27 - Dec 03
Holyrood CT	123.5						Nov 03 - Nov 18
Star Lake	18						Nov 13 - Dec 04
Exploits ^{6, 7, 8, 9, 10, 11}	63						
CBPP CoGen	8						
NLH Diesels ¹²	24.7						
Newfoundland Power	117.9						
CBPP 60 Hz	99.1						
Available Capacity ¹³	1,999	1,780	2,009	2,009	2,009	2,009	
Forecasted Gross Island Peak Load		1,452	1,800	1,800	1,800	1,800	
Total Reserve ¹⁴		344	296	296	296	306	
Largest Operating Unit		170	170	170	170	170	
N-1 Reserve		104	56	56	56	66	

Legend	
Unit Available	White
Unit Unavailable	Dark Blue
Unit Derated	Light Blue
Unplanned / Extension	Gray

Notes:

- ¹ Bay d'Espoir Units 1 and 2 became available on November 30, 2016 upon completion of penstock repairs (Reference PUB Advisory 2016-H-320-a-Updated).
- ² Granite Canal unavailable daily due to planned maintenance (Reference PUB Advisory 2016-H-432-Updated(3)). Expected return to normal service date is December 03, 2016.
- ³ Paradise River became unavailable daily due to planned maintenance (Reference PUB Advisory 2016-H-433-Updated(2)). Expected return to normal service date is December 01, 2016.
- ⁴ Hardwoods Gas Turbine unavailable (Reference PUB Advisory 2016-H-421). Expected return to full capacity date is December 05, 2016.
- ⁵ Stephenville Gas Turbine unavailable to install End A turbine (Reference PUB Advisory 2016-H-430-a). Expected return to full capacity date is December 03, 2016.
- ⁶ Nalcor Exploits Grand Falls Unit 4 unavailable for a major refurbishment (Reference PUB Advisory 2016-H-245-a). Expected return to service date is December 21, 2016.
- ⁷ Nalcor Exploits Grand Falls Unit 7 unavailable runner damage (Reference PUB Advisory 2016-H-012-a-(Rev 1) - Updated).
- ⁸ Nalcor Exploits Bishop's Falls Unit 8 remains unavailable due to heavy rainfall damage from the remnants of hurricane Matthew (Reference PUB Advisory 2016-H-374-a-Updated(6)).
- ⁹ Nalcor Exploits Bishop's Falls Unit 9 remain unavailable due to failed turbine coupling (Reference PUB Advisory 2016-H-288-a-Updated(2)).
- ¹⁰ Nalcor Exploits Bishop's Falls Unit 6 unavailable (Reference PUB Advisory 2016-H-XXX-a Nalcor Exploits Bishop's Falls Plant Unit 6 November 30-2016).
- ¹¹ Nalcor Exploits Bishop's Falls Unit 2 unavailable due to an issue with the shaft seal cooling water flow (Reference PUB Advisory 2016-H-374-a-Updated(2)).
- ¹² 24.7 MW include Hawke's Bay (5 MW), St. Anthony (9.7 MW), and Holyrood Diesels (10 MW).
- ¹³ As of December 01, planned Vale Diesels capacity of 10.8 MW is included in Available Capacity. A pre-winter test has determined that a capacity of 7.6 MW is available for the current winter period.
- ¹⁴ December's Total Reserves reflect the planned agreements for CBPP Capacity Assistance (80 MW net) and System Voltage Reduction (20 MW).

* Preventative/Corrective Maintenance items that require short duration outages are not reflected in this chart. They are planned in conjunction with system operation for an appropriate time.

APPENDIX E

Critical Spares Status Listing – Thermal Generation

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Fire Protection System	Electrical Driven Pump	Pump	Inboard Bearing		BEARING,PEERLESS INBOARD	10	1	10	10	10	41	In Stock
Fire Protection System	Electrical Driven Pump	Pump	Outboard Bearing		BEARING,PEERLESS OUTBOARD	10	1	10	10	10	41	In Stock
Fire Protection System	Electrical Driven Pump	Pump	Casing Ring		RING,PEERLESS CASING	10	1	10	10	10	41	In Stock
Fire Protection System	Electrical Driven Pump	Pump	Casing Gasket		GASKET,PEERLESS CASING	10	1	10	10	10	41	In Stock
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping	Valves	Day Tank TripValve	8" Butterfly Valve and Actuator		VALVE,BTFY 8" 150#	10	1	10	10	10	41	In Stock
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping		Day Tank Trip Valve	Actuator		ACTUATOR,BETTIS CB520	10	1	10	10	10	41	Order Pending
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping		Fuel Line Block Valve	16" Gate Valve		VALVE,GATE 16" NEWCO	10	1	10	10	10	41	In Stock
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping		Day Tank Fill Line Control valve	6" Control Valve		VALVE,CONTROL 6" FISHER	10	1	10	10	10	41	In Stock
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping			Actuator		ACTUATOR,PNEU 1-BSW-5-LT	10	1	10	10	10	41	In Stock
Hydrogen Generation and Storage	Valves	Motorized Valves	1/2 " Valve		SOLENOID,VALVE ASCO 8316	10	1	10	10	10	41	In Stock
Hydrogen Generation and Storage	Tubing		Tubing		TUBING,SS 1" OD X.083 316	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	129V DC System	Charger	Control Unit		CONTROL UNIT,BATTERY CHG 129V	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2205C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2206C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3205C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3206C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2203C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2207C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2202C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Cation Valve - KV2208C		VALVE,ITT	10	1	10	10	10	41	Order Pending
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3203C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3207C		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3202C		VALVE,ITT	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Anion Valve - KV3208C		VALVE,ITT	10	1	10	10	10	41	Order Pending
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4003B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4004A		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4005B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4006B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4007B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4008B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4009B		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4010A		VALVE,ITT	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - KV4011A		VALVE,ITT	10	1	10	10	10	41	Order Pending
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Mixed Bed Valve - PCV4071	Non-Stock is OK since there are non critical uses for this TX which can be "borrowed)	VALVE,PRESS REGULATING	10	1	10	10	10	41	N/A
Raw and Makeup Water System & Water Treatment Plant	Demineralization System	Instrumentation/Controls	Sodium Monitor	Non-Stock is OK since there are non critical uses for this TX which can be "borrowed)	ANALYZER,ORION 2111LLEN	10	1	10	10	10	41	N/A
Raw and Makeup Water System & Water Treatment Plant	Clarifier	Agitator	Frequency Drive		CONTROLLER,SPEED CLARIFIER	10	1	10	10	10	41	In Stock
Raw and Makeup Water System & Water Treatment Plant	Clarifier	Agitator	Recirculator - Double Induction Speed Reducer - In Stock		RECIRCULATOR,STERLING 9A6108	10	1	10	10	10	41	In Stock
Fuel Oil Delivery System Aux. Steam & Fuel Oil Piping		Dock Quick Closing Valves	18 " Butterfly Valve		VALVE,BTFY 18" 150#	10	1	10	10	10	41	In Stock
Fire Protection System	Electrical Driven Pump	Control Panel	Fire Pump Controller	Spare Controller on site in Warehouse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	In Stock
Powerhouse and Switchyard Single Line	129V DC System	129 VDC Panel - Unit 1, 2, 3, Common	30A DC Breaker		BREAKER,DC HFD2030 30A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	129V DC System	129 VDC Panel - Unit 1, 2, 3, Common	25A DC Breaker		BREAKER,DC HFD2025 25A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	129V DC System	129 VDC Panel - Unit 1, 2, 3, Common	15A DC Breaker		BREAKER,DC HFD2015 15A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	129V DC System	129 VDC Panel - Unit 1, 2, 3, Common	400A DC Breaker		BREAKER,DC KD3400 400A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	129V DC System	129 VDC Panel - Unit 1, 2, 3, Common	50A DC Breaker		BREAKER,DC HFD2050 50A	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Powerhouse and Switchyard Single Line	129V DC System	Charger	Control Unit		CONTROL UNIT,BATTERY CHG 129V	10	1	10	10	10	41	In Stock
Circulating Water and Screen Wash System	CW Discharge Valves	Butterfly Valve	36" Butterfly Valve		VALVE,BUTTERFLY 36"	10	1	10	10	10	41	In Stock
Circulating Water and Screen Wash System	CW Discharge Valves	Butterfly Valve	Actuator		ACTUATOR ASSY,ROTORK	10	1	10	10	10	41	Order Pending
Combustion Air & Gas Instruments	Burner Management	Burner Automation	Network Interface Modules		MODULE,NETWORK INTERFACE	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Burner Automation	Master Fuel Trip Relays		RELAY,AB TYPE P	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Burner Automation	DCS Control Processor		MODULE,PROCESSOR FOXBORO	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Flame Scanners	24Vdc Scanner Power Supply		POWER SUPPLY,WEIDMULLER	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Air Flow Transmitters	Transmitter		TRANSMITTER, DP 1 KPA TO 1 KPA	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Oil Flow Transmiitter	Transmitter - Unit 1	One spare F.O. Flow TX for both units	FLOWMETER,ROSE	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Oil Flow Transmiitter	Sensor - Unit 2		FLOWMETER,ROSE	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Oil Flow Transmiitter	Transmitter - Unit 2		FLOWMETER,ROSE	10	1	10	10	10	41	In Stock
Condenser Air Extraction System	Vacuum Breakers		6' Flanged		VALVE,AIR & VACUUM 6 FLG	10	1	10	10	10	41	In Stock
Generator	Seal Oil System	Seals	See Parts List #U1&2 - 1 from Service Contractor		HYDROGEN SEAL RINGS,GE	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	ArcNet Coupler		CARD,ABB UNS0672	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Conduction Monitor		CARD,ABB UNS0673	10	1	10	10	10	41	Order Pending
Generator	Exciter	Controls	Crowbar		CARD,ABB UNS0017AVAR1	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Digital ArcNet		CARD,ABB UPC090	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Binary Input		CARD,ABB UFC092	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Output Relay		CARD,ABB ARC093	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Measuring Card		CARD,ABB UNC4672	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Measuring Card		CARD,ABB UNC4673	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	I/O Connection		CARD,ABB UNC4674	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Converter		CARD,ABB UNS3670	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Snubber Bridge		SNUBBER,ABB UNS4681V12	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Control		CARD,ABB HIEE300900R0001	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Power Supply		CARD,ABB KUC321	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Pulse Gen		CARD,ABB GDB021	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Combined I/O		CARD,ABB UAC326	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Control Panel		CARD,ABB AFC094	10	1	10	10	10	41	In Stock
Generator	Exciter	Controls	Breaker		BREAKER,FIELD ABB F3/SE	10	1	10	10	10	41	Order Pending
Generator	Stator	PT Cubicle	Primary Contact for Generator P.T.		CONTACT ASSY,PT	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Generator	Seal Oil System	Regulator	1.5" Regulating Valve	Not critical to unit operation.	SEAL OIL REG KIT, RK	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply	Light Oil	Trip Valve	1" Valve		VALVE,FISH F.O. TRIP	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply	Light Oil	Igniter Control Box	Ignition Transformer		XFMR,FOSSIL S870-542F	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply	Light Oil	Igniter Control Box	Sunspot		BASE,AMPLIFIER & TERMINAL	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply	Light Oil	Igniter Control Box	Valve Assembly / Oil Igniter		IGNITER,ASSEMBLY ALSTOM	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Level Transmitters		TRANSMITTER,LEVEL	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Aquarian Alarm Modules		MODULE,AQUARIAN	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Relays		RELAY,PLUG-IN 12 PIN AC	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Solenoid		SOLENOID,ASCO 8300 125 VDC	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Conductivity Probe		PROBE,GUIDED WAVE RADAR 26"	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Level Control	Level Switch		SWITCH,LEVEL MOBREY	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	Deaerator System	Level Control	Level Transmitter		TRANSMITTER,LEVEL	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Level Control	Relay		RELAY,PLUG-IN 12 PIN AC	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Ammonia System		Bulk Chemical		AMMONIUM HYDROXIDE,20% TOTE	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	12"-150# Gasket Kit		GASKET,S&K 74S0397V0010	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	O-Rings		O-RING,S&K 75S0144V0090	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	Packing		PACKING,S&K 24"	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	Packing		PACKING,S&K 16"	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	Packing		PACKING,S&K 12"	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	NRV Valves	Seal washers		SEAL,S&K 75G0181V0020	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heaters	NRV Valves - #1&2 LP Heaters	Gasket		GASKET,S&K 67S0064V0010	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heaters	NRV Valves	O-Rings		O-RING,S&K 75S0144V0100	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heaters	NRV Valves	Packing		PACKING,S&K 75G0100V0040	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heaters	NRV Valves	Packing		PACKING,S&K 75G0100V0040	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heaters	NRV Valves	Seal washers		SEAL,S&K 75G0181V0050	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
L.P. Feedwater System	Polisher Bypass Valve		Valve	Non-Stock is OK since there are full rebuild items identified and stocked	VALVE,FISH 5080326PTBNN	10	1	10	10	10	41	N/A
L.P. Feedwater System	Condensate Polishers (Units 1, 2)	Valves	Valve		VALVE KIT,BALL 3	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2)	Valves	Actuator		ACTUATOR KIT,WORCH D-38	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2)	Valves	Valve		VALVE KIT,BALL 2	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2)	Valves	Actuator		ACTUATOR KIT,WORCH C-38	10	1	10	10	10	41	In Stock
Main Steam & Reheat Steam; Turbine Drains	Vacuum Trip Device		Pressure Transmitter - Unit 1		TRANSMITTER,PRESS - 30-0"	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Unit 1 & 2 Field Breakers	Field Breaker		BREAKER,FIELD ABB F3/SE	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - cable assemblies		CABLE ASSY,SERVO G.E.	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - 50 gal. Intercept Control Valve Servos		VALVE,SERVO 50.0 GPM	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - 50 gal. Main Control Valve Servos		VALVE,SERVO 50.0 GPM	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - 6 gal. Intercept Control Valve Servos (scram)		VALVE,SERVO 9.0-11.0 GPM	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - 6 gal. Main Stop Valve Servos		VALVE,SERVO 9.0-11.0 GPM	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Linear Variable Differential Transducer for Intercept Control Valve & Main Control Valve		TRANSDUCER,GE	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Linear Variable Differential Transducers for 1 per Main Stop Valve		TRANSDUCER,GE	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Cable		CABLE SET,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Valve		VALVE,FLUID POWER PILOT	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Sensor		SENSOR,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Coil		COIL,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Go Switch - Limit Switches		SWITCH,LIMIT GO LEVER	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Governor	Governor	Cable Set		CABLE SET,FLUID POWER	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Turbine Generator System Stage 1	Governor	Governor	Valve		VALVE,FLUID POWER PILOT	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Sensor		SENSOR,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	Coil		COIL,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Governor	Governor	O-Ring Kit		O-RING KIT,FLUID POWER	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	DC Oil Pump	Pump		PUMP,DC LUBE OIL	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	DC Motor	Motor		MOTOR,DC LUBE OIL PUMP	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	Pressure Switches	Switch		SWITCH,PRESS 0-150 PSI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Hydraulic Fluid System	Fluid Pumps	Pump		PUMP,HYD FLUID POWER UNIT	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	AC Oil Pumps	Shaft		SHAFT,IR 10 (TYPE 2 ERVH)	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	AC Oil Pumps	Impeller		IMPELLER,IR 2RVH3DX1-813	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	AC Oil Pumps	Sleeve		SLEEVE,I RAND 175B135NX1B-204	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	AC Oil Pumps	Key		KEY,IMPELLER IR 11A9C37	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	AC Motor	Motor		MOTOR,ELECT 20HP 575VAC	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	Pressure Switch 2	Switch		SWITCH,PRESS 0-150 PSI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Main Steam Valve - Actuator	Bushing		BUSHING,FISH 1E845714012	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Steam Seal Regulator	Main Steam Valve - Actuator	Diaphragm		DIAPHRAGM,FISH 2E859802202	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Main Steam Valve - Actuator	Repair Kit		ACTUATOR KIT,FISH R667X000502	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Main Steam Valve - Body	Packing		PACKING KIT,FISH RPACKX0011	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Main Steam Valve - Body	Positioner		POSITIONER,FISH DVC6200	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Actuator	Diaphragm		DIAPHRAGM,FISH 2N130902202	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Actuator	Repair Kit		ACTUATOR KIT,FISH R667X000702	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Gasket		GASKET SET,FISH RGASKETX232	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Plug/Stem		PLUG/STEM,FISH 27A3965X052	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Cage		CAGE,FISH 20A3245X092	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Ring		RING,FISH 17A3991X022	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Seat Ring		RING,FISH 20A3260X152	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Furnace Pressure TX (Trip)	Pressure Transmitter	Pressure Transmittter		TRANSMITTER,DP - 8000-8000KPA	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Baskets	Basket Set	To be ordered & stocked as required	BASKET SET,AIR HEATER 21-1/2"	10	1	10	10	10	41	N/A
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Baskets	Basket Set	To be ordered & stocked as required	BASKET SET,AIR HEATER 22-1/2"	10	1	10	10	10	41	N/A
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Baskets	Basket Set	To be ordered & stocked as required	BASKET SET,AIR HEATER U1	10	1	10	10	10	41	N/A
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Rotating Element & Bearings	Bearing		BEARING,BALL 23034CCK/C3W33	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Rotating Element & Bearings	Seal		SEAL,HOWDEN 68-01- 615	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Drive System	Coupling		COUPLING,STEELFLEX 1-1/8 S-4	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Drive System	Air Motor		AIR MOTOR,ING RAND	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Drive System	Motor		MOTOR,HEATER 1/3HP (XL GEAR)	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Soot Blowers	Sleeve		SLEEVE,RELIANCE 411629-6A	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Soot Blowers	Coupling		COUPLING,BORE 3/4X5/8	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	Rotary Air Heaters	Soot Blowers	Roller assembly		ROLLER,ASSEMBLY	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Gasket		GASKET SET,FISH RGASKETX182	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Stud		STUD,DEW 0282336	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Repair Kit		ACTUATOR KIT,FISH R667X000402	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Cage		CAGE,FISH 2U224033272	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Plug/Stem		PLUG ASSY,FISH 1V6575X0052	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Ring		RING,FISH 1U222646172	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Combustion Control Valve	Combustion Control Valve	Bushing		BUSHING,FISH 1E682814012	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Atomizing Steam Valve	Atomizing Steam Valve	2" Flanged Valve		VALVE,FISH ATOM STEAM	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Main Fuel Oil Trip Valve	Main Fuel Oil Trip Valve	Flanged Valve		VALVE,FISH F.O. TRIP	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Header Pressure Control Valve	Header Pressure Control Valve	Repair Kit	Repair Parts stocked ref CN116667	PACKING KIT,FISH RPACKX00012	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Header Pressure Control Valve	Header Pressure Control Valve	Diaphragm	Repair Parts stocked ref CN116667	DIAPHRAGM,FISH 2E670002202	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Fuel Oil Pumps	Fuel Oil Pumps	PUMP,IMO C324		PUMP,IMO C324 (COMPLETE)	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Units 1 & 2 Fuel Oil System	Mechanical Seal	Mechanical Seal	Seal		SEAL,MECHANICAL FUEL C324	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Short Recirculation Valve	Short Recirculation Valve	Gasket Set	Repair Parts Stocked Ref CN116598	GASKET SET,FISH RGASKETX312	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Short Recirculation Valve	Short Recirculation Valve	Packing	Repair Parts Stocked Ref CN116598	PACKING KIT,FISH RPACKX00012	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Short Recirculation Valve	Short Recirculation Valve	Ring		RING,FISH 1U222535072	10	1	10	10	10	41	Order Pending
Units 1 & 2 Fuel Oil System	Short Recirculation Valve	Short Recirculation Valve	Plug/stem		PLUG/STEM,FISH 1U8350X0022	10	1	10	10	10	41	Order Pending
Units 1 & 2 Fuel Oil System	Short Recirculation Valve	Short Recirculation Valve	Cage	Repair Parts Stocked Ref CN116598	CAGE,FISH 2U215033272	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Long Recirculatoin Valve	Long Recirculatoin Valve	Gasket	Repair Parts Stocked Ref CN116597	GASKET,FISH 10A4154X012	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Long Recirculatoin Valve	Long Recirculatoin Valve	Ring	Repair Parts Stocked Ref CN116597	RING,FISH 1U222835072	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Long Recirculatoin Valve	Long Recirculatoin Valve	Diaphragm		DIAPHRAGM,FISH 2N126902202	10	1	10	10	10	41	Order Pending
Units 1 & 2 Fuel Oil System	Long Recirculatoin Valve	Long Recirculatoin Valve	Cage	Repair Parts Stocked Ref CN116597	CAGE,FISH 2U231833272	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Fuel Oil Heaters	Fuel Oil Heaters	Gaskets		GASKET,FUEL OIL HEATER	10	1	10	10	10	41	In Stock
Units 1 & 2 Fuel Oil System	Fuel Oil Heaters	Fuel Oil Heaters	Tube Bundles	Annual Inspection plus online Check. To be ordered as required.	HEATER,FUEL OIL STAGE 1	10	1	10	10	10	41	N/A
Units 1 & 2 Fuel Oil System	Burners	Oil Valve	Oil, Steam & Scavange Valves - All Same		VALVE,BALL 3/4 C/W PNEU	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Cage	Repair Parts stocked Ref CN687323	CAGE,FISH 42B3570X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Plug/stem	Repair Parts stocked Ref CN687323	PLUG/STEM,FISH 36A5366X062	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Ring	Repair Parts stocked Ref CN687323	RING,FISH 26A5285X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Ring	Repair Parts stocked Ref CN687323	RING,FISH 26A5299X052	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Ring	Repair Parts stocked Ref CN687323	RING,FISH 10A5411X022	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Pin		PIN,FISH 1V334035072	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Gasket	Repair Parts stocked Ref CN687323	GASKET,FISH 18A2810X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Gasket	Repair Parts stocked Ref CN687323	GASKET,FISH 26A5314X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Ring	Repair Parts stocked Ref CN687323	RING,FISH 10A5410X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve - Unit 1	Packing	Repair Parts stocked Ref CN687323	PACKING,FISH 1R290601012	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Element Assembly (Volute)	Rebuildable Item	ELEMENT ASSY,VOLUTE/ROTATING	10	1	10	10	10	41	Out for Rebuild
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Bushing		BUSHING,BJ 216507LG	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Shaft Driven Oil Pump		PUMP,BJ DWG C1F-238	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Ring		RING,BJ 612987-EH	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Ring		RING,BJ 634599-BG	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Shoe		SHOE ASSY,BJ 631163-KD	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps - Unit 1 E & W	Cover		COVER,BJ 308952-SA	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Gasket		GASKET,FISH 12B7100X082	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Seal		SEAL,FISH 10A4215X012	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Ring		RING,FISH 10A4217X012	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Ring		RING,FISH 10A4219X012	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Ring		RING,FISH 22B9344X012	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Main Feedwater Low Load Control Valve	Plug/Stem		PLUG/STEM,FISH 38A0014X062	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit #1 - All HP Heaters	Level Transmitters		TRANSMITTER, DP 0-120" H2O	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit # 2 - HP Heater # 4 & 6	Leve Transmitter		TRANSMITTER, DP 0-120" H2O	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit # 2 -HP Heater # 5	Level Transmitter		TRANSMITTER, DP 0-120" H2O	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit 1 - All HP Heaters	Aquarian Alarm Modules		MODULE,AQUARIAN	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit #2 - Heater # 4 & 6	Aquarian Alarm Modules		MODULE,AQUARIAN	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit # 2 -HP Heater # 5	Aquarian Alarm Modules		MODULE,AQUARIAN	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit 1 & 2 - All HP Heaters	Conductivity Probe		PROBE,CONDUCTIVITY	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit # 1 & 2 - All HP Heaters	Relay		RELAY,PLUG-IN 12 PIN AC	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	Unit 1 & 2	Solenoid		SOLENOID,ASCO 8300 125 VDC	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Suction Valve Limit Switch	Oil Tight Limit Switch		SWITCH,LIMIT AB 802TB	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Suction Valve	Packing		PACKING, GRAFOIL 1IDX1-1/2OD	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Gasket		GASKET, HOP 30037592	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Spindle		SPINDLE, HOP 44574-011	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Nut		NUT, HOP 35224-508	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Stop		STOP, HOP 8 VALVE 24930W	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Belt		BELT ASSY, HOP 44511-001	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	NRV Valves - Heater # 4	8"- 150# Gasket Kit		GASKET, S&K 74S0397V0010	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	NRV Valves - Heater # 5	8"- 300# Gasket Kit		GASKET, S&K 74S0397V0010	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	H.P. Heaters	NRV Valves - Heater # 6	8"- 600# Gasket Kit		GASKET, S&K 74S0397V0010	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Steam Drum	Level Control Transmitters	Level Transmitter		TRANSMITTER, PRESS 5-800	10	1	10	10	10	41	Order Pending
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Suction Line Safety Valve	1/2" x 1" Valve		VALVE, RELIEF 1/2" 110# SE	10	1	10	10	10	41	In Stock
Units 1 & 2 H.P. Feedwater System	Boiler Feed	Boiler Feed Recirculation Valve to DA	4" Valve		VALVE, GATE 4 CS BW 300#	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Positioner	2.5" x 5 "Pneumatic PowerPositioner (Hagan) In Stock		VALVE ASSY, 373218-001	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Coupling		COUPLING, METASTRE AM	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Bearing		BEARING, JOURNAL MP 215878E	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Impeller		IMPELLER, MAT PLA 27881-P	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Impeller		IMPELLER, MAT PLA 27882-P	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Impeller		O-RING, M&P 775C	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Extraction Pumps	Pump	Impeller		O-RING, MAT PLA 775D	10	1	10	10	10	41	Order Pending
Powerhouse and Switchyard Single Line	258V DC System	Cable	Cable		CABLE, BATTERY 1/0	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Governor	Governor	Mark 5 System - speed probes		PROBE, SPEED PICKUP	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Turbine Lube Oil System	Pressure Switch 1	Switch		SWITCH, PRESS 0-150 PSI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 1	Steam Seal Regulator	Dump Control Valve - Body	Positioner		POSITIONER, FISH DVC6200	10	1	10	10	10	41	In Stock
Condenser Air Extraction System	Mechanical Vacuum Pumps	Motor	Motor		MOTOR, ELECT 50HP 575V	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Generator	Stator	PT Cubicle	Potential Transformer (PT)		TRANSFORMER,GE 765X	10	1	10	10	10	41	In Stock
Generator	Stator	Stand Off Insulators	Stand Off Insulator		BUSHING,HIGH VOLTAGE GE	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 1	Governor	Governor	Truck V-Fast Cables		CABLE SET,FLUID POWER	10	1	10	10	10	41	In Stock
Generator	Rotor	Rotor		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Rotor	Rotor Poles		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Stator	Stator and Brush Rigging Assembly	Brush		BRUSH, GENERATOR U1 & U2	10	1	10	10	10	41	In Stock
Generator	Stator	Stator Poles		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Units 1 & 2 Air & Flue Gas	F.D. Fans	Unit 1& 2 - Fans	Inboard Bearing Liner		LINER,BEARING 6"	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	F.D. Fans	Unit 1& 2 - Fans	Outboard Bearing Liner		SLEEVE,BEARING 6"	10	1	10	10	10	41	In Stock
Units 1 & 2 Air & Flue Gas	F.D. Fans	Unit 1& 2 - Fans	Bearing Set	U1 West (Dodge)	BEARING SET,SLEEVE 6"	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Panel	400A DC Breaker		BREAKER,DC KD2400F 400A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Panel	40A DC Breaker		BREAKER,DC HFD2040 40A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-116	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-114-1	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-111-1	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-107-2	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-107-2	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-107-2	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-107-2A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Electronic Control Cards		CARD,CIGENTEC 81-112-2	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	Rectifier		RECTIFIER,CIGENT 323-230	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger Cigentic	Charger	Individual replacement components stocked	CHARGER,BATTERY 250VDC	10	1	10	10	10	41	N/A

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Circulating Water and Screen Wash System	CW Discharge Valves	Valve	36 ' Butterfly Valve		VALVE,BUTTERFLY 36"	10	1	10	10	10	41	In Stock
Circulating Water and Screen Wash System	CW Discharge Valves	Actuator	CW Butterfly Valve Actuator		ACTUATOR ASSY,ROTORK	10	1	10	10	10	41	Order Pending
Combustion Air & Gas Instruments	Burner Management	Burner Automation	Network Interface Modules		MODULE,NETWORK INTERFACE	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Burner Automation	Master Fuel Trip Relays		RELAY,SD 8501XUDO	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Burner Automation	DCS Control Processor		MODULE,PROCESSOR FOXBORO	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Elevation Oil Flow Transmitter	Meter & Transmitter		FLOWMETER,PROMAS S 83F40	10	1	10	10	10	41	In Stock
Combustion Air & Gas Instruments	Burner Management	Elevation Air Dampers	Positioner		POSITIONER,FISH DVC6200	10	1	10	10	10	41	In Stock
Condenser Air Extraction System	Vacuum Breakers		6" Flange Vacuum Breaker		VALVE,AIR & VACUUM 6 FLG	10	1	10	10	10	41	In Stock
Generator	Rotor	Rotor		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Rotor	Rotor Poles		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Stator	Stator and Brush Rigging Assembly	Brush		BRUSH,GENERATOR U3	10	1	10	10	10	41	In Stock
Generator	Stator	Stator Poles		PM maintenance & condition monitoring used to maintain the life of the generator.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		PAD,BEARING U3 SYNC COND	10	1	10	10	10	41	In Stock
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		RING,SEAL U3 SYNC COND	10	1	10	10	10	41	In Stock
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		BEARING,THRUST U3 SYNC COND	10	1	10	10	10	41	In Stock
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		BEARING,THRUST U3 SYNCH COND	10	1	10	10	10	41	In Stock
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		RING,SEAL U3 SYNCH COND	10	1	10	10	10	41	In Stock
Generator	Synchronous Condensor	Thrust Bearing	See Parts List & Estimate by Supplier - #U3-1		THERMOCOUPLE,U3 SYNCH COND	10	1	10	10	10	41	In Stock
Generator	Seal Oil System	Seals	Bellows		BELLOWS,HITACHI	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Generator	Seal Oil System	Seals	Gaskets		GASKET,HITACHI	10	1	10	10	10	41	In Stock
Generator	Seal Oil System	Seals	Gaskets		GASKET,HITACHI	10	1	10	10	10	41	In Stock
Generator	Seal Oil System	Seals	Gaskets		GASKET,HITACHI	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Converter		CONVERTER,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	ECT Panel		ECT PANEL,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Controller		CONTROLLER,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Computer		COMPUTER,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Firing Board		BOARD,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Message Module		MODULE,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Input Coupling		INPUT COUPLING UNIT,ABB	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Power Supply		POWER SUPPLY,ABB	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Crowbar		CROWBAR,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Murr		MURR,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Resistor		RESISTOR,ABB EXCITER	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	I/O/ Board		BOARD,ABB COMBINED I/O	10	1	10	10	10	41	In Stock
Generator	Exciter	Exciter Control System	Field Breaker		BREAKER,FIELD ABB E2/E	10	1	10	10	10	41	In Stock
Generator	Stator	Stand Off Insulators	Insulator Bushing	P.O. sent	BUSHING,HIGH VOLTAGE HIT	10	1	10	10	10	41	Order Pending
Generator	Stator	PT Cubicle	Potential Transformer (PT)		TRANSFORMER,EATO N VIZZ	10	1	10	10	10	41	In Stock
Generator	Stator	PT Cubicle	Fuse		FUSE,GE EJ0-1- C588L405G1	10	1	10	10	10	41	In Stock
Generator	Exciter	Rectifying Transformer		PM maintenance & condition monitoring used to maintain the life of the transformer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ignitor Light Oil and Air Supply	Light Oil	Trip Valve	1-1/2" Valve		VALVE KIT,JAMES RKB5MT	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply	Light Oil	Igniter Control Box	Light Oil / Air Supply Solenoid Valve		SOLENOID,ASCO 8342C1	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	Purge Solenoid Valve		SOLENOID,ASCO 8262G232	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	Pneumatic Actuator		ACTUATOR,PNEU R16C	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	Ignition Transformer		XFMR,IGNITION 120V 60C	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	Relay		BOX,IGNITOR C/W CABLES N-6	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Ignitor Light Oil and Air Supply		Igniter Control Box	Sunspot - Scanner		SCANNER,FOSSIL 9100-1000	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	Snap Action Switch		MICROSWITCH,16CX1 2-D01	10	1	10	10	10	41	In Stock
Ignitor Light Oil and Air Supply		Igniter Control Box	1/4" Light Oil Air Ball Valves		VALVE,BALL 1/4" U3 IGNITOR	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Level Transmitter LP Heater #1		TRANSMITTER,LEVEL	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Aquarian Alarm Modules		MODULE,AQUARIAN	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Solenoid		SOLENOID,ASCO 8300 125 VDC	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Relay		RELAY,OMRON MM4XP-DC125	10	1	10	10	10	41	In Stock
L.P. Feedwater System	L.P. Heater Controls (Water Induction Protection)		Conductivity Probe		PROBE,CONDUCTIVITY	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Deaerator	Gauge Glasses		GAUGE,GLASS 3/4X48	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Level Control	Level Switch		SWITCH ASSY,MAG 89-7401-052	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Level Control	Solenoid		SOLENOID,ASCO 8320G184M0	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Deaerator System	Level Control	Level Transmitter		TRANSMITTER, DP 0-120" H2O	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Ammonia System	Bulk Chemical Tote Tank		Multiple totes in revolving service	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Repair Kit		VALVE KIT,BALL 8"	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Repair Kit		ACTUATOR KIT,WORCH C-38	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Valve		VALVE,FISH 8560-1052-36105	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Disc		DISC,FISH 75B1036X102	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Pin		PIN,FISH 75B1122X052	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Pin		PIN,FISH G13725K0022	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Ring		RING,FISH 75B0311X032	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Shaft		SHAFT,FISH 75B0014X012	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Spring		SPRING,FISH 75B0012X012	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Packing		PACKING,FISH 12A8951X022	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Control Valves	Bearing		BEARING,FISH 75B1076X012	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
L.P. Feedwater System	L.P. Heaters	NRV Valves - #2 LP Heater	20"Dia		GASKET,COVER HIT	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	L.P. Heaters	NRV Valves - #1 LP Heater	24" Dia		GASKET,COVER HIT	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	Deaerator System	NRV Valves (2)	14" Dia on DA		GASKET COVER HIT	10	1	10	10	10	41	Order Pending
L.P. Feedwater System	Deaerator System	Safety Valves	Disc		DISC,VALVE SAFETY RELIEF	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Polisher Bypass Valve		Parts to Repair		VALVE,FISH 8560-1052-36105	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Valves	Valve Kit		VALVE KIT,BALL 3	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Valves	Actuator Kit		ACTUATOR KIT,WORCH D-38	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Valves	Valve Kit		VALVE KIT,BALL 2	10	1	10	10	10	41	In Stock
L.P. Feedwater System	Condensate Polishers (Units 1, 2, 3)	Valves	Actuator Kit		ACTUATOR KIT,WORCH C-38	10	1	10	10	10	41	In Stock
Main Steam & Reheat Steam; Turbine Drains	Vacuum Unloading Device		Bellows		BELLOW ASSY,HIT L1000-1	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System	Charger	400A DC Breaker		BREAKER,DC KD2400F 400A	10	1	10	10	10	41	In Stock
Powerhouse and Switchyard Single Line	258V DC System		40A DC Breaker		BREAKER,DC HFD2040 40A	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Piston		PISTON RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Oil Seal		OIL SEAL,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	O-Ring		O-RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	O-Ring		O-RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bushing		BUSHING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Packing		PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bushing		BUSHING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	O-Ring		O-RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bearing		BEARING,HITACHI LOAD LIMIT	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bearing		BEARING,HITACHI LOAD LIMIT	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Piston		PISTON RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Packing		PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Sleeve		SLEEVE,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Trunnion		TRUNNION,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bearing		BEARING,BALL HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Pin		SPLIT PIN,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Bearing		BEARING,BALL HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Governor	Oil Seal		OIL SEAL,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Packing		PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Piston		PISTON RING,HITACHI	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Washer		WASHER,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Washer		WASHER,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Washer		WASHER,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Washer		WASHER,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Washer		WASHER,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Electrical Trip Test Device	Seat Packing		SEAT PACKING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Governor	Mechanical Overspeed Trip Device		Not practical to have in stock as device requires calibration prior to replacement.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Turbine Generator System Stage 2	Turbine Lube Oil System	DC Lube (Flushing) Oil Pump	Bearing	Parts common to AC Pump	BEARING,PLANE HIT ITEM 35	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	DC Lube (Flushing) Oil Pump	Bearing	Parts common to AC Pump	BEARING,PLANE HIT ITEM 36	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	DC Lube (Flushing) Oil Pump	Auto Start Pressure Switch		SWITCH,PRESS 10-300 TYPE ACW2	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	DC Lube (Flushing) Oil Pump		Unit has shaft driven lube oil pump to facilitate bearing lubrication in case of trip conditions.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Seal Ring		SEALRING,10P-067-551-17	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Seal Ring		SEALRING,10P-067-551-18	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	O-Ring		O-RING,HITACHI	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Ring		RING,HIT 10P 067-551-13	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Ring		RING,HIT 10P 067-551-17	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Ring		RING,HIT 10P 067-551-18	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Shaft Driven Oil Pump	Brush		BRUSH,HIT 10P 067-551-38	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Auxiliary Oil Pump	Bearing		BEARING,PLANE HIT ITEM 35	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Turbine Lube Oil System	Auxiliary Oil Pump	Bearing		BEARING,PLANE HIT ITEM 36	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Turbine Generator System Stage 2	Turbine Lube Oil System	Auxiliary Oil Pump	Motor		MOTOR,AUX OIL YELLOW	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Seat		SEAT,10P-061-226-123	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Pin		PIN,10P-061-226-207	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Lockring		LOCKRING,10P-061-226-208	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Lockring		LOCKRING,10P-061-226-209	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Pin		PIN,HIT 10P-061-226/16	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Upper	Pin		PIN,HIT 10P-061-226/98	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Lower	Bushing		BUSHING,HIT T-9201	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Lower	Pin		PIN,HIT 10P-061-228-125	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Lower	Crosshead		CROSSHEAD,HIT 10P0612283	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Lower	Pin		PIN,HIT 10P-061-228/98	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Control Valve - Lower	Pin		PIN,HIT 10P-061-228/16	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Gasket		GASKET,STL #16	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Gasket		GASKET,HIT 10P-038-197-16	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Gasket		GASKET,HIT 10P-038-197-71	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Bushing		BUSHING,10P-038-197/15	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Seal Ring		SEAL RING,10P-038-197/14	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Main Steam Chest Assembly	Stop Valves	Bushing		BUSHING,HIT 10P-038-197/18	10	1	10	10	10	41	Order Pending
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Bushing		BUSHING,HIT 10P0611582	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Bushing		BUSHING,HIT 10P0611586	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Bushing		BUSHING,HIT 10P06115814	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Rivet		RIVET,HIT 10P-061-15863	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Stem		STEM,HIT 10P061158/7	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Reheat Steam Chest Assembly	Reheat/ICV Valves	Pin		PIN,HIT 10P06115872	10	1	10	10	10	41	In Stock
Turbine Generator System Stage 2	Steam Seal Regulator		Pressure Transmitter - Unit 3		TRANSMITTER,PRESS 0-200	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16													
Asset			Critical Spare			Spare Part Criticality						Inventory Status	
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking		
Turbine Generator System Stage 2	Steam Seal Regulator	2" Valve	Bushing		BUSHING,FISH 1E845714012	10	1	10	10	10	41	Order Pending	
Turbine Generator System Stage 2	Steam Seal Regulator	Main Steam Control Valve - Actuator	Diaphragm		DIAPHRAGM,FISH 2E859602202	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator	Main Steam Control Valve - Actuator	Actuator repair kit		ACTUATOR KIT,FISH R667X000502	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator	Main Steam Control Valve - Body	Packing Kit		PACKING KIT,FISH RPACKX0011	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator	Main Steam Control Valve - Positioner	Positioner		POSITIONER,FISH DVC6200	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator	Auxiliary Steam Control Valve - actuator	Aux Steam Control Valve - Actuator - Unit 3		ACTUATOR KIT,FISH R470X000032	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Aux Steam Control Valve - Body - Unit 3		BODY,VALVE FISH 3N192029022	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Dump Control Valve - Actuator - Repair Kit - Unit 3		ACTUATOR KIT,FISHER R667	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Ring		RING,FISH 17A3990X022	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Ring		RING,FISH 1U508039102	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Pin		PIN,FISH 1V326035072	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Cage		CAGE,FISH 2U505939102	10	1	10	10	10	41	In Stock	
Turbine Generator System Stage 2	Steam Seal Regulator		Plug		PLUG,FISH 27A3953X012	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	Series 8500 size 95 w/ 95" @ 100% width wheel	Thrust Plate		THRUST PLATE KIT,DODGE 132221	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	Fan Assembly	Liner		LINER ASSY,DODGE 132423	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	Fan Assembly	Collar		COLLAR,DODGE 132154	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	Fan Assembly	Opposite side bearing		LINER ASSY,DODGE 132951	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	Fan Assembly	2 - Temperature probes installed in bearings		THERMOCOUPLE,TYPE T	10	1	10	10	10	41	Order Pending	
Unit 3 Air & Flue Gas	F.D. Fans	Fan Assembly	Falk Steelflex coupling		COUPLING,STEEFLFLEX GRID	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	2 - Independent bearing pedestals	Gasket		GASKET,DODGE 132170	10	1	10	10	10	41	In Stock	
Unit 3 Air & Flue Gas	F.D. Fans	2 - bearing sole plates		Non-wear item	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Unit 3 Air & Flue Gas	F.D. Fans	Outlet damper	Damper	To be ordered & stocked as required	DAMPER,STOCKBRIDGE 0.866"	10	1	10	10	10	41	N/A	
Unit 3 Air & Flue Gas	F.D. Fans	Outlet damper	Damper	To be ordered & stocked as required	DAMPER,STOCKBRIDGE 1.004"	10	1	10	10	10	41	N/A	

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit 3 Air & Flue Gas	F.D. Fans	variable inlet vanes	Actuator Repair Kit		DRIVE KIT,BAILEY 532694C1	10	1	10	10	10	41	In Stock
Unit 3 Air & Flue Gas	F.D. Fans	variable inlet vanes	Actuator repair kit		DRIVE KIT,BAILEY 256111A0	10	1	10	10	10	41	In Stock
Unit 3 Air & Flue Gas	F.D. Fans	Inlet Silencer		Non-wear Item, integral to housing assembly	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit 3 Air & Flue Gas	Rotary Air Heaters	Gearbox	Gearbox		GEARBOX,AIR HEATER U3	10	1	10	10	10	41	In Stock
Unit 3 Air & Flue Gas	Rotary Air Heaters	Pneumatic Drive System	Air Drive Motor		AIR MOTOR,ING RAND	10	1	10	10	10	41	In Stock
Unit 3 Air & Flue Gas	O2 Analyzers		Probe - In Stock		PROBE,OXYGEN ANALYZER	10	1	10	10	10	41	In Stock
Unit 3 Air & Flue Gas	O2 Analyzers		Analyser		ANALYZER,ROSE 3000 OXY	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Gasket		GASKET SET,FISH RGASKETX362	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Packing		PACKING KIT,FISH RPACKX0002	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Actuator		ACTUATOR KIT,FISH R667X000502	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Regulator		REGULATOR KIT,FISH WR67AFRX011	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Bushing		BUSHING,FISH 1E845714012	10	1	10	10	10	41	Order Pending
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Diaphragm		DIAPHRAGM,FISH 2E859802202	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Trip Valve	Cage		CAGE,FISH 2U236033272	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Ring		RING,FISH 1U217305092	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Seat		SEAT,FISH 1U222046172	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Plug/Stem		PLUG/STEM,FISH 1V6571X0042	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Cage		CAGE,FISH 2U215333272	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Gasket		GASKET SET,FISH RGASKETX242	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Packing		PACKING KIT,FISH RPACKX00012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Bushing		BUSHING,FISH 1E682814012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Combustion Control Valves	Diaphragm		DIAPHRAGM,FISH 2E669902202	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Atomizing Steam Valve	Cage		CAGE,FISH 2U223733272	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit 3 Fuel Oil System		Atomizing Steam Valve	Ring		RING,FISH 1U222646172	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Atomizing Steam Valve	Plug/Stem		PLUG ASSY,FISH 1V6575X0052	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Atomizing Steam Valve	Packing		PACKING KIT,FISH RPACKX0002	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Atomizing Steam Valve	Gasket		GASKET SET,FISH RGASKETX182	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Atomizing Steam Valve	Diaphragm		DIAPHRAGM,FISH 2E670002202	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Packing		PACKING KIT,FISH RPACKX0002	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Repair Kit		ACTUATOR KIT,FISH R667X000402	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Bushing		BUSHING,FISH 1E682814012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Retainer		RETAINER,FISH 1V710935072	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Disc		DISC,FISH 1V711006242	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Seat		SEAT,FISH 1V711135072	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Diaphragm		DIAPHRAGM,FISH 2E669902202	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Trip Valves (3)	Cage		CAGE,FISH 2U227633272	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Header Pressure Control Valve	Repair Kit		ACTUATOR KIT,FISH R667X000402	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Header Pressure Control Valve	Bushing		BUSHING,FISH 1E682814012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Header Pressure Control Valve	Diaphragm		DIAPHRAGM,FISH 2E669902202	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Fuel Oil Pumps	Pump		PUMP,MAIN FUEL OIL KRAL	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Main Fuel Oil Recirculation Valve	1" Welded Flange Valve w/ Actuator		VALVE ASSY,JAMES 1052 1"	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System		Level Fuel Oil Recirculation Valves	3/4" Welded Valve w/ Actuator		VALVE ASSY,JAMES 1052 3/4"	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Oil Valve	1/2" Ball Valve		VALVE KIT,JAMES RKB5MT	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Steam Valve	Gasket		GASKET SET,FISH RGASKETX312	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Steam Valve	Packing		PACKING KIT,FISH RPACKX00012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Steam Valve	Plug/Stem		PLUG/STEM,FISH 1U2161X0082	10	1	10	10	10	41	Order Pending
Unit 3 Fuel Oil System	Burners	Steam Valve	Ring		RING,FISH 1U222546172	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit 3 Fuel Oil System	Burners	Steam Valve	Cage		CAGE,FISH 2U215033272	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Scavenge Valve	Gasket		GASKET SET,FISH RGASKETX312	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Scavenge Valve	Packing		PACKING KIT,FISH RPACKX00012	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Scavenge Valve	Plug/Stem		PLUG/STEM,FISH 1U2161X0082	10	1	10	10	10	41	Order Pending
Unit 3 Fuel Oil System	Burners	Scavenge Valve	Ring		RING,FISH 1U222546172	10	1	10	10	10	41	In Stock
Unit 3 Fuel Oil System	Burners	Scavenge Valve	Cage		CAGE,FISH 2U215033272	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Rotating Assembly		CASE ASSY,BWL (INNER)	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Shoe Assembly		SHOE ASSY,KI-00166-A- 3740	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Throttle bushing [(2 req'd)		BUSHING,BWL 3106181	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Bearing		BEARING,HIT 9-60-1	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Bearing		BEARING,HIT 9-60-2	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Balance bushing		BUSHING,BWL 3106181	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Thrust bearing		BEARING ASSY,THRUST JHJ-5	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Boiler Feed Pumps	Gaskets		GASKET,BWL T- 101204JG	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	6" - EHT valve 1500lb - Welded		DIAPHRAGM,FISH 2R6376X00	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 10A5411X022 -Seal Ring		RING,FISH 10A5411X022	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 13A5599X052 - O-Ring		O-RING,FISH 13A5599X052	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 26A52990X52 - Seat Ring Retainer		RING,FISH 26A5299X052	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 27A2798X042 - Seat Ring, O-Ring		RING,FISH 27A2798X042	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 42B3570X012 - Cage, Eq%		CAGE,FISH 42B3570X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 36A5366X062 - Plug/Stem Bal		PLUG/STEM,FISH 36A5366X062	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	2 - 26A5314X012 - Gasket		GASKET,FISH 26A5314X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 1J872906332 - Upper Wiper		WIPER,FISH 1J872906332	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 1J873435072 - Packing Box Ring		RING,FISH 1J873435072	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 1R290601012 - Packing Set		PACKING,FISH 1R290601012	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 1H7441X0022 - Bushing Seal		SEAL,FISH 1H7441X0022	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - 2R6376X0082 - Diaphragm		DIAPHRAGM,FISH 2R6376X00	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	Main Feed Water Control Valve	1 - R667X000802 - Repair Kit		ACTUATOR KIT,FISHER R667	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)	All HP Heaters	Conductivity Probe		PROBE,CONDUCTIVITY	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)		Aquarian Alarm Module		PROBE,AQUARIAN	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)		Level Transmitter		TRANSMITTER, DP 0-120" H2O	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)		Relay		RELAY,OMRON MM4XP-DC125	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heater Controls (Water Induction Protection)		Solenoid		SOLENOID,ASCO 8300 125 VDC	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Bushing		BUSHING,DEW 0800109	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Clip		CLIP,DEW 0540097	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Ring		RING,DEW 0760093	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Ring		RING,DEW 668215DEW	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Screw		SCREW,DEW 0440024	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Spacer		SPACER,DEW 0660065	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Spring		SPRING,DEW 6580312 (3/SET)	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Stem		STEM,DEW 0040851	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Stud		STUD,DEW 0282351	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Stud		STUD,DEW 0280514	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Packing		PACKING,DEW 6442946	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	Motorized Bypass Valves	Nut		NUT,DEW P71ER250	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	H.P. Heaters	NRV Valves - #6 HP Heater	6" Dia		GASKET,COVER HIT	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	H.P. Heaters	NRV Valves - #5 HP Heater	8" Dia		GASKET,COVER HIT	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	H.P. Heaters	NRV Valves - #4 HP Heater	10" Dia		GASKET,COVER HIT	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Stud		STUD,DEW 0280443	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Stud		STUD,DEW 0280513	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Disc		DISC,DEW 051095	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Ring		RING,DEW 0760072	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Ring		RING,DEW 2004920	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Stud		STUD,DEW 0440024	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Nut		NUT,DEW #2003863	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Nut		NUT,DEW 2000006	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Motorized Discharge Valves	Nut		NUT,KEYSTONE 903-735	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit 3 H.P. Feedwater System	Steam Drum	Level Control Transmitters	Transmitter	Part on order	TRANSMITTER,PRESS 5-800	10	1	10	10	10	41	Order Pending
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Cage		CAGE ASSY,FISH 22A3525X022	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Packing		PACKING,FISH 1R290601012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Plug/Stem		PLUG/STEM,FISH 22A3527X052	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Gasket		GASKET,FISH 10A4155X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Gasket		GASKET,FISH 10A4154X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Ring		RING,FISH 10A4210X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Ring		RING,FISH 12A3529X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Feed Water Flow Controls	LL Control Valve	Ring		RING,FISH 11A3306X012	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	Suction Line Safety Valve	1/2" Dia		VALVE,RELIEF 1/2"110# SE	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Body		BODY,VALVE MASON 37-79264	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Ring		RING KIT,MASON 01148734399	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Gasket		GASKET,MASON 356154-152-825	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Seal		SEAL,MASON 354810-034-779	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Retainer		RETAINER,MASON 358754-000-163	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Seal		SEAL,MASON 358753-000-210	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Pin		PIN,MASON 971342-023-250	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Stem		STEM,MASON 358738-113-210	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Plug		PLUG,MASON 011509-398206	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Seat		SEAT,MASON 358748-000-596	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Liner		LINER,MASON 359005-000-213	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Diaphragm		DIAPHRAGM,MASON 010275-040-77	10	1	10	10	10	41	In Stock
Unit 3 H.P. Feedwater System	Boiler Feed	DA Recirculation Block Valve	Stem		STEM,MASON 770354-027-152	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Feeder to MCC E1 - breaker C4	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Feeder to MCC C12 - breaker C7	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Feeder to Power Centre - breaker C14	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Feeder to Power Centre - breaker C15	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C3	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C5	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C6	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C8	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C9	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C10	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C11	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C12	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	breaker C13	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Circuit Breaker to Bus - breaker C16	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Circuit Breaker to Bus - breaker C17	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Feeder to MCC - breaker C18	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Circuit Breaker to Bus - breaker C19	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-3 Relay	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			Feeder to transformer ATC - breaker SSB-3		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-4 Relay	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-4 Relay	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			Feeder to Station Board - breaker SSB-2		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			Feeder to Station Board - breaker SSB-4		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Boiler Area MCC BAB3 - breaker SDB-34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	GPB34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	AC34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	CWP34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	LDP34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	WTP34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Diesel Bus DB34 - Breaker DB34	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Diesel Bus - D2	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Diesel Bus - DBT	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker ST34 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker ST34 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker TB12 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker TB12 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker SAT34 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker SAT34 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	TB3 (Tie Breaker Between Station Board SB34 & Unit Board UB3)		TB3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	TB3 (Tie Breaker Between Station Board SB34 & Unit Board UB3)		TB3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			Feeder to Station Board - breaker ST34 & relays		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			Feeder to Station Board - breaker TB12 & relays		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	TB3 (Tie Breaker Between Station Board SB34 & Unit Board UB3)		Circuit Breaker TB3		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker PSM3 & relay		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker TB12 relays		SYNCHROTRACT,SYN52 01	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Station Board SB34 (ST34)			breaker TB12 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	TB3 (Tie Breaker Between Station Board SB34 & Unit Board UB3)		TB3 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	TB3 (Tie Breaker Between Station Board SB34 & Unit Board UB3)		TB3 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
UB1-1 (Tie Breaker Between Station Board SB12 & Unit Board UB1)			Circuit Breaker UB1-1	Shares spare with Feeder to Station Board - breaker SSB-1.	BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
UB1-1 (Tie Breaker Between Station Board SB12 & Unit Board UB1)			UB1-1 Relay		SYNCHROTECT,SYN52 01	10	1	10	10	10	41	In Stock
UB1-1 (Tie Breaker Between Station Board SB12 & Unit Board UB1)			UB1-1 Relay	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
UB1-1 (Tie Breaker Between Station Board SB12 & Unit Board UB1)			UB1-1 Relay	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
UB2-12 (Tie Breaker Between Unit Board UB2 & Station Board SB12)			Circuit Breaker UB2-12	Shares spare with Feeder to Station Board - breaker SSB-1.	BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
UB2-12 (Tie Breaker Between Unit Board UB2 & Station Board SB12)			UB2-12 Relay		SYNCHROTECT,SYN52 01	10	1	10	10	10	41	In Stock
UB2-12 (Tie Breaker Between Unit Board UB2 & Station Board SB12)			UB2-12 Relay	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
UB2-12 (Tie Breaker Between Unit Board UB2 & Station Board SB12)			UB2-12 Relay	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
UB2-12 (Tie Breaker Between Unit Board UB2 & Station Board SB12)			UB2-12 Relay	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1) (Alternate Feed Transfer Bus A9)	Feeder to Power Centre A - A1	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1) (Alternate Feed Transfer Bus A9)	Feeder to Power Centre A - A9	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)	Feeder to transformer LT-A - breaker A3	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)	Feeder to MCC A1 - breaker A4	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)	A5	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)	A6	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)	A7	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-4 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-9 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-11 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-2 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMA-2	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-2 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMA-1	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-2 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMS-1	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-2 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMH-2	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1) (Alternate Feed Transfer Bus A9)	Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			Feeder to Unit Board UB1 - breaker UB1-2		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			Feeder to transformer ATA - breaker UB1-3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-4		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-5		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB1 (UB1-2)			breaker UB1-6		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-7		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-8		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-9		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-10		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			breaker UB1-11		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-2 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Feeder to Power Centre B - breaker B1	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Feeder to transformer LT-B - breaker B4	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Feeder to MCC B1 - breaker B5	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	B2	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	B6	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	B7	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	B8	Shares spare re-build kit/critical spares kit with other CGE AK breakers.	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB2 (UB2-1)			UB2-3 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-4 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-9 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-10 relay	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-1 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMA-2	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-1 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMA-1	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-1 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMS-1	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-1 relays	Shares spare with CGE HFA devices	RELAY,AUXILIARY RXMH-2	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-2 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-2 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			Feeder to Unit Board - breaker UB2-1 & relays	Shares spare with Feeder to Station Board - breaker SSB-1.	BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			Feeder to Transformer ATB, breaker UB2-2		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-4		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-5		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-6		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB2 (UB2-1)			UB2-7		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-8		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-9		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-10		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-1 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Relays	Spares spare with CGE IAC51 and ICA53 devices	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Relays	Spares spare with CGE IAC51 and ICA53 devices	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Feeder to Aux Board - breaker UAB-3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Feeder to transformer LDP- 3 - breaker LDP-3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Feeder to MCC BAB3 - breaker BAB-3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	AOP3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	TAB3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	AC12	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Tie Breaker to Station Board - breaker ATB3	Shares spare re-build kit/critical spares kit with other FP breakers.	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Relays	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB3 (UT3)			UT3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			UT3 relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			UAT3 Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			UAT3 Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			Feeder to Unit Board - breaker UT3	Shares spare with Feeder to Station Board - breaker SSB-1.	BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			Feeder to transformer UAT3 - breaker UAT3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			BFE3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			BFW3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			FDE3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			FDW3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CEN3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CES3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB3 (UT3)			CWE3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CWW3		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			UT3 relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Relays	Shares spare with other Westinghouse relays - replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-3 Relay	Replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Relays		RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			Feeder to Station Board - breaker SSB-1 & Relays		BREAKER,EATON 4160V 2000A	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay		SYNCHROTECT,SYN5201	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay	Replaced by ABB SPAU121C	RELAY,VOLTAGE ABB SPAU121C	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay	Replaced by ABB RXMA/RXMH	RELAY,AUXILIARY RXMA-2	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay	Replaced by ABB RXMA/RXMH	RELAY,AUXILIARY RXMA-1	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay	Replaced by ABB RXMA/RXMH	RELAY,AUXILIARY RXMS-1	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)			SSB-1 Relay	Replaced by ABB RXMA/RXMH	RELAY,AUXILIARY RXMH-2	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			breaker PSM3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-5 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-6 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-7 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-8 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)			UB1-10 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-5 relay		RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16												
Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB2 (UB2-1)			UB2-6 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-7 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB2 (UB2-1)			UB2-8 relay		RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			BFE3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			BFW3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			FDE3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			FDW3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CEN3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CES3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CWE3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)			CWW3 relay	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)	Relays	n/a	RELAY,PROTECTION SEL701	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)	Feeder to Power Centre - breaker C1		BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)	Feeder to MCC C1 - breaker C2	Purchasing re-build kit/critical spares kit for AK-2-25 frame breaker	BREAKER,EATON 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)			Feeder to transformer SAT34 - breaker SAT34 & relays		BREAKER,EATON 4160V 1200A	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Station Board - breaker SAB34	Purchasing re-build kit/critical spares kit for 65H frame breaker	BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	Feeder to Station Board - breaker ATB12		BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)	WAM34		BREAKER,SCHNEIDER 600V	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1) (Alternate Feed Transfer Bus A9)	Relays	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1) (Alternate Feed Transfer Bus A9)	Relays	Shares spare with CGE IAC51 and ICA53 devices - replaced by SEL-551C	RELAY,OVERCURRENT SEL 551C	10	1	10	10	10	41	In Stock

Holyrood Thermal Generating Station - Critical Spares Program

Nov-16

Asset			Critical Spare			Spare Part Criticality						Inventory Status
System	Sub-System	Asset	Defined Spare	Notes	Inventory Description	Asset Criticality	PM / CM	Lead Time	Tech Spec	# of suppliers	Ranking	
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)	Relays	Shares spare with all other P&B Golds devices.	RELAY,RETRO. PBSJ3E5N11	10	1	10	10	10	41	In Stock
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3			Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1) (Alternate Feed Tie Breaker to Transfer Bus C15)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB12 (SSB1)	Aux Transformer ATC - SSB3	Power Center C SAB12 (C1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)			Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station Board SB34 (ST34)	Station Aux Transformer (SAT34)	Station Aux Board (SAB34)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB1 (UB1-2)	UB13 (Aux Transformer ATA)	Power Center A UAB1 (A1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB3 (UT3)				Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)	Aux Board UAB3 (UAB3)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB1 (UB1-2)	UB1-3 (Aux Transformer ATA)			Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)			Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB2 (UB2-1)	Aux Transformer ATB (UB22)	Power Center B UAB2 (B1)		Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unit Board UB3 (UT3)	Unit Aux Transformer (UAT3)			Not critical	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX F

Critical Spares Status Listing – Combustion Turbines

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2016-17 Winter Readiness Report

Hardwoods and Stephenville		September 23, 2016 Update		
Recommended Component	Risk Score	Updated Stock Status	Expected Delivery Date	Exposure for winter 2016/2017 based on current plan
High Energy Ignition Unit, Gas Generator, Prime Mover Systems	High	In Stock	N/A	Med
Fire Fuel Shutoff Valve (LF-8), Liquid Fuel System, Auxiliary Systems	Low	In Stock	N/A	Low
Bearing (494047), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Bearing (494056), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Vibration Transducer, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Jacking Oil Pump, Main Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Fuel Filter, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Oil Filter Unit - Complete (B.108506), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Filter (494064), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Proximity Switch, Clutch, Prime Mover Systems	Medium	In Stock	N/A	Low
Altair Quick Shutoff Valve (AV-LF-1), Liquid Fuel System, Auxiliary Systems	High	In Stock	N/A	Low
Fuel Valve (FC-LF-1), Liquid Fuel System, Auxiliary Systems	High	In Stock	N/A	Low
Fuel Recirculation Solenoid Valve (LF-7), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Fuel Regulator (LF-4), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Jacking Oil Permissive Pressure Switch, Main Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Clutch Control Solenoid Valve (LO-6), Main Lube Oil System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
Valve (181536), Power Turbine Model CT2, Prime Mover Systems	Low	In Stock	N/A	Low
Primary Ratchet Ring, Clutch, Prime Mover Systems; A side	High	In Stock	N/A	Low
Primary Ratchet Ring, Clutch, Prime Mover Systems; B side	High	In Stock	N/A	Low
Secondary Ratchet Ring, Clutch, Prime Mover Systems; A side	High	In Stock	N/A	Low
Secondary Ratchet Ring, Clutch, Prime Mover Systems; B side	High	In Stock	N/A	Low
Ring that the Primary Pawl and spring are installed	Medium	In Stock	N/A	Low
Primary Pawl Spring, Clutch, Prime Mover Systems	High	In Stock	N/A	Low
Primary Pawl, Clutch, Prime Mover Systems	High	In Stock	N/A	Low
Secondary Pawl, Clutch, Prime Mover Systems	Medium	In Stock	N/A	Low
Limit Switch, Snow Door Assembly, Exhaust, Prime Mover Systems, SVL GT	Medium	In Stock	N/A	Low
NC Solenoid Valve (SV-CA-2), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
NO Solenoid Valve (SV-CA-1), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Starter Control Valve (CA-17), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
3-Way Thermostatic Valve (GL-2), MLO/Glycol Cooling System, Auxiliary Systems	Medium	In Stock	N/A	Low
Thermocouple (181398N1), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Speed Pickup (181487), Power Turbine Model CT2, Prime Mover Systems	High	In Stock	N/A	Low
Vibration Pickup (181571), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Thermocouple (181397), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Thermocouple (181398N2), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Probe (181414N1), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Probe (181414N2), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Thermocouple (184847), Power Turbine Model CT2, Prime Mover Systems	High	In Stock	N/A	Low
Motor Operated Tank Shutoff Valve (LF-38), Liquid Fuel System, Auxiliary Systems, HWD GT	High	In Stock	N/A	Med
Final Fuel Filter (F-LF-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Heater Filter Coalescer, Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Prefilter, Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Supplemental Fuel Filter (F-LF-5), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
High Efficiency Farr HP-100 Filter (2'x2'x2"), Filter Box - Curtiss Wright, Prime Mover Systems	Medium	In Stock	N/A	Low

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2016-17 Winter Readiness Report

Hardwoods and Stephenville		September 23, 2016 Update		
Recommended Component	Risk Score	Updated Stock Status	Expected Delivery Date	Exposure for winter 2016/2017 based on current plan
Filter (F-GGLO-1), Gas Generator Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Unloading Filter, Liquid Fuel System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Duplex 25u Filter (F-LO-1), Main Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Filter/Coalescer Heater (HTR-LF-1), Liquid Fuel System, Auxiliary Systems, HWD GT		In Stock	N/A	Low
P3 Pressure Transducer (PT-P3-1), Liquid Fuel System, Auxiliary Systems	High	In Stock	N/A	Low
Common Drain Clutch A Thermocouple (TC-LO-3), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Fuel Supply Thermocouple (TC-LF-1), Liquid Fuel System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Alternator Bearing Drain Oil Thermocouple (TC-LO-3), Main Lube Oil System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
Alternator Cooling Air Temperature Thermocouple (TC-A-1), Alternator Cooling System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Common Drain Clutch B Thermocouple (TC-LO-11), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Compressor Start-Stop Pressure Switch (PS-CA-1), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Compressor Start-Stop Pressure Switch (PS-CA-2), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 1 Thermocouple (TC-LO-4), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 2 Thermocouple (TC-LO-5), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 3 Thermocouple (TC-LO-6), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 4 Thermocouple (TC-LO-7), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 5 Thermocouple (TC-LO-8), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Alternator Clutch Bearing 6 Thermocouple (TC-LO-9), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Exciter Bearing 7 Thermocouple (TC-LO-10), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
Oil Drain Thermocouple (TC-LO-2), Main Lube Oil System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
Oil Supply Thermocouple (TC-GGLO-1), Gas Generator Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Oil Supply Thermocouple (TC-LO-1), Main Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Anti-Icing Hot Air Valve - Complete (810-501-0747), Gas Generator, Prime Mover Systems	Low	In Stock	N/A	Low
Gas Generator Permissive Start Pressure Switch, Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Starter Overpressure Pressure Switch (PS-CA-3), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Pressure Regulating Valve (LO-8), Main Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Inlet Temperature Thermocouple, Gas Generator Enclosure with Septum Doors, Prime Mover Systems	Medium	In Stock	N/A	Low
Resistance Temperature Detector Probe, Gas Generator Enclosure with Septum Doors, Prime Mover Systems	Medium	In Stock	N/A	Low
NC Solenoid Valve (SV-CA-3), Gas Generator Air Starter System, Auxiliary Systems	High	In Stock	N/A	Low
Fuel Temperature Sensor (TS-LF-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Combustion Chamber, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Lower Fuel Pump Assembly, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Outer Fuel Pump Drive Assembly (BDA.7591), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Upper Fuel Pump Assembly, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Exciter Bearing, 63MVA 50MW Generator, Power Generation Systems	High	In Stock	N/A	Low
Rotor Bearing, 63MVA 50MW Generator, Power Generation Systems	High	In Stock	N/A	Low
Bearing (181413 or 181332), Power Turbine Model CT2, Prime Mover Systems	Medium	In Stock	N/A	Low
Fuel Pump Servo Valve (SV-LF-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Low Trip Pressure Switch (PS-LO-7), Main Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Start Permissive Pressure Switch (PS-LO-6), Main Lube Oil System, Auxiliary Systems, SVL GT	High	In Stock	N/A	Low
Pressure Switch, Permissive Start - Low Pressure Alarm (PS-LF-2), Liquid Fuel System, Auxiliary Systems	High	In Stock	N/A	Low
Pressure Switch, Trip - Low Fuel Pressure (PS-LF-3), Liquid Fuel System, Auxiliary Systems	High	In Stock	N/A	Low
Low Oil Pressure Switch (PS-GGLO-1), Gas Generator Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Filter Differential Pressure Switch (PSD-LO-1), Main Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low

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Hardwoods and Stephenville		September 23, 2016 Update		
Recommended Component	Risk Score	Updated Stock Status	Expected Delivery Date	Exposure for winter 2016/2017 based on current plan
Filter Upstream Pressure Switch (PS-GGLO-3), Gas Generator Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Pre-filter Differential Pressure Switch (PSD-LF-2), Liquid Fuel System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
AC Pump Discharge Fuel Pressure Switch (PS-LF-4), Liquid Fuel System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
DC Pump Start Pressure Switch (PS-LO-1), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
DC Pump Start Pressure Switch (PS-LO-2), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	In Stock	N/A	Low
DC Pump Start Pressure Switch (PS-LO-3), Main Lube Oil System, Auxiliary Systems, HWD GT	Medium	In Stock	N/A	Low
Low Oil Pressure Switch (PS-GGLO-2), Gas Generator Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Pressure Switch (PS-HO-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Inertial Filter Element, Filter Box - Curtiss Wright, Prime Mover Systems	Medium	In Stock	N/A	Low
Oil to Clutch A Pressure Transducer (PT-LO-1), Main Lube Oil System, Auxiliary Systems, SVL GT	High	In Stock	N/A	Low
Oil to Clutch B Pressure Transducer (PT-LO-2), Main Lube Oil System, Auxiliary Systems, SVL GT	High	In Stock	N/A	Low
Fuel Pressure Transducer (PT-LF-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Liquid Fuel Burner - Complete (BDC.3026), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Oil Pump - Complete, Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Outer Oil Pump Drive Assembly (47-1-1-006409), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Outer Starter Drive Assembly (BDA.1153), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
Scavenge Pump Assembly (47-1-1-006418), Gas Generator, Prime Mover Systems	Medium	In Stock	N/A	Low
HP Compressor Magnetic Pickup, Gas Generator, Prime Mover Systems	Low	In Stock	N/A	Low
LP Compressor Magnetic Pickup, Gas Generator, Prime Mover Systems	Low	In Stock	N/A	Low
Low Liquid Level Alarm Switch (LL-GL-1), MLO/Glycol Cooling System, Auxiliary Systems	Medium	In Stock	N/A	Low
Level Switch (LS-GGLO-1), Gas Generator Lube Oil System, Auxiliary Systems	High	In Stock	N/A	Low
Heater Control Temperature Switch (TS-GGLO-1), Gas Generator Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Heater Control Temperature Switch (TS-LO-1), Main Lube Oil System, Auxiliary Systems	Medium	In Stock	N/A	Low
Final Fuel Filter Differential Pressure Switch (PSD-LF-1), Liquid Fuel System, Auxiliary Systems	Medium	In Stock	N/A	Low
Inlet Pressure Transducer, Gas Generator Enclosure with Septum Doors, Prime Mover Systems	Medium	In Stock	N/A	Low
Clutch Control Solenoid Valve (LO-6), Main Lube Oil System, Auxiliary Systems, SVL GT	Medium	Procurement in progress	TBD	Low
Proximity Switch, Snow Door Assembly, Exhaust, Prime Mover Systems, HWD GT	Low	Procurement in progress	Nov-16	Low

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Part No.	Description	Recommended Component	Stock Status	Quantity on Hand	Risk Score	Lead Time	Expected Delivery	Comments
60101152	ACTUATOR,PNEUMATIC	DOUBLE ACTING PNEUMATIC ACTUATOR, KEYSTONE MORIN, TYCO:MRP 004	In Stock	1			N/A	
58400786	AFTER-FILTER,AIR DRYER	AIR DRYER AFTER FILTER, PN 25-178-50C, PARKER FILTER CARTRIDGE # 10C10-050	In Stock	4			N/A	
54900162	ANALYZER,DEW POINT	INST AIR DEW POINT ANALYZER, MICHELL INSTRUMENTS:EA-XP-TX-EX1-C1-D1-E2-F1-G1-H1	In Stock	1			N/A	
22900028	BELT,POLYBAND	BELT, 1320-BLT-B-EHX07-1250 3R 5VX1250, POLYBAND DODGE OR EQUAL	In Stock	6			N/A	
42100313	BELT,V	INGERSOLL RAND 95100178	In Stock	6			N/A	
58000077	BELT, 1320-BLT-S-EHX19-90	BELT, ECODYNE:1320-BLT-S-EHX19-90	In Stock	6			N/A	
65000436	BRUSH,CARBON MOTOR	1 SET = 2 PIECES, ABB: GPFX052143P0098	In Stock	1			N/A	
60101092	CABLE,SOLAR,IGNITER	CENTAUR:919340C2	In Stock	1			N/A	
58400799	CARTRIDGE,DESICCANT	PNEUMATIC PRODUCTS:3153517	In Stock	1			N/A	
54900175	COIL,MAGNETIC SPEED PICK-UP	TORQUE CONVERTER MAGNETIC SPEED PICK-UP COIL, KOENIG:9501W14	In Stock	1			N/A	
54900174	COIL,OVERSPEED TRIP	ELECTRONIC OVERSPEED TRIP, 9501W38	In Stock	1			N/A	
70000484	CONTACTOR,50A 120VAC	42CF35AF	In Stock	2			N/A	
60101075	CONTROLLER,LIMIT (0-2502-F)	LIMIT CONTROLLER (0-2502-F), SA100LKA3-MN-4*NN-D1/Y	In Stock	1			N/A	
60101074	CONTROLLER,STEP LIFO	8 STAGES, SCL4000-8	In Stock	1			N/A	
60101076	CONTROLLER,STEP LIFO (4 STAGE)	STEP CONTROLLER LIFO (4 STAGES), SCL4000-4	In Stock	1			N/A	
25900063	COUPLING,FISHER	COUPLING, FISHER:17A8307X012	In Stock	1			N/A	
58101229	COUPLING,PUMP-MOTOR	COUPLING, REXNORD-OMEGA: REX ELASTOMER-ES-4(STANDARD ORANGE),PUMP-MOTOR	In Stock	1			N/A	
58101230	COUPLING,PUMP-MOTOR	COUPLING, REXNORD-OMEGA: ELASTOMER-ES-5 (STANDARD ORANGE) PUMP-MOTOR	In Stock	1			N/A	
58101224	COUPLING,PUMP/MOTOR	JOHN CRANE:A045-3S78-1270, 1-1/2" - 2-3/8", ROUGH BORE	In Stock	1			N/A	
65900004	COUPLING,PUMP/MOTOR	SIZE 1040T20, FLEXIBLE GRID TYPE, VERTICAL ORIENTATION, MANUFACTURER:FALK	In Stock	1			N/A	
68601093	CUT-OUT,AUTO	AUTO CUT-OUT, CHROMOLOX:168-053169-1 05	In Stock	3			N/A	
92000260	DESICCANT,4-8 GRADE D	INGERSOLL RAND 50# BAG	In Stock	2			N/A	
98200197	DETECTOR,SMOKE	SMOKEDETECTOR, NOTIFIER:FSI-851	In Stock	2			N/A	
98200194	DETECTOR,THERMAL	ELECTRICAL PACKAGE THERMAL DETECTOR, KIDDE-FENWAL:27121-160	In Stock	2			N/A	
98200195	DETECTOR,THERMAL	TURBINE EXHAUST TUNNEL - THERMAL DETECTOR, KIDDE-FENWAL:12-H27121-020-08	In Stock	2			N/A	
98200196	DETECTOR,THERMAL	MECHANICAL PACKAGE THERMAL DETECTOR, KIDDE-FENWAL:27121-225	In Stock	1			N/A	
98200200	DETECTOR,THERMAL	TURBINE ENCLOSURE THERMAL DETECTOR, KIDDE-FENWAL:27121-325	In Stock	4			N/A	
61100469	DIVIDER,FLOW	FLOW DIVIDER, JAHNS HYDRAULIK:MTO-2-5-G	In Stock	1			N/A	
60101077	DRYER,INSTRUMENT AIR	INSTRUMENT AIR DRYER DIFFERENTIAL PRESSURE, DIFFERENTIAL PRESSURE TRANSMITTER, ROSEMOUNT:3051S2CD3A2A11A1A1L1L2L4M5Q4	In Stock	1			N/A	
58400788	ELEMENT,POST FILTER	POST FILTER ELEMENT 105 SCFM, INGERSOLL RAND 85565661	In Stock	6			N/A	
58400766	ELEMENT,PRE-FILTER	PRE-FILTER ELEMENT 105 SCFM, INGERSOLL RAND 85565679	In Stock	6			N/A	
58400762	ELEMENT,0180MA0003BN	ELEMENT 0180MA0003BN (3µm), P/N 2059438, SPIN ON ELEMENT, MANUFACTURER:HYDAC	In Stock	1			N/A	
56500206	FILL KIT,SF6	ABB BREAKER SF6 FILL KIT, (HECS 80S), S/N 1HC211015861	In Stock	1			N/A	
58400772	FILTER KIT,FUEL	LOW PRESSURE FUEL FILTER REPLACEMENT KIT, CENTAUR:912555C3	In Stock	1			N/A	
58400764	FILTER,AIR (ELEMENT)	INGERSOLL RAND 32012957	In Stock	20			N/A	
58400802	FILTER,AIR 4P0710S	AIR FILTER, CAT: 4P0710	In Stock	2			N/A	
58400797	FILTER,FLOW CONTROL	FILTER AUTOMATIC FLOW CONTROL, 4"FNPT, MODEL:ST-400-25, 240GPM, PENTAIR:LWT 3949	In Stock	1			N/A	
58400798	FILTER,FLOW CONTROL	FILTER AUTOMATIC BACKWASH FLOW CONTROL, 4" FNPT, MODEL:ST-400-25, 245GPM, MODULAR PIPING SUPPLY INC: LWT5430	In Stock	1			N/A	
58400780	FILTER,FUEL BOOST KIT	LOW PRESSURE, 912343C1	In Stock	1			N/A	
58400504	FILTER,FUEL CAT 1R0749	FOR USE ON STAGE I AND II, EMERGENCY DIESEL MANUAL PRIMING PUMPS, CATERPILLAR #1R-0749	In Stock	10			N/A	
58400782	FILTER,IGV ACTUATOR	MOOG:B64567-1V	In Stock	6			N/A	
58400791	FILTER,LUBE OIL	LUBE OIL FILTER, CLARKE RELIANCE:A2200A4, NFS:2200A4	In Stock	20			N/A	
58400801	FILTER,OIL 275-2604	OIL FILTER, CAT:275-2604	In Stock	6			N/A	
58400787	FILTER,PRESSURE	PALL: ELEMENT HC9600FCP4H	In Stock	4			N/A	
58400783	FILTER,TMP-95 FINAL	PNEUMAFIL:S52538B1, V-CELL STMPM16 STATIC BARRIER FILTER, 24"X24"X12", INJECTION MOLDED PLASTIC FRAME, 100% SYNTHETIC MEDIA, NEOPRENE SPONGE RUBBER GASKET - DOWN STEAM SIDE	In Stock	55			N/A	
54800069	FILTER,WATER	CLARK RELIANCE 2500PW	In Stock	24			N/A	
58400778	FILTER,.961131C1 FUEL	CENTAUR:912555C1 (ELEMENT & GASKET KIT)	In Stock	6			N/A	
54900194	FLOAT,SURESITE	FLOAT, SURESITE:88111	In Stock	1			N/A	

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61100434	FLOWMETER,MAGNETIC	RAW WATER FLOW MAGNETIC FLOWMETER, ROSEMOUNT:8705TSA060C1W0N0G1	In Stock	1			N/A	
70000486	FUSE,AC 25A	ATOR25	In Stock	4			N/A	
70000370	FUSE,AGC 1A 250V	AGC 1	In Stock	10			N/A	
70000373	FUSE,AGC 3A 250V		In Stock	10			N/A	
70000485	FUSE,PANEL HEATER 4.5A	PANEL HEATER FUSE 4.5A, ATQR4.5	In Stock	3			N/A	
70000481	FUSE,POWER CLASS J 45A	A4J45	In Stock	10			N/A	
70000482	FUSE,PRIMARY 20A	ATQR20	In Stock	4			N/A	
70000483	FUSE,SECONDARY 8A	ATQR8	In Stock	4			N/A	
70000490	FUSE,1.0A	BUSSMAN:LP-CC-1	In Stock	10			N/A	
70000507	FUSE,1.25A GMC-1.25A	FUSE 1.25 AMP, GMC-1.25-A, BUSSMANN:LWT9119	In Stock	10			N/A	
70000488	FUSE,15.0A	BUSSMAN:LP-CC-15.0	In Stock	10			N/A	
70000491	FUSE,2.0A 300 VDC	BUSSMAN:LP-CC-2	In Stock	10			N/A	
70000500	FUSE,2AMP	FUSE 2 AMP, GMC-2-A, BUSSMAN:GMC-2-A	In Stock	10			N/A	
70000492	FUSE,3.0A	BUSSMAN:LP-CC-3.0	In Stock	20			N/A	
70000501	FUSE,3AMP GMC-R	FUSE 3AMP, BUSSMAN:GMC-3-R	In Stock	10			N/A	
70000489	FUSE,5.0A	BUSSMAN:LP-CC-5.0	In Stock	20			N/A	
70000506	FUSE,6A GMC-6A	6AMP, GMC-6A, BUSSMANN:LWT7345	In Stock	10			N/A	
56200364	GASKET,FILTER HOUSING	GASKET,CLARK RELIANCE:A10137455, NFS# 10117455	In Stock	6			N/A	
60101083	GAUGE,PRESSURE	FUEL UNLOADING PUMPS OUTLET PRESURE/GAUGE PRESSURE TRANSMITTER, ROSEMOUNT:3051S2TG3A2E11A1AB4K6M5Q4	In Stock	1			N/A	
61100426	GAUGE,PRESSURE	ATOMIZING AIR HEADER PRESSURE GAUGE, PRESSURE TRANSMITTER, ROSEMOUNT:3051S2TG3A2A11A1AM5Q4	In Stock	1			N/A	
61100436	GAUGE,PRESSURE	RAW WATER PUMP 1 & 2, DISCHARGE GAUGE, PRESSURE TRANSMITTER, ROSEMOUNT: 3051S2TG2A2A11A1AB4M5Q4	In Stock	1			N/A	
03900023	HEATER,400W PANEL	PANEL HEATER 120V 60HZ 400W, PH40011	In Stock	1			N/A	
37900016	IGNITER,SPARK PLUG	SOLAR SPARK PLUG IGNITER, CENTAUR:903316C1	In Stock	2			N/A	
61100427	INDICATOR,BLUE MOISTURE	BLUE MOISTURE INDICATOR, INGERSOLL RAND 705001-SP	In Stock	1			N/A	
60101138	INDICATOR,LEVEL	HYD FLUID RESERVOIR LEVEL INDICATOR, REXROTH:CS3615-244910	In Stock	1			N/A	
61100432	INDICTATOR,DISCHG PRESS	HYDRUALIC FLUID PUMP #1 - DISCHARGE PRESSURE INDICTATOR, REXROTH:2-1/2/1500PUA31-10A-4 JIC	In Stock	1			N/A	
61100452	INDICTATOR,PRESSURE	INTAKE AIR STATIC FINAL-FILTER - DIFFERENTIAL PRESSURE INDICTATOR, DWYER INSTRUMENTS:4006	In Stock	1			N/A	
61100453	INDICTATOR,PRESSURE	INTAKE AIR STATIC PRE-FILTER - DIFFERENTIAL PRESSURE INDICTATOR, DWYER INSTRUMENTS:4002	In Stock	1			N/A	
60101155	INPUT CARD,PLC	ANALOG INPUT CARD FOR PLC, VARIOUS SKIDS, AUTOMATION DIRECT:F0-04AS1	In Stock	1			N/A	
58400792	KIT,SOFT PARTS	SOFT PARTS KIT, CLARKE RELIANCE:A10400107, NFS:10400107	In Stock	1			N/A	
60101085	LEVEL SWITCH,DAY TANK	FUEL OIL TANK HIGH LEVEL SWITCH, ULTRASONIC GAP LEVEL SWITCH, MAGNETROL:961-2DA0-030 C/W 9A1-A43A-018	In Stock	1			N/A	
60101088	LEVEL TRANSMITTER,LEVEL	FUEL OIL DAY TANK LEVEL RADAR LEVEL TRANSMITTER, ROSEMOUNT:5402AH1E64PNACAM1C1	In Stock	1			N/A	
61100423	MANIFOLD,PRESSURE TRANSMITTER	ROSEMOUNT 0305RC22B11	In Stock	1			N/A	
74600106	MODULE,ABSOLUTE SHAFT	SHAFT ABSOLUTE I/O MODULE WITH - EXTERNAL TERMINATIONS, BENTLY NEVADA:138700-01	In Stock	1			N/A	
74600111	MODULE,DISCRETE I/O	DISCRETE I/O MODULE WITH - EXTERNAL TERMINATIONS, BENTLY NEVADA:133434-01	In Stock	1			N/A	
74600105	MODULE,I/O	I/O MODULE WITH INTERNAL BARRIERS - (INTERNAL TERMINATIONS) (4 X VELOMITER), BENTLY NEVADA:135489-03	In Stock	1			N/A	
74600108	MODULE,I/O	I/O MODULE WITH INTERNAL BARRIERS - (INTERNAL TERMINATIONS), (2 X PROX/ACCEL + 2 X VELOMITER), BENTLY NEVADA:135489-02	In Stock	1			N/A	
60101173	MODULE,POWER SWITCH	LEVEL SWITCH MODULES, SURESITE: 87480	In Stock	1			N/A	
74600104	MODULE,PROX/SEISMIC	PROX/SEISMIC I/O MODULE WITH EXTERNAL TERMINATIONS, BENTLY NEVADA:128240-01	In Stock	1			N/A	
74600107	MODULE,PROX/SEISMIC	PROX/SEISMIC I/O MODULE WITH INTERNAL TERMINATIONS, BENTLY NEVADA:128229-01	In Stock	1			N/A	
74600110	MODULE,PROX/SEISMIC	3500/42M PROXIMITOR/SEISMIC MONITOR, BENTLY NEVADA:140734-02	In Stock	1			N/A	
74600101	MODULE,PROX/VELOM I/O	PROX/VELOM I/O MODULE WITH INTERNAL TERMINATIONS, BENTLY NEVADA:140471-01	In Stock	1			N/A	
74600102	MODULE,PROX/VELOM I/O	PROX/VELOM I/O MODULE WITH EXTERNAL TERMINATIONS, BENTLY NEVADA:140482-01	In Stock	1			N/A	
74600103	MODULE,SHAFT ABSOLUTE	SHAFT ABSOLUTE I/O MODULE WITH EXTERNAL TERMINATIONS, BENTLY NEVADA:138708-01	In Stock	1			N/A	
74600112	MODULE,SIGNAL OUTPUT	3500 BUFFERED SIGNAL OUTPUT MODULE, BENTLY NEVADA:147364-01	In Stock	1			N/A	
74600100	MODULE,TMR I/O	PROX/SEISMIC TMR I/O WITH EXTERNAL TERMINATIONS, BENTLY NEVADA:126632-01	In Stock	1			N/A	
74600115	MODULE,3500/50	3500/50 MODULE, BENTLY NEVADA:133388-02	In Stock	1			N/A	
65000442	MOTOR,BALDOR	BALDOR:VEM3770T NEMA	In Stock	1			N/A	
65000439	MOTOR,10 HP DC TURNING GEAR	KOENIG: DG6711A	In Stock	1			N/A	

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56400183	O-RING,FISHER	O-RING, FISHER:T1205106562	In Stock	1		N/A
88600152	OIL,COMPRESSOR	ALL SEASON SELECT OIL, INGERSOLL RAND 38436721	In Stock	2		N/A
89200233	OIL,LUBE	TURBOFLOXL32, MANUFACTURER: PETRO CANADA	In Stock	2		N/A
60101094	PICKUP,MAGNETIC	CENTAUR:P/N 190430-1	In Stock	1		N/A
74600097	PILOT LIGHT ASSEMBLY,AMBER	PILOT LIGHT ASSEMBLY AMBER 120VAC, A13200-05	In Stock	6		N/A
58400785	PRE-FILTER,PARKER AIR DRYER	PARKER AIR DRYER PRE-FILTER, PARKER FILTER CARTRIDGE# 6C10-050	In Stock	8		N/A
58400784	PRE-FILTER,Z-100	PNEUMAFIL:S52709C1, PRE-FILTER PANEL, 24"X24"X4"73 (FT2) SYNTHETIC MEDIA, PLASTIC FRAME FOR HIGHER PERFORMANCE AND LOWER PRESSURE DROP	In Stock	130		N/A
42900001	PUMP,CONVERTER CHARGING	TORQUE CONVERTER CHARGING PUMP, KOENIG:X216228-J	In Stock	1		N/A
54900163	RACK & PINION,PNEUMATIC	ACTUATOR, TYPE PNEUMATIC RACK & PINION, FLOWSERVE:20E39SWZ24D	In Stock	1		N/A
61100437	REGULATOR,SIGNAL PRESSURE	STAGE 2 TEMPERATURE CONTROL VALVE - AIR SIGNAL PRESSURE REGULATOR, FISHER:67CF-1663-38656	In Stock	1		N/A
68601089	RELAY,DPDT 120VAC	RCP8002 120AC	In Stock	1		N/A
60101179	RELAY,SINGLE POLE	SINGLE POLE RELAYS - VARIOUS SKIDS, AUTOMATION DIRECT:781-1C-120A	In Stock	2		N/A
68601090	RELAY,TPDT 120VAC	RCP1103 120AC	In Stock	1		N/A
58101231	REPAIR KIT,INJ. PUMP	CHEMICAL INJECTION PUMP REPAIR KIT, GRAINGER:K4PTC1	In Stock	1		N/A
42900002	REPAIR KIT,SSS CLUTCH MINOR	KOENIG:SL17998MNKT	In Stock	1		N/A
60101123	RTD,#1 PRIMARY SIGNAL	INLET SCROLL RTD #1 PRIMARY SIGNAL, ROSEMOUNT:0078-N-25-N-00-A-060-T26-XA	In Stock	1		N/A
60101087	RTD,HEATER DISCHARGE TEMP.	FUEL OIL INLINE HEATER DISCHARGE TEMPERATURE RTD, ROSEMOUNT:68 SERIES/0068D21C30A020T26	In Stock	1		N/A
60101117	SENSOR,#1 OVERSPEED TRIP	OVERSPEED TRIP SENSOR #1, ELECTRO CORP:3090A35	In Stock	2		N/A
60900049	SENSOR,CONDUCTIVITY	CONDUCTIVITY SENSOR - RO, RYAN HERCO:5926-200	In Stock	1		N/A
61100439	SOLENOID,BLEED VALVE	LP COMPRESSOR BLEED VALVE SOLENOID, ASCO:JKC8316G034V	In Stock	1		N/A
60101090	SWITCH ASSEMBLY,LIMIT	MICROSWITCH # LSA2B	In Stock	2		N/A
60101126	SWITCH, LOW ALARM PRESSURE	INSTR.AIR COMPRESSOR RECEIVER - LOW PRESSURE ALARM SWITCH, UNITED ELECTRIC CONTROLS: H122-274	In Stock	1		N/A
60101149	SWITCH,CHLORINE FLOW	CHLORINE INJECTION FLOW SWITCH, DWYER INSTRUMENTS:FS2	In Stock	1		N/A
60101191	SWITCH,DIFF PRESSURE	IGV ACT HYD FLUID FILTER- DIFF PRESS HIGH SWITCH, MOOG:G4444-2	In Stock	1		N/A
61100433	SWITCH,DIFF PRESSURE	HYDRAULIC FLUID CONDITIONING LOOP - FILTER DIFFERENTIAL PRESSURE SWITCH, PALL:RC0113CZ090H	In Stock	1		N/A
60101143	SWITCH,DIFF. PRESSURE	HYD FLUID SUPPLY FILTER - DIFFERENTIAL PRESSURE SWITCH, PALL:RC0113CZ097H	In Stock	1		N/A
60101120	SWITCH,DIFFERENTIAL PRESS	DIFFERENTIAL PRESSURE SWITCH, PNEUMAFIL:552033-B1	In Stock	2		N/A
60101121	SWITCH,DIFFERENTIAL PRESSURE	INTAKE AIR STATIC FILTER DIFFERENTIAL- PRESSURE SWITCH, SOR:107AL-K12-P1-F1A	In Stock	1		N/A
60101135	SWITCH,DISCH PRESSURE	HYD FLUID PUMP #1 DISCHARGE - PRESSURE SWITCH, REXROTH:HED 3 OAEX/63/12	In Stock	1		N/A
60101089	SWITCH,DISPLACER LEVEL	FUEL OIL TANK HIGH LEVEL SWITCH, DISPLACER LEVEL SWITCH, MAGNETROL MODEL # A15-1E2B-HM3, SERIAL # 744243-01-001	In Stock	1		N/A
60101082	SWITCH,HEATER SUPPLY FLOW	FUEL OIL INLINE HEATER SUPPLY FLOW SWITCH, MAGNETROL TD2-7D01-0G0 C/W TEA-A110-004, THERMAL DISPERSION FLOW SWITCH	In Stock	1		N/A
60101119	SWITCH,MANIFOLD PRESSURE	INLET AIR MANIFOLD PRESSURE SWITCH, UNITED ELECTRIC CONTROLS: J400K-455-1520	In Stock	1		N/A
60101095	SWITCH,OVERSPEED	CENTAUR KIT P/N1071653-2600	In Stock	1		N/A
60101079	SWITCH,PRESSURE	DIFFERENTIAL PRESSURE SWITCH,JOHNSON CONTROLS:JCI P 233 A-10-AAC	In Stock	1		N/A
60101107	SWITCH,PRESSURE	BEARING LUBE OIL HEADER PRESS#1 LOW, PRESSURE SWITCH, UNITED ELECTRIC CONTROLS: J402-146-1521	In Stock	1		N/A
60101110	SWITCH,PRESSURE	EMERGENCY LUBE OIL PUMP DISCHARGE - PRESSURE SWITCH, UNITED ELECTRIC CONTROLS - J400-146-1521	In Stock	1		N/A
60101115	SWITCH,PRESSURE	MAIN LUBE OIL PUMP #1 - DISCHARGE PRESSURE SWITCH, UNITED ELECTRIC CONTROLS: J402-164-1521	In Stock	1		N/A
60101171	SWITCH,PRESSURE	PRESSURE SWITCH, BARKSDALE:X1T-4100-25	In Stock	1		N/A
60101172	SWITCH,PRESSURE	PRESSURE SWITCH, DRUCKSCHALTER: D1 TM80 SS	In Stock	1		N/A
60101072	SWITCH,PUMP DISCHARGE PRESS.	PUMP DISCHARGE PRESSURE SWITCH, CCS 646GZEM5	In Stock	1		N/A
60101069	SWITCH,PUMP SUPPLY PRESSURE	PUMP SUPPLY PRESSURE SWITCH, CCS 646GZEM1	In Stock	1		N/A
60101114	SWITCH,TEMPERATURE	LUBE OIL RESERVOIR TEMPERATURE SWITCH, HONEYWELL:T775A2009	In Stock	1		N/A
61100429	THERMOCOUPLE,SHELL	SIEMENS:MQ 0206-PVDF8 3XTC(K), INSTALLATION LENGTH 375MM, HAN 8D	In Stock	1		N/A
60101175	THERMOSTAT,VENTILATION	MECHANICAL PACKAGE - VENTILATION THERMOSTAT, T631C1012	In Stock	1		N/A
60101086	TRANSMITTER,HEATER DISCHARGE	FUEL OIL INLINE HEATER DISCHARGE TEMPERATURE TRANSMITTER, ROSEMOUNT:644HAK6J6M4	In Stock	1		N/A
58400790	TRANSMITTER,PRESSURE	ROSEMOUNT:3051S2TG3A2A11A1AM5Q4	In Stock	1		N/A
60101139	TRANSMITTER,PRESSURE	HYD FLUID HEADER SUPPLY - PRESSURE TRANSMITTER, ROSEMOUNT: 3051TG4A2A21AM5Q4	In Stock	1		N/A
60101153	TRANSMITTER,PRESSURE	0-500 PRESSURE TRANSMITTER - RO SKID, AUTOMATION DIRECT: PTD25-20-0500H	In Stock	1		N/A

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60101154	TRANSMITTER,PRESSURE	PRESSURE TRANSMITTER, AUTOMATION DIRECT:PTD25-20-0100H, 0-100 PSI - VARIOUS SKIDS	In Stock	3			N/A	
60101084	TRANSMITTER,RADAR LEVEL	FUEL OIL TANK 1 LEVEL RADAR LEVEL TRANSMITTER, ROSEMOUNT:5402AH1E64SPVDAM1C1S3	In Stock	1			N/A	
61100435	TRANSMITTER,TANK LEVEL	RAW WATER STORAGE TANK LEVEL RADAR - LEVEL TRANSMITTER, ROSEMOUNT:5402AH1E64SPVCAM1C1S3	In Stock	1			N/A	
60101071	VALVE,ACTUATED THROTTLE	PNEUMATICALLY ACTUATED THROTTLE VALVE, FISHER ET-677-DVC-6200	In Stock	1			N/A	
60101134	VALVE,AIR BLEED	HYD FLUID AIR BLEED VALVE, HYDAC:AEV6/5 00230023	In Stock	1			N/A	
54900169	VALVE,AIR FILTER DRAIN	COOLING AIR FILTER BLEED DRAIN VALVE, 1", WORCHESTER:B4446 XG SW	In Stock	1			N/A	
54900166	VALVE,AUTO SHUT-OFF	MODEL ASV-1 AUTOMATIC - SHUT-OFF VALVE, TYCO:92-343-1-021	In Stock	2			N/A	
54900165	VALVE,AUTOMATIC DRAIN	MODEL AD-1 AUTOMATIC DRAIN VALVE, TYCO:52-793-2-004	In Stock	2			N/A	
60101162	VALVE,BALL	1.5", STAINLESS STEEL, MCMMASTER CARR: 45995K84	In Stock	1			N/A	
54100208	VALVE,CHECK	CHECK VALVE, SUN HYDRAULICS:CXDA-XAN	In Stock	1			N/A	
54300750	VALVE,FUEL BYPASS	MANUFACTURER:FISHER, MODEL:1008 HANDWHEEL ACTUATOR W/LOCKING MECHANISM, SIZE 40, TRAVEL LENGHT:3/4", CAPABLE OF GIVING PRECISE MANUAL - THROTTLING CONTROL, TRAVEL INDICTATOR MOUNTED ON ACTUATOR - YOKE FOR VISUAL VALVE PLUG POSITION	In Stock	1			N/A	
54100206	VALVE,FUEL CHECK	FUEL LINE CHECK VALVE, PARKER:10A-CBG8L-10-PF-SS, VOGT:SW9871T	In Stock	3			N/A	
54900176	VALVE,NEEDLE	1 SERIES NEEDLE VALVE, SWAGELock:B-1VM4-S4/SS-1VM4-S4	In Stock	1			N/A	
54400332	VALVE,PRESSURE CONTROL	PRESSURE CONTROL VALVE, SUN HYDRAULICS:RDBA-LAN	In Stock	1			N/A	
54400326	VALVE,PRESSURE RELIEF	HYDRAULIC FLUID PRESS RELIEF VALVE, REXROTH:R900341066	In Stock	1			N/A	
54400327	VALVE,PRESSURE RELIEF	PUMP DISCHARGE - PRESSURE RELIEF VALVE, REXROTH:R900420276	In Stock	1			N/A	
54400328	VALVE,PRESSURE RELIEF	VALVE MANIFOLD PRESSURE RELIEF VALVE, REXROTH:R900423723	In Stock	1			N/A	
54400329	VALVE,PRESSURE RELIEF	MAIN PUMP DISCHARGE - PRESSURE RELIEF VALVE, REXROTH:R900424147	In Stock	1			N/A	
54100209	VALVE,SOLENOID	SOLENOID VALVE, SUN HYDRAULICS:DLDA-MCN	In Stock	1			N/A	
54500437	VALVE,SOLENOID	SOLENOID VALVE, TYCO: 52-287-10-024	In Stock	2			N/A	
54500511	VALVE,SOLENOID	AIR CONTROL SOLENOID VALVE, 24VDC MINI, INGERSOLL RAND 633658	In Stock	1			N/A	
60101101	VALVE,SOLENOID	RAC FILTER DRAIN SOLENOID VALVE, PARKER:H2223N	In Stock	1			N/A	
65000438	VALVE,SOLENOID	GENERATOR JACKING OIL - SOLENOID VALVE, SUN HYDRAULICS:DLDA-MCN	In Stock	1			N/A	
54100203	VALVE,SS POPPET CHECK	SS POPPET CHECK VALVE, SWAGELock:SS-6C-1	In Stock	1			N/A	
54800068	VALVE,STOP	FISHER 3", 560lit-TH66 QS1600-4 DXP-L21GNEB	In Stock	1			N/A	
54900197	VALVE,THROTTLE	THROTTLE VALVE, NFBC-LCN	In Stock	1			N/A	
54900178	VALVE,6Z-PR4-BNT-SS	PARKER VALVE, MODEL# 6Z-PR4-BNT-SS	In Stock	1			N/A	
58400768	FILTER, AIR	GEN AIR FILTERS, COMPACT FILTER G4/F7 287 X 292 X 300, SIEMENS	In stock	8			TBD	
42100315	BELT,RADIATOR FAN	RADIATOR FAN BELT GROUP 1, CAT:7W5228	In stock	0			TBD	
58400763	FILTER,LIQUID FUEL	CLARK RELIANCE 2200A3	In Stock	25			TBD	
54300751	REPAIR KIT,BYPASS VALVE	REPAIR KIT FOR FUEL START-UP BYPASS VALVE, MANUFACTURER:FISHER, MODEL:EZ, SIZE:1", TRIM:1/4" M-FORM, USED FOR THROTTLING ON-OFF CONTROL OF LIQUID OR GASES, SINGLE PORT, GLOBE-STYLE BODY FOR - QUICK CHANGE TRIM & POST GUIDED UNBALANCED VALVE PLUG	In Stock	1			TBD	
54900190	VALVE ASSY,PILOT	PILOT VALVE ASSEMBLY, CLIPPARD FV-SP W/MPA-3P, CLIPPARD:LWT3732	In Stock	0			TBD	
61900223	TRANSMITTER,DEW POINT -100F	-40F AND -100F, INGERSOLL RAND P/N 23182603	On Order	0			TBD	
81200812	R-DIODE	SIEMENS PG:840C411F04	On Order	0			TBD	
81200813	F-DIODE	SIEMENS PG:840C411F03	On Order	0			TBD	
61100458	GAUGE,PRESSURE	PRESSURE GAUGE - FOR INSTR AIR COMPRESSOR, ASHCROFT:45-13772204b, RANGE:0-200 PSI	On Order	0			TBD	
61100454	GAUGE,CAPSULELIC	CAPSULELIC GOUGE 0-2" W.C., PNEUMAFIL:S51646-B6	On Order	0			TBD	
61100455	TRANSMITTER,PRESSURE	PRESSURE TRANSMITTER 0-300 PSI 4-20MA, ROSEMOUNT:3051TA3A2B21AES	On Order	0			TBD	
61100456	REGULATOR,PRESSURE	PRESSURE REGULATOR - AIR SUPPLY FROM INST AIR COMPRESSOR, FISHER:FS64-29	On Order	0			TBD	
61100457	GAUGE,PRESSURE	INSTR. AIR COMPRESSOR PRESSURE GAUGE, AIR CENTERS OF FLORIDA:5ZP76	On Order	0			TBD	
61100460	GAUGE,PRESS REGULATING	PRESSURE REGULATING GAUGE - AIR SUPPLY FROM INSTR AIR COMPRESSOR, FAIRCHILD:4066AT	On Order	0			TBD	
61100463	GAUGE,PRESSURE	PRESSURE GAUGE 0-160PSI, LIQUID FILLED BACK MOUNT, STAINLESS STEEL, AUTOMATION DIRECT:G25-SL160-4LB	On Order	0			TBD	
61100464	GAUGE,PRESSURE	PRESSURE GAUGE 0-100PSI, LIQUID FILLED LOWER MOUNTED, STAINLESS STEEL, AUTOMATION DIRECT:G25-SD100-4LS	On Order	0			TBD	
61100465	GAUGE,PRESSURE	PRESSURE GAUGE 0-100PSI, LIQUID FILLED BACK MOUNTED, STAINLESS STEEL, AUTOMATION DIRECT:G25-SD100-4CS	On Order	0			TBD	

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61100466	PRESSURE GUAGE 0-500PSI	PREESSURE GUAGE 0-500PSI, LIQUID FILLED BACK MOUNTED, STAINLESS STEEL, DWYER INSTRUMENTS:SGY-D11142N-GF	On Order	0			TBD	
61100467	GAUGE,PRESSURE 0-500PSI	PRESSURE GAUGE 0-500 PSI, LIQUID FILLED LOWER MOUNTED, STAINLESS STEEL, DWYER INSTRUMENTS:SGY-D11122N-GF	On Order	0			TBD	
54100202	VALVE,CHECK 3"	3MB60-6047-WVR	On Order	0			TBD	
81200814	CAPACITOR ASSEMBLY,RC	SIEMENS PG:153C684	On Order	0			TBD	
61900225	MONITOR,GROUND VERIFICATION	TRUCK UPLOADING GROUND VERIFICATION MONITOR, 8030-120 GROUND VERIFICATION MONITOR, CIVACON	On Order	0			TBD	
58400769	FILTER, AIR	GEN AIR FILTERS, COMPACT FILTER, G4/F7 592 X 292 X 300, SIEMENS	On Order	0			TBD	
54400323	VALVE,PUMP DISCHARGE	PUMP DISCHARGE PRESSURE REGULATING VALVE, MOOG/FISHER:ET-657-DVC-6200, SERIAL # F000642304, TYPE:ET CAV 111, SIZE 1-1/2, PORT SIZE:1-5/16, RATING:CL600/1500 PSI CWP, PLUG:SST, STEM:SST, BODY:STL, SEAT:SST	On Order	0			TBD	
60101183	METER,30-199.9 MV	E-CELL 30-199.9 MV METER, GENERAL ELECTRIC: 3038073	On Order	0			TBD	
60101144	THERMOCOUPLE,RESERVOIR	HYD FLUID RESERVOIR THERMOCOUPLE, OMEGA:NB1-CASS-14U-12" DUAL	On Order	0			TBD	
60101174	ACTUATOR,LOUVER	ELECTRICAL PACKAGE LOUVER ACTUATOR, ML4115B1008	On Order	0			TBD	
60101178	KIT,STACK FITTINGS	E-CELL STACK FITTINGS KIT, GENERAL ELECTRIC:3019638	On Order	0			TBD	
54900188	VALVE,GLOBE	GLOBE VALVE, STEEL, VOGT:SW9871T, LUBE OIL FILTER TOWER #1 VENT VALVE	On Order	0			TBD	
54900164	VALVE,AIR INLET	ATOMIZING AIR RECEIVER INLET VALVE, WORCESTER:5166TT150	On Order	0			TBD	
60101132	SWITCH,OIL FLOW	GENERATOR TURBINE END BEARING - JACKING OIL FLOW SWITCH, MEISTER:DKM/A-1/10	On Order	0			TBD	
60101148	SPEED CONTROL,NUMATICS	SPEED CONTROL, BRONZE, NUMATICS A1MN, EMERSON:LWT21254	On Order	0			TBD	
60101161	VALVE,ACTUATOR	ACTUATOR, VALWORX:561055A, ELECT FOR RO INLET VALVE & RINSE VALVE -RO SKID	On Order	0			TBD	
60101177	SENSOR,INLINE FLOW	E-CELL INLINE FLOW SENSOR, BURKERT: 3059466	On Order	0			TBD	
60101181	SENSOR,E-CELL FLOW	E-CELL FLOW SENSOR 8020 SHORT, BURKERT:3033067	On Order	0			TBD	
60101182	ANALYZER,CONDUCTIVITY	E-CELL CONDUCTIVITY ANALYZER, BURKERT:3059495	On Order	0			TBD	
60101186	TRANSMITTER,PRESSURE	E-CELL PRESSURE TRANSMITTER, BURKERT:3059497	On Order	0			TBD	
70000504	FUSE,2A E-CELL	E-CELL FUSE 2A, BUSSMANN:3060755	On Order	0			TBD	
70000503	FUSE,25A E-CELL	E-CELL FUSE 25A, BUSSMANN:1154697	On Order	0			TBD	
70000502	FUSE,3A E-CELL	E-CELL FUSE 3A, BUSSMAN:3060756	On Order	0			TBD	
70000508	FUSE,8A E-CELL	E-CELL FUSE 8A, MERSEN ELECTRIC POWER:3060752	On Order	0			TBD	
54900177	VALVE,FEMALE NEEDLE	FEMALE NEEDLE VALVE, MCMMASTER CARR:4644K33, 3/8"NPT	On Order	0			TBD	
54900172	VALVE,COMPRESSOR BLEED	HP COMPRESSOR BLEED VALVE, 14", FISHER:A31A-1031/33082 SR80	Capital	0			TBD	
54900171	VALVE,COMPRESSOR BLEED	LP COMPRESSOR BLEED VALVE, 18", METSO AUTOMATION:815W 11 22HB XZC VA	Capital	0			TBD	
65000437	ACTUATOR,AUMA	ACTUATOR, AUMA, MODEL:SA10.2-216/GS200.3/GZ200.3	In procurement process	0			TBD	
60101192	ACTUATOR,DEMAND CONTROL	INLET GUIDE VALVE HYD DEMAND CONTROL - ACTUATOR, MOOG:85-616C101	In procurement process	0			TBD	
58400773	AIR FILTER,SOLAR FINAL	CENTAUR:AAF 515-564-002	In procurement process	0			TBD	
98200199	ALARM,PANEL DISCHARGE	FIRE CONTROL PANEL DISCHARGE -ALARM TO DCS, NOTIFIER:AFP-300	In procurement process	0			TBD	
98200198	ALARM,TROUBLE	FIRE CONTROL PANEL TROUBLE ALARM TO DCS, DET-TRONICS:U9500A	In procurement process	0			TBD	
65900003	BRUSH SET,TURNING MOTOR GEAR	TURNING GEAR MOTOR BRUSH SET, 419904-51AC	In procurement process	0			TBD	
80900088	BULB,TEMP A DRY	WEATHER STATION DRY BULB TEMP A, VAISALA: HMT3301A0B101CGAB200B01CABAA1	In procurement process	0			TBD	
56400184	BUSHING ASSY,FISHER POT	POT/BUSHING ASSEMBLY, FISHER:27B6208X012	In procurement process	0			TBD	
37900015	CABLE,TITAN IGNITER	TITAN IGNITER CABLE, CENTAUR:115352-1	In procurement process	0			TBD	
74201105	CONTACT,BRUSH	TWO LAYER CONTACT BRUSH, SIEMENS:EMT 513-005, 20X8X32 EG5U/AG20	In procurement process	0			TBD	
74201106	CONTACT,1NC BLK	CONTACT BLK 1NC, SIEMENS:52BAK	In procurement process	0			TBD	
60101185	CONTACTOR,E-CELL 32A	E-CELL 32A CONTACTOR, GENERAL ELECTRIC:3060877	In procurement process	0			TBD	
43900018	DAMPER,VACUUM CONTROL	LUBE OIL RESERVOIR - VACUUM CONTROL DAMPER, INTEGRAL WITH BLOWER HOUSING, 4"	In procurement process	0			TBD	
03900028	ELEMENT,CHROMOLOX	ELEMENT, CHROMOLOX:118-305471-112	In procurement process	0			TBD	
58400781	FILTER,HIGH PRESSURE FUEL	CENTAUR:1125423	In procurement process	0			TBD	
58400789	FILTER,LUBE OIL	TURBOHYDRAULIC START LUBE OIL FILTER, CENTAUR FAUCET: 038062 10M	In procurement process	0			TBD	
58400779	FILTER,TITAN FUEL	CENTAUR:11246882	In procurement process	0			TBD	
58400777	FILTER,TITAN LUBE OIL	CENTAUR:38062	In procurement process	0			TBD	
61100431	FLOWMETER,TURBINE	FUEL OIL UNLOADING FLOW LIQUID TURBINE FLOWMETER, HOFFER FLOW CONTROLS: HO SERIES/6X6-75-1250-CB-1M/XE2-F1CS-EXP	In procurement process	0			TBD	
70000509	FUSE,AC PIM	REPLACEMENT FUSE FOR AC PIMS, BENTLY NEVADA:1720025	In procurement process	0			TBD	
60101156	FUSE,LOW VOLTAGE DC	REPLACEMENT FUSE (LOW VOLTAGE DC PIM), BENTLY NEVADA: 1720045	In procurement process	0			TBD	

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70000487	FUSE,SIEMENS PG	SIEMENS PG 840C208FO1	In procurement process	0			TBD	
70000493	FUSE,12A	FUSE 12A, SIEMENS:S00232012	In procurement process	0			TBD	
56200363	GASKET,CENTAUR	GASKET, CENTAUR:946933C1	In procurement process	0			TBD	
56200362	GASKET,FLANGE	ROTOR COOLING AIR FILTER COVER - FLANGE GASKET, NATIONAL FILTRATION SYSTEMS:10300002	In procurement process	0			TBD	
61100451	GAUGE,CAPSUHELIC	CAPSUHELIC GUAGE 0-6" W.C., PNEUMAFIL:551646-B1	In procurement process	0			TBD	
61100450	GAUGE,CONVERTER PRESSURE	STARTING PACKAGE TORQUE CONVERTER PRESSURE GAUGE, KOENIG:BAC-160-25	In procurement process	0			TBD	
61100442	GAUGE,DIAL PRESSURE	DIAL PRESSURE GAUGE, ECODYNE:2172-1067	In procurement process	0			TBD	
60101106	GAUGE,OIL TEMPERATURE	LUBE OIL COOLER OUTLET TEMP GAUGE, ASHCROFT:600B-01-CEXSG	In procurement process	0			TBD	
61100459	GAUGE,PRESSURE	DIFFERENTIAL PRESSURE GAUGE - COMPRESSOR INSTR AIR COALESCING FILTER, HEADLINE FILTERS:DPP-975	In procurement process	0			TBD	
03900029	HEATER,CHROMOLOX	HEATER, CHROMOLOX:1281537	In procurement process	0			TBD	
03900025	HEATER,12KW OPEN COIL	12KW OPEN COIL HEATER, CHROMOLOX:OCE-12120-210-480V	In procurement process	0			TBD	
03900026	HEATER,3PH COMFORT	5KW/3PH/480V COMFORT HEATER, CHROMOLOX:HD3D-500 (PCN#520153)	In procurement process	0			TBD	
60101136	INDICATOR,LOOP PRESSURE	HYD FLUID CONDITIONING LOOP - PRESSURE INDICATOR, 2-1/2", REXROTH/400PUA31-10A-4 JIC	In procurement process	0			TBD	
61100447	INDICATOR,OIL LEVEL	LUBE OIL RESERVOIR LEVEL INDICATOR, GEMS:806601	In procurement process	0			TBD	
60101111	INDICATOR,VACUUM PRESSURE	LUBE OIL RESERVOIR VACUUM - PRESSURE INDICATOR, ASHCROFT:45-11877SS-04B	In procurement process	0			TBD	
60101129	INDICATOR,LOW OIL LEVEL	INSTRUMENT AIR COMPRESSOR LOW - OIL LEVEL INDICATOR, INGERSOLL RAND:22102388	In procurement process	0			TBD	
54900189	INDICATOR,SIGHT	1-1/2", JACOBY:100-S(NF)	In procurement process	0			TBD	
58400775	KIT,OIL FILTER & O-RING	LUBE OIL FILTER & O-RING KIT, CENTAUR:9161283C1	In procurement process	0			TBD	
74600114	LAMP,115VAC PILOT	115VAC PILOT LAMP - VARIOUS SKIDS, RADWELL INTERNATIONAL:D5N130	In procurement process	0			TBD	
60101160	MANUAL,POWER SUPPLY MODULE	POWER SUPPLY MODULE, MANUAL, BENTLY NEVADA:129767-01	In procurement process	0			TBD	
60101067	METER,FLOW	ROSEMOUNT:3051SFC1CS030N065-T33EA1A5Q4E6M5	In procurement process	0			TBD	
60101073	METER,FLOW	ROSEMOUNT:3051SFC1CS030NXT33DA1A5DQ4E6M5	In procurement process	0			TBD	
58400796	MICROSWITCH ASSY,FILTER	MICROSWITCH ASSEMBLY- FILTER SKIDS & SOFTENER, PENTAIR:LWT3215	In procurement process	0			TBD	
60101157	MODULE,DC POWER SUPPLY	HIGH VOLTAGE DC POWER SUPPLY MODULE, BENTLY NEVADA:129486-01	In procurement process	0			TBD	
74600113	MODULE,DISCRETE I/O	DISCRETE I/O MODULE WITH - INTERNAL TERMINATIONS, BENTLY NEVADA:133422-01	In procurement process	0			TBD	
74600109	MODULE,I/O	DISCRETE INTERNAL BARRIERS I/O MODULE WITH INTERNAL TERMINATIONS, BENTLY NEVADA:136703-01	In procurement process	0			TBD	
60101159	MODULE,POWER INPUT	LOW VOLTAGE DC POWER INPUT MODULE (PIM), BENTLY NEVADA:133300-01	In procurement process	0			TBD	
60101158	MODULE,POWER SUPPLY	LOW VOLTAGE DC POWER SUPPLY MODULE, BENTLY NEVADA:133292-01	In procurement process	0			TBD	
74600099	MODULE,TMR I/O	I/O MODULE WITH INTERNAL BARRIERS - (INTERNAL TERMINATIONS)(4 X PROX/ACCEL)	In procurement process	0			TBD	
60800395	MONITOR,MULTIFUNCTION	MULTIFUNCTION MONITOR - ORP OR CONDUCTIVITY, RYAN HERCO:5924-562	In procurement process	0			TBD	
65000435	MOTOR,FLAP ACTUATOR	JOHNSON CONTROLS, JCI M9132-GGA-1	In procurement process	0			TBD	
56400182	O-RING,BUNA	HEAD TO BOWL O-RING BUNA, PALL:UK19672	In procurement process	0			TBD	
60101116	PICK UP,GENERATOR SPEED	TURBINE GENERATOR SPEED PICK UP, BRAUN:A5S08T165C0.5	In procurement process	0			TBD	
60101118	PICK UP,TORQUE CONVERTER SP	TORQUE CONVERTER SPEED PICK UP, ELECTRO CORP:725833	In procurement process	0			TBD	
60800396	POWER SUPPLY,24VDC	24VDC POWER SUPPLY, AUTOMATION DIRECT:PSB24-060D	In procurement process	0			TBD	
58400776	PRE-FILTER,SOLAR	CENTAUR AMERKLEEN M-80 FILTER	In procurement process	0			TBD	
60800398	PREAMPLIFIER,ORP	ORP PREAMPLIFIER, RYAN HERCO:5905-273	In procurement process	0			TBD	
58101225	PUMP,GEAR	DANFOSS:BERENDEN FLUID POWER SNP 2/11	In procurement process	0			TBD	
54900195	REPAIR KIT,SOLENOID	PURGE SOLENOID REPAIR KIT, SURESITE:3153515	In procurement process	0			TBD	
61100430	RTD,AIR TEMPERATURE	GENERATOR EXCITER END COLD AIR TEMPERATURE RTD, 100 OHM PLATINUM, TMG GERABERG	In procurement process	0			TBD	
56500208	SEAL,MECHANICAL	MECHANICAL SEAL, EAGLE:ABPN Q1Q1VMG	In procurement process	0			TBD	
60800397	SENSOR,ORP	ORP SENSOR, RYAN HERCO:5909-751, RAW WATER PUMP - VARIOUS SKIDS	In procurement process	0			TBD	
60101080	SENSOR,TEMPERATURE	JCI TS-9103-8324	In procurement process	0			TBD	
60101164	SENSOR,VIBRATION	GENERATOR TURBINE END VIBRATION X, BENTLY NEVADA: 3300 SERIES	In procurement process	0			TBD	
60101170	SENSOR,VIBRATION	TURBINE EXHAUST END VIBRATION X - RELATIVE SENSOR, BENTLY NEVADA: 3500 SERIES	In procurement process	0			TBD	
42100314	SHAFT,FISHER	SHAFT, FISHER:7000400800	In procurement process	0			TBD	
74600098	SWITCH,AUXILIARY	AUX SWITCH, SIEMENS:A01JLD64	In procurement process	0			TBD	
60101180	SWITCH,E-CELL PRESSURE	E-CELL PRESSURE SWITCH, AUTOMATION DIRECT:3039305	In procurement process	0			TBD	
60101145	SWITCH,FLUID LOW LEVEL	HYD FLUID RESERVOIR LOW LEVEL SWITCH, REXROTH:500PUA31-05 2 SW	In procurement process	0			TBD	
60101104	SWITCH,HIGH PRESSURE	LUBE OIL FILTER DELTA HIGH PRESS SWITCH, MIDWEST:120-AA-09-0-CZ	In procurement process	0			TBD	

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60101150	SWITCH,INSULATOR #58-PA	MICRO SWITCH INSULATOR #58-PA, PENTAIR:LWT7696	In procurement process	0			TBD	
60101130	SWITCH,OIL PUMP PRESSURE	GENERATOR MAIN JACKING OIL PUMP - PRESSURE SWITCH, BARKSDALE:B1T-H32	In procurement process	0			TBD	
60101131	SWITCH,OIL PUMP PRESSURE	GENERATOR MAIN JACKING OIL PUMP - PRESSURE SWITCH, BARKSDALE:B1T-H04	In procurement process	0			TBD	
60101125	SWITCH,PRESSURE	INSTRUMENT AIR SYSTEM PRESSURE SWITCH, UNITED ELECTRIC CONTROLS: H122-184, MFG PN 0409-007	In procurement process	0			TBD	
60101151	SWITCH,STAGER 48-03	STAGER (110V) SERIES 48-03 - W/HOMING SWITCH, OSMONICS: 48-03	In procurement process	0			TBD	
60101128	SWITCH,START STOP PRESSURE	INSTR.AIR COMPRESSOR START STOP, PRESSURE SWITCH, HUBBELL INDUSTRIAL CONTROL: 69HA109779U	In procurement process	0			TBD	
58608460	SWITCH,TEMPERATURE	BARKSDALE HEATER CONTROL TEMPERATURE SWITCH, MODEL # T1X-S154-A, STAINLESS STEEL	In procurement process	0			TBD	
60101142	SWITCH,TEMPERATURE	HYD FLUID RESERVOIR HEATER - TEMPERATURE SWITCH, UNITED ELECTRIC CONTROLS: C402-120-1070-M202 73/86F	In procurement process	0			TBD	
60101176	SWITCH,TEMPERATURE	ELECTRICAL PACKAGE TEMPERATURE SWITCH, SERIES 54	In procurement process	0			TBD	
60101140	SWITCH,TEMPERATURE (OFF)	HYD FLUID COOLER FAN MOTOR - TEMPERATURE SWITCH (OFF), UNITED ELECTRIC CONTROLS: C402-120-1070-M202 135/120F	In procurement process	0			TBD	
60101141	SWITCH,TEMPERATURE (ON)	HYD FLUID COOLER FAN MOTOR - TEMPERATURE SWITCH (ON), UNITED ELECTRIC CONTROLS: C402-120-1070-M202 135/120F	In procurement process	0			TBD	
60101097	SWITCH,VALVE OPEN LIMIT	HP BLEED VALVE OPEN LIMIT SWITCH, WESTLOCK:2007XBY/4SPDT	In procurement process	0			TBD	
60101100	SWITCH,VALVE OPEN LIMIT	LP BLEED VALVE OPEN LIMIT SWITCH, WESTLOCK:2007XBY/6SPDT	In procurement process	0			TBD	
61100424	THERMOCOUPLE ASSEMBLY TYPE J	THERMOCOUPLE ASSEMBLY TYPE J, C11637-07-001	In procurement process	0			TBD	
61100440	THERMOCOUPLE,BLADE PATH	COMPRESSOR BLADE PATH THERMOCOUPLE, DUPLEX TYPE K	In procurement process	0			TBD	
61100441	THERMOCOUPLE,DISC CAVITY	DISC CAVITY THERMOCOUPLE, PYCO:DUPLEX TYPE K	In procurement process	0			TBD	
61100438	THERMOCOUPLE,EXHAUST	TURBINE EXHAUST END BEARING - THERMOCOUPLE, DUPLEX TYPE K	In procurement process	0			TBD	
60101108	THERMOCOUPLE,LUBE OIL TEMP	BEARING LUBE OIL SUPPLY TEMPERATURE - THERMOCOUPLE, PYCO:02-3174 W/16-0049 (TYPE K)	In procurement process	0			TBD	
54900167	THERMOCOUPLE,TEMPERATURE	COMBUSTOR SHELL DISCHARGE - TEMPERATURE THERMOCOUPLE DUPLEX TYPE K	In procurement process	0			TBD	
61100448	THERMOCOUPLE,TEMPERATURE	STARTING PACKAGE MOTOR STATOR - TEMPERATURE THERMOCOUPLE, S102629PD-120T305Z96	In procurement process	0			TBD	
61100449	THERMOCOUPLE,TEMPERATURE	STARTING PACKAGE MOTOR FORWARD - BEARING TEMPERATURE T/C, S16820PD-300Z96	In procurement process	0			TBD	
61100425	THERMOCOUPLE,TYPE K	K316G316-0-60-120-1ASP	In procurement process	0			TBD	
61100428	THERMOMETER,RESISTANCE	SIEMENS:WQ 0233 2XPT100, INSTALLATION LENGTH 250MM, HAN 8D	In procurement process	0			TBD	
03900024	THERMOSTAT KIT,WR-90	WR-90 THERMOSTAT KIT, CHROMOX:WR-90 KIT	In procurement process	0			TBD	
61100468	THERMOSTAT,AC#1	ELECTRICAL PACKAGE AC#1 THERMOSTAT, HH01AD045	In procurement process	0			TBD	
60101105	TOWER,LUBE OIL FILTER	LUBE OIL FILTER TOWER #1 PRESS, MARSH:J4652	In procurement process	0			TBD	
60101184	TRANSDUCER,55A CURRENT	E-CELL 55A CURRENT TRANSDUCER, PHOENIX CONTACT:3062518	In procurement process	0			TBD	
60101078	TRANSMITTER,GROUND FAULT	SIEMENS PG:153C691G02	In procurement process	0			TBD	
60101099	TRANSMITTER,GUIDE POSITION	INLET GUIDE VANE POSITION TRANSMITTER, FISHER:4200 SERIES (4200)	In procurement process	0			TBD	
60101137	TRANSMITTER,LEVEL	HYD FLUID RESERVOIR - LEVEL TRANSMITTER, GEMS:XT-800	In procurement process	0			TBD	
60101068	TRANSMITTER,LIQUID FUEL TEMP	LIQUID FUEL TEMPERATURE TRANSMITTER, ROSEMOUNT 644HAK6M5Q4J6	In procurement process	0			TBD	
61100445	TRANSMITTER,OIL PRESSURE	BEARING OIL PRESSURE TRANSMITTER, SIEMENS: 7MF4033-1CA10-1AC7-Z+B21+A02+Y01+Y21+Y15+Y16	In procurement process	0			TBD	
60101124	TRANSMITTER,PRESSURE	INLET FILTER HOUSE BAROMETRIC - PRESSURE TRANSMITTER, SIEMENS: 7MF4233-1FA10-1AC1-Z+B21+Y01+Y15	In procurement process	0			TBD	
60101193	TRANSMITTER,PRESSURE	COMBUSTOR SHELL PRESS TRANSMITTER, SIEMENS:7MF4233-1HA10-1AC1-Z+B21+Y01+Y15	In procurement process	0			TBD	
60101070	TRANSMITTER,PUMP DISCHARGE	PUMP DISCHARGE PRESSURE TRANSMITTER, ROSEMOUNT 3051CG5A22A1ASSB4C6M5Q4	In procurement process	0			TBD	
60101122	TRANSMITTER,31 TEMPERATURE	INLET SCROLL TEMPERATURE TRANSMITTER #1, YOKAGAWA:YTA320-EA2NN/FU1/D2/Z	In procurement process	0			TBD	
54600160	VALVE 2" NPT BALL	FEMALE 316 SS FULL PORT BALL VALVE, 2"NPT, MCM:46495K86	In procurement process	0			TBD	
54400324	VALVE,AIR RELIEF	INST AIR HEADER RELIEF VALVE, PARKER:6M-6M-RL4A-VTSSMNKD	In procurement process	0			TBD	
54800070	VALVE,BUTTERFLY	BUTTERFLY VALVE, GEAR OPERATED, VELAN TOURQUESEAL: L16-1CP02-ACAA C/W MODEL M15	In procurement process	0			TBD	
54100205	VALVE,CHECK	CHECK VALVE, MODEL 210, 4"	In procurement process	0			TBD	
60101096	VALVE,COMPRESSOR SOLENOID	HP COMPRESSOR BLEED VALVE SOLENOID, ASCO:JKC8316G74V	In procurement process	0			TBD	
54900161	VALVE,CONTINUOUS PURGE	3", QS0600-4 DXP-L21GNEB EFHC8321G1	In procurement process	0			TBD	
61100443	VALVE,CONTROL	STAGE 3 TEMPERATURE CONTROL VALVE - I/P W/POSITIONER, FISHER:DVC5030	In procurement process	0			TBD	
61100444	VALVE,CONTROL	STAGE 2 TEMPERATURE CONTROL VALVE - I/P W/POSITIONER, VRC:VE700GT1	In procurement process	0			TBD	
54900193	VALVE,INLET SHUFFLE	INLET SHUTTLE VALVE, SURESITE:4010031	In procurement process	0			TBD	
54900173	VALVE,PRESS REGULATING	LO BEARING PRESSURE REGULATING VALVE, FISHER:44 ACTUATOR 4 BODY 655ED	In procurement process	0			TBD	
60101109	VALVE,PRESSURE CONTROL	BEARING LUBE OIL PRESSURE CONTROL VALVE, FISHER:ED-655	In procurement process	0			TBD	

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54400325	VALVE,PRESSURE RELIEF	POLISHING LOOP PRESSURE RELIEF VALVE, REXROTH:RR00347261	In procurement process	0			TBD	
54400330	VALVE,PRESSURE RELIEF	POLISHING LOOP PRESSURE RELIEF VALVE, REXROTH:HH8670A20KPRBV	In procurement process	0			TBD	
54100207	VALVE,PVC CHECK	PVC Y-PATTERN CHECK VALVE, 3", UNITED STATES PLASTIC CORP:5132-030	In procurement process	0			TBD	
54900160	VALVE,SHUTDOWN PURGE	1", QS0065-4 DXP-L21GNEB JBHC8327G041-125VDC	In procurement process	0			TBD	
54500434	VALVE,SOLENOID	MECHANICAL PACKAGE LOUVER - SOLENOID VALVE, ASCO:WPKP8320A89MS	In procurement process	0			TBD	
54500436	VALVE,SOLENOID	E-CELL SOLENOID VALVE, EMERSON:3022390	In procurement process	0			TBD	
60101127	VALVE,SOLENOID	INST AIR SYSTEM ISOLATION SOLENOID VALVE, ASCO:HCL8316G66MB	In procurement process	0			TBD	
54900196	VALVE,SUPPLY FILTER	HYD FLUID SUPPLY FILTER SELECTION VALVE, PALL:1319232	In procurement process	0			TBD	
54900168	VALVE,TEMP CONTROL	STAGE #3 DISC CAVITY TEMPERATURE - CONTROL VALVE, 3", FISHER:A41-1032425AS	In procurement process	0			TBD	
54900170	VALVE,TEMP CONTROL	STAGE #2 DISC CAVITY TEMPERATURE - CONTROL VALVE, 4", FISHER:A41-1032425SR	In procurement process	0			TBD	
54600159	VALVE,1" SW BALL	1" SW BALL VALVE, WORCESTER:K466TSW	In procurement process	0			TBD	
54100204	VALVE,150# CHECK	150# CHECK VALVE, MODEL 210, 6"	In procurement process	0			TBD	
54600163	VALVE,2" PVC BALL	TRUE UNION BALL VALVES, 2", PVC, INDELCO:2TUBV	In procurement process	0			TBD	
54600161	VALVE,3/8" THD BALL	3/8" THD BALL VALVE, APOLLO:76-102-01	In procurement process	0			TBD	

APPENDIX G

Critical Spares Status Listing – Hydraulic Generation

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - INTAKE STRUCTURE NO. 1 - TRANSMITTER,PRESS 0-6MH20	In Stock	MEDIUM	NO	
BDE - PENSTOCK NO. 1 - TRANSMITTER,PRESS 0-375	In Stock	MEDIUM	NO	
BDE - PENSTOCK NO. 2 - TRANSMITTER,PRESS 0-375	In Stock	MEDIUM	NO	
BDE - PENSTOCK NO. 3 - TRANSMITTER,PRESS 0-375	In Stock	MEDIUM	NO	
BDE - PENSTOCK NO. 4 - TRANSMITTER,PRESS 0-375	In Stock	MEDIUM	NO	
BDE - TURBINE - Turbine Carbon Seal (Units 1 to 4)	In Stock	HIGH	NO	
BDE - TURBINE - Turbine Carbon Seal (Units 5 & 6)	In Stock	HIGH	NO	
BDE - WICKET GATES AND LINKAGES - Shear Pins	In Stock	MEDIUM	NO	
BDE - WICKET GATES AND LINKAGES - PACKING,V TYPE 2-EASY	In Stock	MEDIUM	NO	
BDE - WICKET GATES AND LINKAGES - PIN,ECCENTRIC	In Stock	MEDIUM	NO	
BDE - WICKET GATES AND LINKAGES - RING,PISTON SERVO MOTOR 18"OD	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - XFMR,CT 13.8KV	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - XFMR,CT 1000:	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - XFMR,PT 14400KV	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - XFMR,CT 3032313	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - XFMR,CT 800:5	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - CT 50/51	In Stock	HIGH	NO	
BDE - GATE HOIST - BAY D'ESPOIR - ST - Remote I/O Adapter	In Stock	MEDIUM	NO	
BDE - HEADCOVER ASSEMBLY - UNIT 1 - BUSHING,UPPER HEAD COVER P003	In Stock	HIGH	NO	
BDE - HEADCOVER ASSEMBLY - UNIT 1 - BUSHING,UPPER WICKET	In Stock	HIGH	NO	
BDE - RUNNER - UNIT 1 - BOLT,SHAFT TO RUNNER	In Stock	HIGH	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,ANALOG QUANTUM	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,CPU MODICON	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,DISCRETE IN	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,DISCRETE OUT	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,ETHERNET QUANTUM	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,GPS QUANTUM	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,HOT STANDBY	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,INTERFACE PLC	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,RACK FILLER	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - MODULE,RELAY OUT	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - POWER SUPPLY, 125-24 VDC	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - POWER SUPPLY,125 VDC	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - POWER SUPPLY,125VDC 8A	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - POWER SUPPLY,24 VDC	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - REMOTE I/O HEAD,MODICON	In Stock	MEDIUM	NO	
BDE - PLC, Model Quantum- Modicon - ADAPTER,REMOTE I/O	In Stock	MEDIUM	NO	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - PLC, Model Quantum- Modicon - BACKPLANE,10 SLOT MODICON	In Stock	MEDIUM	NO	
BDE - STATION SERVICE - BDE PH1 - ACB	In Stock	HIGH	NO	
BDE - STATION SERVICE - BDE PH1 - Trip Unit - Breaker control device	In Stock	HIGH	NO	
BDE - ROTOR SHAFT - Rotating Ring	In Stock	HIGH	TBD	
BDE - STATOR ASSEMBLY - BAR,COPPER 1/2"X2"X10'	In Stock	HIGH	NO	
BDE - STATOR ASSEMBLY - BAR,ROTOR CONNECTION	In Stock	HIGH	NO	
BDE - STATOR ASSEMBLY - BAR,ROTOR CONNECTION	In Stock	HIGH	NO	
BDE - STATOR ASSEMBLY - BAR,STATOR	In Stock	HIGH	TBD	
BDE - STATOR ASSEMBLY - BAR,STATOR	In Stock	HIGH	TBD	
BDE - SPILLWAY #1-SALMON RIVE - Lift gearboxes/nuts	In Stock	HIGH	NO	
BDE - INTAKE GATE - BACKPLANE,6 SLOT MODICON	In Stock	MEDIUM	NO	
BDE - DISCONNECT SWITCH 29-1 - Complete Unit	In Stock	HIGH	YES	
BDE - Generator SLIPRING/BRUSH RIGGING - Carbon Brushes	In Stock	MEDIUM	NO	
BDE - Generator SLIPRING/BRUSH RIGGING - Brush Holders	In Stock	MEDIUM	NO	
BDE - Generator SLIPRING/BRUSH RIGGING - Slip Ring	In Stock	HIGH	YES	
BDE - TURBINE GUIDE BEARING - Bearing	In Stock	HIGH	YES	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE200130R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE205011R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE205012R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE205014R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE300661R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE300686R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE300690R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE300698R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE300766R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE305043R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE305069R0001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE30598R1	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - CARD,ABB HIEE401481RD001	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - COIL,ABB HIER464920P1	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - MAINBOARD,ABB HIER465176R22	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - POWER SUPPLY,TRACO HIER46651-	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - POWER SUPPLY,TRACO HIER46651-	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - RESISTOR,FIELD DISCHARGE	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - SHUNT,ABB UXAB269330R909	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - VARISTOR,ABB 3ACD5245A003	In Stock	HIGH	NO	
BDE - FIELD BREAKER QO2 - PANEL EE - BREAKER,ABB HIER466757P2331 (entire unit)	In Stock	HIGH	NO	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - FIELD BREAKER QO2 - PANEL EE - SHUNT,ABB UXAB269350R909	In Stock	HIGH	NO	
BDE - FIELD BREAKER QO2 - PANEL EE - CONTACT,ABB UXAB239Z60R002	In Stock	HIGH	NO	
BDE - FIELD BREAKER QO2 - PANEL EE - CONTACT,ABB UXAB239299R0003	In Stock	HIGH	NO	
BDE - FIELD BREAKER QO2 - PANEL EE - CONTACT,ABB UXAB269399R032	In Stock	HIGH	NO	
BDE - FIELD BREAKER QO2 - PANEL EE - ARC-CHUTE,ABB UXAB269399R012	In Stock	HIGH	NO	
BDE - GENERATOR - CREEP DETECTOR ASSY,129 VCD	In Stock	HIGH	NO	
BDE - GENERATOR - PLATES,BRAKE (24 PER SET)	In Stock	HIGH	NO	
BDE - GENERATOR - SWITCH,WOODWARD 8935-139	In Stock	HIGH	NO	
BDE - Exciter POWER ELECTRONICS - Pulse Transformers	In Stock	MEDIUM	NO	
BDE - Exciter POWER ELECTRONICS - BRIDGE,ABB S00772	In Stock	HIGH	NO	
BDE - Exciter POWER ELECTRONICS - FUSE,ABB 6,6URD32TTF0800	In Stock	MEDIUM	NO	
BDE - Exciter POWER ELECTRONICS - FAN ASSY,ABB 500773	In Stock	HIGH	NO	
BDE - Exciter POWER ELECTRONICS - THYRISTOR,ABB 5STP27F1200	In Stock	HIGH	NO	
BDE - RECTIFYING TRANSFORMER - Full Unit	In Stock	HIGH	YES	
BDE - SURFACE AIR COOLERS - SAC Unit	In Stock	MEDIUM	TBD	
BDE - SURFACE AIR COOLERS - Tubes	In Stock	MEDIUM	NO	
BDE - THRUST/GUIDE BEARING COOLERS - Cooler	In Stock	HIGH	YES	
BDE - ROTOR POLES - Pole	In Stock	HIGH	TBD	
BDE - STATOR WINDINGS - UNIT 1 - CONNECTOR,STATOR CU	In Stock	HIGH	NO	
BDE - STATOR WINDINGS - UNIT 1 to 4 - Coils	In Stock	HIGH	TBD	
BDE - THRUST/GUIDE BEARING ASSEMBLY - Springs	In Stock	HIGH	NO	
BDE - THRUST/GUIDE BEARING ASSEMBLY - Oil	In Stock	MEDIUM	NO	
BDE - THRUST/GUIDE BEARING ASSEMBLY - TRANSMITTER,DIFF	In Stock	MEDIUM	NO	
BDE - GOVERNOR - BEARING,DASHPOT LINK	In Stock	HIGH	NO	
BDE - GOVERNOR - BRACKET,WOODWARD 11002-57	In Stock	HIGH	NO	
BDE - GOVERNOR - BRACKET,WOODWARD 91588	In Stock	HIGH	NO	
BDE - GOVERNOR - BUSHING,PILOT VALVE	In Stock	HIGH	NO	
BDE - GOVERNOR - BUSHING,SNAP ACTION	In Stock	HIGH	NO	
BDE - GOVERNOR - BUSHING,WW 11002-65	In Stock	HIGH	NO	
BDE - GOVERNOR - BUSHING, DASHPOT - SMALL	In Stock	HIGH	NO	
BDE - GOVERNOR - BUSHING, DASHPOT - LARGE	In Stock	HIGH	NO	
BDE - GOVERNOR - CABLE,AIRCRAFT 1/4 187083	In Stock	HIGH	NO	
BDE - GOVERNOR - CLIP,WW 11002-16	In Stock	HIGH	NO	
BDE - GOVERNOR - COIL,DASHPOT	In Stock	HIGH	NO	
BDE - GOVERNOR - COIL,PARTIAL SHUTDOWN RESET	In Stock	HIGH	NO	
BDE - GOVERNOR - COIL,SHUTDOWN SOLENOID	In Stock	HIGH	NO	
BDE - GOVERNOR - COIL,SHUTDOWN SOLENOID 65SD	In Stock	HIGH	NO	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - GOVERNOR - COIL,WW 202132	In Stock	HIGH	NO	
BDE - GOVERNOR - CONTACT,CONTACTOR-TYPE DG-	In Stock	HIGH	NO	
BDE - GOVERNOR - DASHPOT,WW 161314	In Stock	HIGH	NO	
BDE - GOVERNOR - DIODE,WW 202891	In Stock	HIGH	NO	
BDE - GOVERNOR - DISC,RELIEF VALVE	In Stock	HIGH	NO	
BDE - GOVERNOR - DISC,UNLOADER	In Stock	HIGH	NO	
BDE - GOVERNOR - GASKET KIT,WOODWARD 8926-137	In Stock	HIGH	NO	
BDE - GOVERNOR - GASKET,WOODWARD 1327-816	In Stock	HIGH	NO	
BDE - GOVERNOR - GASKET,WOODWARD 206317	In Stock	HIGH	NO	
BDE - GOVERNOR - LEVER,CONNECTING LOWER	In Stock	HIGH	NO	
BDE - GOVERNOR - LEVER,LOWER FLOATING	In Stock	HIGH	NO	
BDE - GOVERNOR - LEVER,UPPER FLOATING	In Stock	HIGH	NO	
BDE - GOVERNOR - LINK,WOODWARD 070346	In Stock	HIGH	NO	
BDE - GOVERNOR - LOCKWASHER,BEARING	In Stock	HIGH	NO	
BDE - GOVERNOR - MOTOR ASSY,C/W SHAFT & GEAR	In Stock	HIGH	NO	
BDE - GOVERNOR - MOTOR ASSY,GATE LIMIT	In Stock	HIGH	NO	
BDE - GOVERNOR - MOTOR,GOVERNOR SPEED 28 VOLT	In Stock	HIGH	NO	
BDE - GOVERNOR - MOTOR,SYNCHRONIZING	In Stock	HIGH	NO	
BDE - GOVERNOR - MOTOR, VIBRATING OIL	In Stock	HIGH	NO	
BDE - GOVERNOR - FILTER,HYD 932633Q	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,BALLARM	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,DASHPOT	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,LOWER DRIVE	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,PIVOT	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,WOODWARD 11002-71	In Stock	HIGH	NO	
BDE - GOVERNOR - PIN,WOODWARD 11002-75	In Stock	HIGH	NO	
BDE - GOVERNOR - PLUNGER,SNAP ACTION	In Stock	HIGH	NO	
BDE - GOVERNOR - POTENTIOMETER,1250OH 0.24A	In Stock	HIGH	NO	
BDE - GOVERNOR - PUMP,OIL IMO A3DB-275	In Stock	HIGH	NO	
BDE - GOVERNOR - RETAINER,SWITCH	In Stock	HIGH	NO	
BDE - GOVERNOR - RING,SNAP (PILOT SERVO PLUG)	In Stock	HIGH	NO	
BDE - GOVERNOR - ROTOR,BALL HEAD MOTOR	In Stock	HIGH	NO	
BDE - GOVERNOR - SOLENOID,125 V DC	In Stock	HIGH	NO	
BDE - GOVERNOR - SOLENOID,125VDC 211E	In Stock	HIGH	NO	
BDE - GOVERNOR - SPRING,PILOT VALVE LINK	In Stock	HIGH	NO	
BDE - GOVERNOR - SPRING,RELIEF	In Stock	HIGH	NO	
BDE - GOVERNOR - SPRING,UNLOADER	In Stock	HIGH	NO	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - GOVERNOR - STATOR,BALL HEAD MOTOR	In Stock	HIGH	NO	
BDE - GOVERNOR - SWITCH,PRESS OIL ALARM	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - BEARING,SPEED SIGNAL	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - BUSHING, OILITE OVERSPEED SWITCH ASSEMBLY	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - PIN,DOWEL - SPEED SWITCH	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - PLATE,MOUNTING - MERCURY	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - RING,ROTOR	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - PIN,ROCKER ARM	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - BEARING,WW 1800125	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - BEARING,WW 111006	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - BEARING,PMG P/N Z995205	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - PIN,BALLARM	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - BUSHING,URETHANE UPPER D	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - BUSHING,URETHANE LOWER D	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - BALLARM,SPEED SWITCH	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - PIN,TAPERED	In Stock	MEDIUM	NO	
BDE - GOVERNOR SPEED GENERATOR - SPRING,SPEED SWITCH	In Stock	HIGH	NO	
BDE - GOVERNOR SPEED GENERATOR - STATOR,P.M.G.	In Stock	HIGH	NO	
BDE - GUIDE BEARING SEGMENTS - Bearing segments,	In Stock	HIGH	YES	
BDE - THRUST BEARING SEGMENTS - Bearing segments,	In Stock	HIGH	YES	
BDE - UNIT 7 GOVERNOR - FILTER,HYD 932633Q	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,BALLARM	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,DASHPOT	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,LOWER DRIVE	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,PIVOT	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,ROCKER ARM	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,WOODWARD 11002-71	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PIN,WOODWARD 11002-75	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PLUNGER,SNAP ACTION	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - POTENTIOMETER,1250OH 0.24A	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - PUMP,OIL IMO A3DB-275	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - RETAINER,SWITCH	In Stock	MEDIUM	N/A	
BDE - UNIT 7 GOVERNOR - RING,SNAP (PILOT SERVO PLUG)	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - ROTOR,BALL HEAD MOTOR	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - SENSOR,LOAD GOVERNOR	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - SOLENOID,125 V DC	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - SOLENOID,125VDC 211E	In Stock	HIGH	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - UNIT 7 GOVERNOR - SPRING,PILOT VALVE LINK	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - STATOR,BALL HEAD MOTOR	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - SWITCH,PRESS OIL ALARM	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - STATOR,PERMANENT MAGNET	In Stock	HIGH	N/A	
BDE - UNIT 7 GOVERNOR - SPRING,SPEED SWITCH	In Stock	HIGH	N/A	
BDE - UNIT 7 TURBINE - Carbon Seal	In Stock	HIGH	N/A	
BDE - UNIT 7 TURBINE - Wicket gate	In Stock	HIGH	N/A	
BDE - UNIT 7 TURBINE - Turbine bearing	In Stock	HIGH	N/A	
BDE - Unit 7 DRAFT TUBE-TURBINE - Water Level Probe	In Stock	MEDIUM	N/A	
BDE - Unit 7 HEADCOVER ASSEMBLY - BOTTOM RING P001 bushing	In Stock	HIGH	N/A	
BDE - Unit 7 HEADCOVER ASSEMBLY - BUSHING,LOWER HEAD COVER P001	In Stock	HIGH	N/A	
BDE - Unit 7 HEADCOVER ASSEMBLY - PACKING,V-TYPE 3/8 EASY	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - Linkage	In Stock	HIGH	N/A	
BDE - Unit 7 OPERATING RING - BUSHING,LINK PIN	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - CAP,SHEARPIN	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - PIN,ECCENTRIC P005	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - PIN,LINK P006	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - PIN,ROD SHEARPIN	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - PIN,UPPER DRIVE	In Stock	MEDIUM	N/A	
BDE - Unit 7 OPERATING RING - LEVER,WICKET GATE	In Stock	HIGH	N/A	
BDE - Unit 7 ROTOR ASSEMBLY - POLE	In Stock	HIGH	N/A	
BDE - Unit 7 RUNNER - TURBINE - CARBON SEAL	In Stock	HIGH	N/A	
BDE - Unit 7 SERVOMOTOR # 1 - Piston Ring	In Stock	HIGH	N/A	
BDE - Unit 7 SERVOMOTOR # 1 - PACKING,SERVOMOTOR	In Stock	MEDIUM	N/A	
BDE - Unit 7 SERVOMOTOR # 1 - PACKING,V TYPE 2-EASY	In Stock	MEDIUM	N/A	
BDE - Unit 7 SERVOMOTOR # 1 - PACKING,V-TYPE 9"X8"ID	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - BOARD,DIGITAL I/O	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - BOARD,I/O ANALOG	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - BOARD,MEASURING ABB	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - BOARD,POWER SYSTEM STABI	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - CAPACITOR,20 MF +-10% 150 V	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - COMPONENT, INTEG CCT	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - INTEG CCT	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - CONTACT,ISOLATING	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - MODULE,ABB DCS500B200361	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - PANEL,CONTROL	In Stock	MEDIUM	N/A	
BDE - UNIT 7 EXCITER - POWER SUPPLY,ABB 3BHE013940R00	In Stock	MEDIUM	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - UNIT 7 EXCITER - RELAY,GROUND VOLTAGE	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - Main Moving Contacts	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - Main Fixed Contacts	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - COIL,SHUNT CLOSING	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - COIL,SHUNT OPENING	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - Charging Motor	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - BREAKER,ABB EZNE1600MS4-B1	In Stock	HIGH	N/A	
BDE - Unit 7 Generator Field Breaker - ARC CHUTE,ABB UXAB289199215	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - MOTOR,CHARGING	In Stock	MEDIUM	N/A	
BDE - Unit 7 Generator Field Breaker - CONTACT,ABB UXAB239Z60R0	In Stock	MEDIUM	N/A	
BDE - Unit 7 Control Board - BOARD,CONTROL	In Stock	MEDIUM	N/A	
BDE - UNIT 7 HYDRAULIC GENERATOR - coolers	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - BEARING,SPEED SIGNAL	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - BUSHING, OILITE OVERSPEED SWITCH ASSEMBLY	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - PIN,DOWEL - SPEED SWITCH	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - PLATE,MOUNTING - MERCURY	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - RING,ROTOR	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - PIN,ROCKER ARM	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - BEARING,WW 1800125	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - BEARING,WW 111006	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - BEARING,PMG P/N Z995205	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - PIN,BALLARM	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - BUSHING,URETHANE UPPER D	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - BUSHING,URETHANE LOWER D	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - BALLARM,SPEED SWITCH	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - PIN,TAPERED	In Stock	MEDIUM	N/A	
BDE - Unit 7 PMG - SPRING,SPEED SWITCH	In Stock	HIGH	N/A	
BDE - Unit 7 PMG - STATOR,P.M.G.	In Stock	HIGH	N/A	
BDE - Unit 7 VIBRATION MONITORING - PICK-UP,NON-CONTACT	In Stock	MEDIUM	N/A	
BDE - Unit 7 VIBRATION MONITORING - PICK-UP,SPEED SENSING	In Stock	MEDIUM	N/A	
BDE - Unit 7 VIBRATION MONITORING - POWER SUPPLY,IRD PCB 29128	In Stock	HIGH	N/A	
BDE - Unit 7 GENERATOR COOLING WATER SYSTEM - TRANSMITTER,DIFF	In Stock	MEDIUM	N/A	
BDE - Unit 7 WICKET GATES - GATE, WICKET	In Stock	HIGH	N/A	
BDE - Unit 7 SLIPRING/BRUSH RIGGING - Collector rings	In Stock	HIGH	N/A	
BDE - Unit 7 SLIPRING/BRUSH RIGGING - Brushes	In Stock	MEDIUM	N/A	
BDE - Unit 7 SURFACE AIR COOLERS - Tubes	In Stock	MEDIUM	N/A	
BDE - Unit 7 THRUST/GUIDE BEARING COOLERS - Coolers	In Stock	HIGH	YES	New Ordered

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - Unit 7 NEUTRAL GROUND TRANSFORMER - transformer	In Stock	MEDIUM	N/A	
BDE - Unit 7 ROTOR - Pole	In Stock	HIGH	N/A	
BDE - Unit 7 STATOR WINDINGS - Stator Bars	In Stock	HIGH	N/A	
BDE - Unit 7 STATOR WINDINGS - Wedges	In Stock	HIGH	N/A	
BDE - Unit 7 TURBINE GUIDE BEARING - bearing	In Stock	HIGH	YES	New Ordered
BDE - Unit 7 GENERATOR GUIDE BEARING - segments	In Stock	HIGH	N/A	
BDE - Unit 7 THRUST BEARING - Thrust Pads	In Stock	HIGH	N/A	
BDE - Unit 7 THRUST BEARING - Rotating Ring	In Stock	HIGH	N/A	
BDE - PANEL STATION SERVICE - PH #2 - ACB	In Stock	HIGH	YES	
CAT - ACCUMULATOR TANK - COIL AUTO AIR CHARGING SOLND	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE DEFLECTOR FDBK AMP	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE FEEDBACK 20'	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE FEEDBACK 200'	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE FEEDBACK 50'	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE,NEEDLE FDBK AMP,	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE PROPORTIONAL VLV	In Stock	HIGH	N/A	
CAT - Governor Control System - CABLE90 DEG.5' ZVPU,	In Stock	HIGH	N/A	
CAT - Governor Control System - Power Supply	In Stock	MEDIUM	N/A	
CAT - Governor Control System - Power Supply 24V	In Stock	MEDIUM	N/A	
CAT - Governor - JOINT,UNIVERSAL SSG #1787058	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Tip	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Shuttle Valve	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - CONNECTOR, MINIATURE CHAIN	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Casing guide U/S	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Casing guide D/S	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Needle seat	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - BUSHING NOZZLE 374527007/P001	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - CABLE AIRCRAFT,	In Stock	MEDIUM	N/A	
CAT - NEEDLE VALVE ASS (6) - CABLE AIRCRAFT 20,	In Stock	MEDIUM	N/A	
CAT - NEEDLE VALVE ASS (6) - CHAIN,DBS FCS-A1-15	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - CONTROL DEVICE,NEEDLE	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - CONNECTOR, MINIATURE CHAIN	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - Amplifier/proportional	In Stock	HIGH	N/A	
CAT - NEEDLE VALVE ASS (6) - seal piston ring	In Stock	MEDIUM	N/A	
CAT - NEEDLE VALVE ASS (6) - Seal	In Stock	MEDIUM	N/A	
CAT - Electronic Governor - BUSHING CABLE PROP VLV,	In Stock	HIGH	N/A	
CAT - Electronic Governor - CONNECTOR,MLDT ROD BALL	In Stock	HIGH	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
CAT - Electronic Governor - CONVERTER,SERIAL/ETHERNET	In Stock	HIGH	N/A	
CAT - Electronic Governor - HOLDER,CIRCUIT BREAKER	In Stock	HIGH	N/A	
CAT - Electronic Governor - INTERFACE,ETHERNET VERSA	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,GE AMPLIFIER	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,GE PT INTERFACE	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,PLUG-IN DIODE	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,VERSAMAX 16 PT	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,VERSAMAX 32 PT	In Stock	HIGH	N/A	
CAT - Electronic Governor - MODULE,VERSAMAX 4 AO	In Stock	HIGH	N/A	
CAT - Electronic Governor - PC,ATLAS VX WORKS	In Stock	HIGH	N/A	
CAT - Electronic Governor - VERSAMAX power supply	In Stock	HIGH	N/A	
CAT - Electronic Governor - PROBE,SPEED ZVPU	In Stock	HIGH	N/A	
CAT - Electronic Governor - RELAY,14 PIN PLUG 24VDC	In Stock	HIGH	N/A	
CAT - Electronic Governor - LVDT deflector	In Stock	HIGH	N/A	
CAT - Electronic Governor - Pos.Xducer	In Stock	HIGH	N/A	
CAT - Electronic Governor - POs.Xducer	In Stock	HIGH	N/A	
CAT - Electronic Governor - Deflector proportional	In Stock	HIGH	N/A	
CAT - Electronic Governor - Rod deflector	In Stock	HIGH	N/A	
CAT - Electronic Governor - PC, Atlas 2	In Stock	HIGH	N/A	
CAT - Electronic Governor - Guide Ball Slide	In Stock	HIGH	N/A	
CAT - Governor Hydraulics - ELEMENT,FILTER SM 10	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - ELEMENT,FILTER SM 25	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - DEFLECTOR,SERVOMOTOR	In Stock	HIGH	YES	New Ordered
CAT - Governor Hydraulics - PLUG,C/V 010168-390-163	In Stock	HIGH	N/A	
CAT - Governor Hydraulics - PLUG,C/V 021002-281-208	In Stock	HIGH	N/A	
CAT - Governor Hydraulics - PLUG,ESCHER WYSS	In Stock	HIGH	N/A	
CAT - Governor Hydraulics - Deflector valve	In Stock	HIGH	N/A	
CAT - Governor Hydraulics - Piston seal 725X8 X3/8	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - Piston seal 9X8X1/2	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - Seal	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - Pressure Switch	In Stock	MEDIUM	N/A	
CAT - Governor Hydraulics - OIL,TURBINE 46 (205L)	In Stock	MEDIUM	N/A	
CAT - POWER TUNNEL (ROCKCUT) - Seal, Adit Door	In Stock	HIGH	N/A	
CAT - ROTOR - GENERATOR - Pole	In Stock	HIGH	N/A	
CAT - Turbine - Runner	In Stock	HIGH	N/A	
CAT - GENERATOR - MODULE,TYP 1CD 108 M 2-02 vibro-meter	In Stock	MEDIUM	N/A	
CAT - GENERATOR - OVERCURRENT relay	In Stock	MEDIUM	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
CAT - GENERATOR - RELAY,TIME DELAY .6 - 1.0	In Stock	MEDIUM	N/A	
CAT - GENERATOR - rotating ring	In Stock	HIGH	N/A	
CAT - GENERATOR - INSLTR,SLIP RING	In Stock	MEDIUM	N/A	
CAT - GENERATOR - Brake ring	In Stock	HIGH	N/A	
CAT - GENERATOR - Brake valve	In Stock	HIGH	N/A	
CAT - GENERATOR - Brake Solenoid	In Stock	HIGH	N/A	
CAT - Isolated Phase Bus - PT fuse	In Stock	MEDIUM	N/A	
CAT - STATION SERVICE SYSTEM - COIL,CLOSING 129 V DC	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Arc Chute	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Trip Coil	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Main Drawout Contact	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Contact Moving Arc	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Contact Stationary Arc	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Undervoltage Coil	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - Contact 1600Amp	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - CT 400-800	In Stock	HIGH	N/A	
CAT - STATION SERVICE SYSTEM - CT 800-1600	In Stock	HIGH	N/A	
CAT - SURFACE AIR COOLERS - Surface Air Cooler	In Stock	HIGH	N/A	
CAT - Generator Bearing - Cooler	In Stock	HIGH	YES	New Ordered
CAT - Stator Assembly - BAR STATOR BOTTOM,	In Stock	HIGH	N/A	
CAT - Stator Assembly - BAR STATOR TOP,	In Stock	HIGH	N/A	
CAT - Stator Assembly - CAP STATOR WINDING END,	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR ASM 105	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR ASM 107	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR ASM 108	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR ASM 109	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - Stator Assembly - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - Stator Assembly - Wedge	In Stock	HIGH	N/A	
CAT - Stator Assembly - Wedge	In Stock	HIGH	N/A	
CAT - Stator Assembly - Connector	In Stock	HIGH	N/A	
CAT - Stator Assembly - Slider	In Stock	HIGH	N/A	
CAT - Stator Assembly - Slider	In Stock	HIGH	N/A	
CAT - Stator Assembly - Slider	In Stock	HIGH	N/A	
CAT - Exciter # 1 - COIL,SHUNT CLOSING	In Stock	HIGH	N/A	
CAT - Exciter # 1 - COIL,SHUNT OPENING	In Stock	HIGH	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
CAT - Exciter # 1 - CONTACT,ISOLATING	In Stock	HIGH	N/A	
CAT - Exciter # 1 - MODULE,THYRISTOR BRIDGE	In Stock	HIGH	N/A	
CAT - Exciter # 1 - SUPPLY,110-220 VOLT	In Stock	HIGH	N/A	
CAT - Exciter # 1 - Breaker	In Stock	HIGH	N/A	
CAT - Exciter # 1 - Arc Chute	In Stock	HIGH	N/A	
CAT - Exciter # 1 - Control Board	In Stock	HIGH	N/A	
CAT - Exciter # 1 - I/O ANALOG BOARD CONTROL,	In Stock	HIGH	N/A	
CAT - Exciter # 1 - DIGITAL I/O BOARD,	In Stock	HIGH	N/A	
CAT - Exciter # 1 - PANEL,CONTROL	In Stock	HIGH	N/A	
CAT - Exciter # 1 - BOARD POWER SYSTEM STABI,	In Stock	HIGH	N/A	
CAT - Exciter # 1 - BOARD MEASURING,	In Stock	HIGH	N/A	
CAT - Exciter # 1 - MOTOR,CHARGING	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CONTROL BOARD,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB HIER319619R2,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB KX9170A V1,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN 2010B-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UNC001D-E,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UNS0026A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD\ ABB UN0014B-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0016A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0025A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0026A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0027A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0031A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN004A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0079A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0083A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0089A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0091A-P,CARD ABB UN0093A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0503A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Unitrol Card	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Thyristor	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Transformer	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Field Voltage Transducer	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Shunt Voltage Transducer	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Analog Input Transducer	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - Fuse 600Amp	In Stock	HIGH	N/A	

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Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
CAT - EXCITER NO. 2 - CARD ABB UN0510C-9,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0516A,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0900B-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN0901B-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN1001C-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN1004A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - COIL,SHUNT CLOSING	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - COIL,125 VOLT 60HZ	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD\ ABB UN1004A-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB UN1024C-P,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD ABB 1WX 174-2,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD BBC UN0077AP,	In Stock	HIGH	N/A	
CAT - EXCITER NO. 2 - CARD,BBC UN2001F-P	In Stock	HIGH	N/A	
CAT - BREAKERS BY BROWN BOVERI, 600V - spare field breaker in used spare exciter	In Stock	HIGH	N/A	
CAT - Slipring/brush Rigging Assembly - Ring, Collector Assembly	In Stock	HIGH	N/A	
CAT - Slipring/brush Rigging Assembly - Brushes	In Stock	MEDIUM	N/A	
CAT - Slipring/brush Rigging Assembly - Brush Holder	In Stock	HIGH	N/A	
CAT - Slipring/brush Rigging Assembly - Insulator	In Stock	HIGH	N/A	
CAT - Governor Pumps - Pump	In Stock	HIGH	N/A	
CAT - Governor Pumps - INSERT,CURVED JAW SPIDER	In Stock	HIGH	N/A	
CAT - Rotor Poles - Entire Pole	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR ASM 105	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR ASM 107	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR ASM 108	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR ASM 109	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - Stator Windings - JUMPER,STATOR WINDING	In Stock	HIGH	N/A	
CAT - THRUST BEARING - thrust pads	In Stock	HIGH	N/A	
CAT - Turbine Guide Bearing - Bearing	In Stock	HIGH	N/A	
CAT - Guide Bearing Segments - Bearing	In Stock	HIGH	N/A	
CAT - Thrust Bearing Segments - Segments	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - PUMP UNLOADER,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - COILDASHPOT,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - COIL OIL PUMP UNLOADER SOLND. ,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - COIL PARTIAL SHUTDOWN RESET ,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - COIL SHUTDOWN SOLENOID 65SD ,	In Stock	HIGH	N/A	

2016-17 Winter Readiness Report - Update

Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
HLK - GOVERNOR HYDRAULIC SYSTEM - COIL RESET SOLENOID ,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - WOODWARD 1447- 634,motor	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - WOODWARD 1447-640,MOTOR	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - GATE LIMIT,ROD,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - UNLOADER PISTON,	In Stock	HIGH	N/A	
HLK - GOVERNOR HYDRAULIC SYSTEM - filter	In Stock	HIGH	N/A	
HLK - GOVERNOR ACCUMULATOR TANK - SWITCH PRESS OIL ALARM,	In Stock	HIGH	N/A	
HLK - GOVERNOR ACCUMULATOR TANK - Air admission solenoid	In Stock	HIGH	N/A	
HLK - GOVERNOR SPEED GENERATOR - GEAR,WOODWARD 1447-640	In Stock	HIGH	N/A	
HLK - GOVERNOR SPEED GENERATOR - gear drive	In Stock	HIGH	N/A	
HLK - MECHANICAL GOVERNOR CONTROLS - Motor limit	In Stock	HIGH	N/A	
HLK - MECHANICAL GOVERNOR CONTROLS - Motor speeder	In Stock	HIGH	N/A	
HLK - MECHANICAL GOVERNOR CONTROLS - Unloader timing valve	In Stock	HIGH	N/A	
HLK - OPERATING RING - Bearing pads	In Stock	HIGH	N/A	
HLK - SERVOMOTOR #1 - servomotor repair kit	In Stock	HIGH	N/A	
HLK - SERVOMOTOR ASSEMBLY - shear pins	In Stock	HIGH	N/A	
HLK - Rotor Assembly - HLK Generator - Rotor pole	In Stock	HIGH	N/A	
HLK - TURBINE - Carbon seal,	In Stock	HIGH	N/A	
HLK - TURBINE - BEARING SEGMENT TURBINE,	In Stock	HIGH	N/A	
HLK - TURBINE - PLATE BEARING,	In Stock	HIGH	N/A	
HLK - TURBINE - SEAL TURBINE,	In Stock	HIGH	N/A	
HLK - TURBINE - Wicket gate lever	In Stock	HIGH	N/A	
HLK - TURBINE - Friction hub	In Stock	HIGH	N/A	
HLK - TURBINE - Friction hub	In Stock	HIGH	N/A	
HLK - TURBINE - Packing box	In Stock	HIGH	N/A	
HLK - TURBINE - link thin	In Stock	HIGH	N/A	
HLK - TURBINE - link thick	In Stock	HIGH	N/A	
HLK - TURBINE - wicket gate seal	In Stock	HIGH	N/A	
HLK - TURBINE - Dowel	In Stock	HIGH	N/A	
HLK - TURBINE - Link pin	In Stock	HIGH	N/A	
HLK - TURBINE - Eccentric pin	In Stock	HIGH	N/A	
HLK - WICKET GATES - wicket gate	In Stock	HIGH	N/A	
HLK - GENERATOR - brake shoes	In Stock	HIGH	N/A	
HLK - GENERATOR - SOLENOID,GENERATOR AIR VALVE,	In Stock	HIGH	N/A	
HLK - GENERATOR - Generator air valve	In Stock	HIGH	N/A	
HLK - HEADCOVER ASSEMBLY - SEAL TURBINE,	In Stock	HIGH	N/A	
HLK - HEADCOVER ASSEMBLY - SEALWICKET GATE,	In Stock	HIGH	N/A	

2016-17 Winter Readiness Report - Update

Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
HLK - HEADCOVER ASSEMBLY - BUSHING 60X75 MM,	In Stock	HIGH	N/A	
HLK - HEADCOVER ASSEMBLY - BUSHING GATE STEM - LOWER,	In Stock	HIGH	N/A	
HLK - HEADCOVER ASSEMBLY - BUSHING GATE STEM - UPPER,	In Stock	HIGH	N/A	
HLK - HEADCOVER ASSEMBLY - Bushing upper	In Stock	HIGH	N/A	
HLK - INTAKE HEADGATE AND HOIST EQUIP - Pressure druk	In Stock	MEDIUM	N/A	
HLK - STATION SERVICE SWITCHGEAR - Breaker (EATON)	In Stock	HIGH	N/A	
HLK - Thrust/Guide Bearing Coolers - Hi pressure lift pump	In Stock	HIGH	N/A	
HLK - ISOLATED PHASE BUS - PT fuse	In Stock	HIGH	N/A	
HLK - STATOR ASSEMBLY - Stator connection caps	In Stock	HIGH	N/A	
HLK - STATOR ASSEMBLY - Stator bars	In Stock	HIGH	N/A	
HLK - EXCITATION - Bridge (entire module)	In Stock	HIGH	N/A	
HLK - Slipring /Brush Rigging - Carbon brush	In Stock	MEDIUM	N/A	
HLK - Slipring /Brush Rigging - Brush holder	In Stock	HIGH	N/A	
HLK - Rotor - Pole	In Stock	HIGH	N/A	
HLK - STATOR WINDINGS - UNIT 1 - robel bars	In Stock	HIGH	N/A	
HLK - TURBINE GUIDE BEARING - BEARING, Segment TURBINE	In Stock	HIGH	N/A	
HLK - GUIDE BEARING SEGMENTS (SET) - BEARING,SEGMENT	In Stock	HIGH	N/A	
HLK - HD-1N - HINDS LAKE INTAKE - TRANSMITTER,PRESS 0-375	In Stock	MEDIUM	N/A	
HLK - THRUST BEARING SEGMENTS (SET) - Thrust Bearing Segments	In Stock	HIGH	N/A	
HLK - UPPER GUIDE BEARING SEGMENTS - Upper Guide Bearing Segments	In Stock	HIGH	N/A	
HLK - IN FRAZIL ICE SYS - INTAKE - TRANSMITTER,TEMPERATURE	In Stock	MEDIUM	N/A	
HLK - GOVERNOR SPEED GENERATOR - Speed switch bracket	In Stock	HIGH	NO	
GCL - Governor Control System - Pressure Switch	In Stock	MEDIUM	N/A	
GCL - Governor Control System - POWER SUPPLY,18-32VDC	In Stock	MEDIUM	N/A	
GCL - Governor Control System - TRANSMITTER,PRESS 0-2000	In Stock	MEDIUM	N/A	
GCL - Governor Control System - TRANSMITTER,TEMP 4-20 MA	In Stock	MEDIUM	N/A	
GCL - Governor Hydraulic System - Filter, Element NS-7	In Stock	MEDIUM	N/A	
GCL - Governor Hydraulic System - Joint, Shaft Parker	In Stock	MEDIUM	N/A	
GCL - Governor Hydraulic System - Pump, Vane Vick	In Stock	HIGH	N/A	
GCL - Governor Hydraulic System - Seal, Polypak "U" Cup	In Stock	MEDIUM	N/A	
GCL - Governor Hydraulic System - Valve, Relief	In Stock	HIGH	N/A	
GCL - Governor Hydraulic System - Valve, Check 1 6000 psi	In Stock	MEDIUM	N/A	
GCL - Governor Hydraulic System - Valve, Proportional	In Stock	HIGH	N/A	
GCL - Operating Ring - Washer, Ring Seal	In Stock	MEDIUM	N/A	
GCL - Operating Ring - BUSHING,GE 226043126X015	In Stock	MEDIUM	N/A	
GCL - Servomotor - Rod, Seal H254-918	In Stock	MEDIUM	N/A	
GCL - Servomotor - Rod, Seal H092-730	In Stock	MEDIUM	N/A	

2016-17 Winter Readiness Report - Update

Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
GCL - Servomotor Assembly - Ring, Piston GE	In Stock	HIGH	N/A	
GCL - Speed Signal Generator - Pickup, Zero Velocity	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Packing Ring, Segment	In Stock	MEDIUM	N/A	
GCL - Turbine Assembly - Pad, Stop GE	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Seal, Inflatable	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Transmitter, Pressure GE	In Stock	MEDIUM	N/A	
GCL - Turbine Assembly - Transmitter, Pressure -5TO55	In Stock	MEDIUM	N/A	
GCL - Turbine Assembly - Transmitter, Pressure 0-90 PSIG	In Stock	MEDIUM	N/A	
GCL - Turbine Assembly - Transmitter, Diff Pressure	In Stock	MEDIUM	N/A	
GCL - Turbine Assembly - Ring, Rotating GE	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Ring, Sealing C/W Spring	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Ring, Wear	In Stock	HIGH	N/A	
GCL - Turbine Assembly - Valve, Check Wafer 12"D	In Stock	MEDIUM	N/A	
GCL - Wicket Gates - Bushing, GE 226043126X015	In Stock	MEDIUM	N/A	
GCL - Wicket Gates - Gate, Wicket GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Level, Gate GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Lever, Shear GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Liner, Gate Operating	In Stock	HIGH	N/A	
GCL - Wicket Gates - Link, GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Pin, Eccentric	In Stock	HIGH	N/A	
GCL - Wicket Gates - Pin, Shear GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Pin, Taper GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Plate, Retaining GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Plate, Top GE	In Stock	HIGH	N/A	
GCL - Wicket Gates - Shim, Laminum	In Stock	MEDIUM	N/A	
GCL - Wicket Gates - Sleeve, BRS 210mm	In Stock	MEDIUM	N/A	
GCL - Wicket Gates - Spacer	In Stock	MEDIUM	N/A	
GCL - Generator - Top Stator Bars (36)	In Stock	HIGH	N/A	
GCL - Generator - Bottom Stator Bars (18)	In Stock	HIGH	N/A	
GCL - Generator - Guide Bearing, GE	In Stock	HIGH	N/A	
GCL - Generator - Converter, RTD Temperature	In Stock	HIGH	N/A	
GCL - Generator - Converter, RTD Universal	In Stock	HIGH	N/A	
GCL - Generator - Creep Detector ASSY, 129 V	In Stock	HIGH	N/A	
GCL - Generator - Device, Surge Suppression	In Stock	MEDIUM	N/A	
GCL - Generator - Fuse, TEMP Limiter	In Stock	MEDIUM	N/A	
GCL - Generator - Fuse, Voltage XFMR	In Stock	MEDIUM	N/A	
GCL - Generator - Jumper, Pole ASM #1	In Stock	HIGH	N/A	

2016-17 Winter Readiness Report - Update

Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
GCL - Generator - Jumper Pole ASM #2	In Stock	HIGH	N/A	
GCL - Generator - Jumper Pole ASM #3	In Stock	HIGH	N/A	
GCL - Generator - Jumper Pole ASM #4	In Stock	HIGH	N/A	
GCL - Generator - Level, Indicator Magnetic	In Stock	HIGH	N/A	
GCL - Generator - Oil, Turbine 46 (205L)	In Stock	MEDIUM	N/A	
GCL - Generator - Packing, V-Type GE	In Stock	MEDIUM	N/A	
GCL - Generator - Pin, Taper 25MM x 90MM	In Stock	MEDIUM	N/A	
GCL - Generator - Plate, Brake GE	In Stock	HIGH	N/A	
GCL - Generator - Plate, Locating Pivoted	In Stock	HIGH	N/A	
GCL - Generator - Pole, Wound GE	In Stock	HIGH	N/A	
GCL - Generator - Probe, 741 GE	In Stock	HIGH	N/A	
GCL - Generator - RTD, 12.5" -50-550 DEG	In Stock	HIGH	N/A	
GCL - Generator - RTD, 17" -50-550 DEG C	In Stock	HIGH	N/A	
GCL - Transmitter, PFM	In Stock	MEDIUM	N/A	
GCL - Transmitter, Temp 4-20 MA	In Stock	MEDIUM	N/A	
GCL - Switch, Press 200 PSI 15A	In Stock	MEDIUM	N/A	
GCL - Switch, 20-160 ABB 104-324-46	In Stock	MEDIUM	N/A	
GCL - Thermometer, ADJ 0-55	In Stock	MEDIUM	N/A	
GCL - Transducer, Balluff Track	In Stock	HIGH	N/A	
GCL - Shim, GE 007	In Stock	MEDIUM	N/A	
GCL - Shim, GE 008	In Stock	MEDIUM	N/A	
GCL - Shoe, brake GE 6201B6815L005	In Stock	HIGH	N/A	
GCL - Spring, GE	In Stock	MEDIUM	N/A	
GCL - Valve, Purge GE	In Stock	HIGH	N/A	
GCL - Washer, Brake Plate	In Stock	MEDIUM	N/A	
GCL - Washer, GE 105000100	In Stock	MEDIUM	N/A	
GCL - Ring Assy, Collector	In Stock	HIGH	N/A	
GCL - Stick, Joint Horz	In Stock	MEDIUM	N/A	
GCL - Stick, Joint Vert	In Stock	MEDIUM	N/A	
GCL - Switch, Press Actuated	In Stock	MEDIUM	N/A	
GCL - Switch, Press Gran 20W	In Stock	MEDIUM	N/A	
GCL - Seal, Top Guide Bearing	In Stock	MEDIUM	N/A	
GCL - Runner - Seal, 770mm x 730mm x 25mm	In Stock	MEDIUM	N/A	
GCL - Surface Air Coolers - Cooler, Surface Air	In Stock	HIGH	N/A	
GCL - Thrust/Guide Bearing Coolers - Coil, Cooling GE	In Stock	HIGH	YES	
BDE - RECTIFYING TRANSFORMER - Insulating Fluid	In Stock	MEDIUM	NO	
BDE - ISOLATED PHASE BUS - Surge Capacitor	In Stock	HIGH	NO	

2016-17 Winter Readiness Report - Update

Critical Spare Component	Stock Status	Risk Score	Spare Cost >\$50,000	Comments
BDE - EXCITATION CONTROLS - Field Flashing Resistor	In Stock	HIGH	NO	
BDE - UNIT 7 GOVERNOR - Unloader/Relief Valve	In Stock	HIGH	NO	
CAT - ACCUMULATOR TANK - Air Admission Valve	In Stock	HIGH	NO	
HLK - GOVERNOR ACCUMULATOR TANK - Solenoid valve	In Stock	HIGH	NO	
BDE - ISOLATED PHASE BUS - Surge Capacitor	In Stock	HIGH	NO	
BDE - EXCITATION CONTROLS - Field Flashing Resistor	In Stock	HIGH	NO	
BDE - UNIT 7 GOVERNOR - Unloader/Relief Valve	In Stock	HIGH	NO	
BDE - TURBINE GUIDE BEARING - oil cooler	In Stock	HIGH	NO	
HLK - CIRCUIT BREAKER - Primary disconnect	In Stock	HIGH	NO	Item #68001594
HLK - CIRCUIT BREAKER - Charging motor	In Stock	HIGH	NO	Item #58608396
HLK - CIRCUIT BREAKER - Motor brush kit	In Stock	HIGH	NO	Item #65300060
HLK - CIRCUIT BREAKER - Spring release coil	In Stock	HIGH	NO	Item #68001592
HLK - CIRCUIT BREAKER - Shunt trip coil	In Stock	HIGH	NO	Item #68001591
HLK - CIRCUIT BREAKER - Anti-pump relay	In Stock	HIGH	NO	Item #60101058
CAT - Governor Hydraulics - Cooler	In Stock	HIGH	NO	
CAT - BRAKING JET ASSEMBLY - Control Valve	In Stock	HIGH	TBD	Item #58800486
HLK - EXCITER FIELD BREAKER - Entire unit	In Stock	HIGH	TBD	Item #68001626

APPENDIX H

Allowance for Unforeseen Notification Letter
Bay d'Espoir Penstock 1 Refurbishment

2016-17 Winter Readiness Report

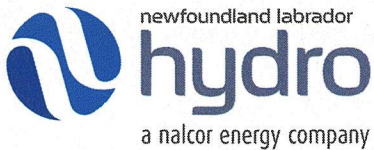
Hydro Place, 500 Columbus Drive.

P.O. Box 12400, St. John's, NL

Canada A1B 4K7

t. 709.737.1400 f. 709.737.1800

www.nlh.nl.ca



October 14, 2016

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Bay d'Espoir Penstock 1 Refurbishment
Allowance for Unforeseen Notification

On September 14, 2016, water was observed running down the side of Bay d'Espoir Penstock 1 due to a leak in the penstock. Bay d'Espoir Units 1 and 2 (total generation capacity of 153MW) was removed from service to isolate the leak and investigate.

This leak occurred approximately 5 meters upstream of a previous leak that was identified in Penstock 1 on May 21, 2016. At the time of the first leak, expert evaluation concluded that the crack in the penstock was a localized weakness due to workmanship when the penstock was fabricated. A weld repair was performed on the leak in May, and the penstock was returned to service.

With the occurrence of the second crack, the question arose if the issue was actually localized or indeed more widespread. As such, an investigation guided by an outside consultant, began on the cause of the cracks. A methodical inspection process began in the vicinity of the two cracks and as unacceptable welds continued to be discovered, the inspection expanded accordingly until the extent of unacceptable welds was found. Where the welds were found to be unacceptable, the welds contained cracks, had porous surfaces, and were eroded below the level of the base material. These welds have to be replaced to ensure sufficient strength for reliable penstock operation. The total length of substandard welds that are required to be rehabilitated is approximately 700 linear meters. The photo (below) shows an example of an unacceptable weld.



As a result of the unacceptable welds, Bay d'Espoir Units 1 and 2 are not available for generation until the work to rehabilitate the welds can be completed. An expedited and aggressive project schedule has been developed to enable a return to reliable operation in time for the winter operating season.

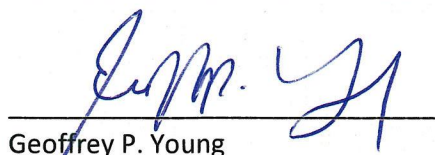
The Bay d'Espoir Penstock 1 Refurbishment is of an urgent and unforeseen nature, and is required to enable Hydro to provide reliable service to customers. Hydro is therefore initiating a project under Allowance for Unforeseen Items account. It is estimated that the total cost of the work will be approximately \$12.9 million.

Hydro recognizes this level of expenditure is above the Allowance for Unforeseen Items allocation and will therefore be applying to top up the Allowance for Unforeseen Items account.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Geoffrey P. Young
Corporate Secretary and General Counsel
GPY/bs

APPENDIX I

Allowance for Unforeseen Notification Letter
Bay d'Espoir Access Roads Refurbishment

2016-17 Winter Readiness Report

Hydro Place, 500 Columbus Drive,
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 f. 709.737.1800
www.nlh.nl.ca



October 14, 2016

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

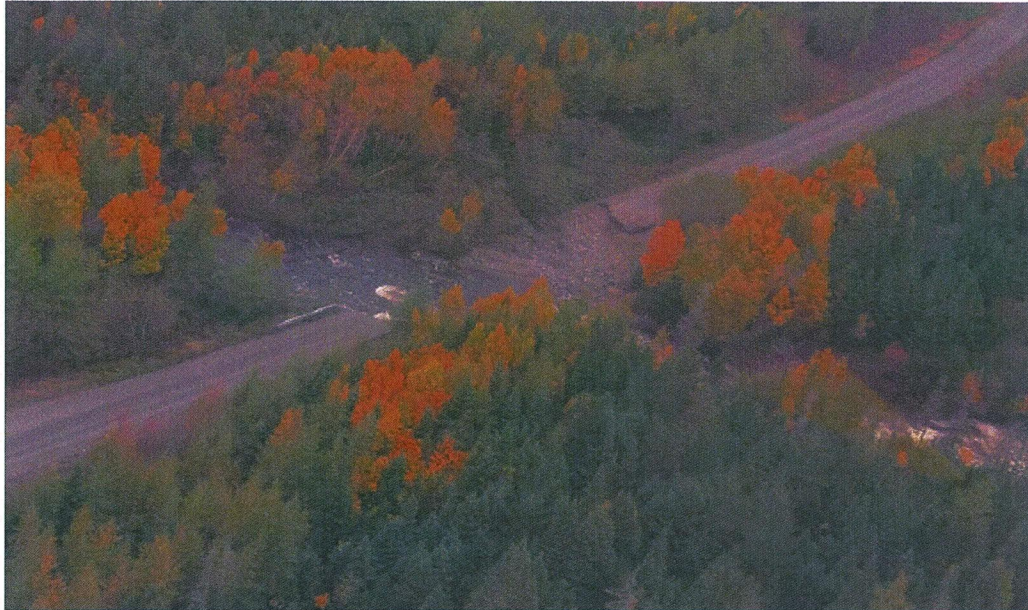
Re: Bay d'Espoir Access Roads Refurbishment
Allowance for Unforeseen Notification

On October 10, 2016, Hurricane Matthew tracked over the South Coast of Newfoundland. During this storm, more than 200mm of rain was deposited in the area. The Bay d'Espoir Generating Station recorded 207mm during this event. Most of the rain fell in a short period of time, causing rivers and streams to rise quickly, overflow their banks, and move large amounts of earth and trees. Culverts in many areas were not able to keep up with the excessive volume of flowing water which resulted in water flowing across roads.

Fortunately, there was no damage to the reservoir infrastructure and all dams are intact.

Over 400km of gravel roads connect the generating stations in the system and provide access to reservoirs and water control structures. After the rain stopped, an inspection via helicopter identified 24 extensive wash-outs in the Bay d'Espoir and Upper Salmon access roads in addition to areas with less extensive damage that will also require attention to return the access road to service.

The photographs below give an indication of the storm damage. Photo #1 (below) shows a section of the road to the Upper Salmon Generating Station where the road was washed out and requires extensive rehabilitation work. Photo #2 shows a road washout between the Bay D'Espoir Generating Station and the Surge tanks. Photo #3 shows culverts that were displaced well downstream from a washout location.





These access roads are regularly used by Hydro employees to travel to Hydro's remote generating stations, structures and dams to perform maintenance and operations activities. Bay d'Espoir and Upper Salmon are two critical hydraulic generating stations on the island of Newfoundland and thus need to be accessible to ensure reliable service for Island Interconnected customers.

The work to reinstate these access roads requires culverts and fill, in large quantities. Preliminary information obtained by Hydro suggests that timely ordering of replacement culverts is critical to delivery of the culverts due to the competing requests coming from across the island as a result of significant damage to other roads throughout the province caused by the same rain event. Further, any delay in commencing the project can push the execution of the road reestablishing into the colder temperatures when road fill can be come frozen and hard to obtain and therefore place in the washed out road ways.

The Bay d'Espoir Access Roads Refurbishment project is of an urgent and unforeseen nature, and is required to enable Hydro to provide reliable service to customers, and safe operation of the reservoirs. Hydro is therefore proposing to execute this work using its Allowance for Unforeseen Items account. The preliminary estimate for this work is \$4.6 million.

Hydro recognizes this level of expenditure is above the Allowance for Unforeseen Items allocation and will therefore be applying to top up the Allowance for Unforeseen Items account.

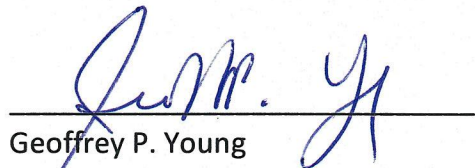
Ms. Cheryl Blundon
Public Utilities Board

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Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Geoffrey P. Young
Corporate Secretary and General Counsel

GPY/bs