STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners:	Robert M. Pickett, Chairman Stephen McAlpine Rebecca L. Pauli Norman Rokeberg Janis W. Wilson
In the Matter of the Request Filed by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for Approval to Establish Depreciation Rates	U-16-064
In the Matter of the Tariff Revision Designated as TA357-121 Filed by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT	U-17-008

MUNICIPAL LIGHT & POWER'S RESPONSE TO PROVIDENCE HEALTH & SERVICES' EIGHTH REQUEST FOR DISCOVERY (PHS-MLP-8)

The Municipality of Anchorage d/b/a Municipal Light & Power ("ML&P"), hereby responds to the Providence Health & Services' ("PHS"") eighth request for discovery. All responses to discovery are prepared by ML&P in consultation with counsel. Witnesses at hearing will be available for cross-examination on their testimony. Documents produced in response to these requests will also be stored in an electronic document management sharefile site accessible with login credentials that have been or will be provided as requested to the counsel, analysts, and consultants for PHS, AG, ANTHC, ENSTAR, FEA, and JLP.

PRELIMINARY STATEMENT

Discovery in this docket is not complete. As discovery proceeds, facts, information, evidence, documents, and other matters may be discovered which are not set forth

LAW OFFICES OF
KEMPPEL, HUFFMAN AND ELLIS
A PROFESSIONAL CORPORATION
255 E. FIREWEED LANE, SUITE 200
ANCHORAGE, ALASKA 99503-2025
(907) 277-1604

Interrogatory (No. PHS-MLP-8-5): State the monthly equivalent availability factor, net generation (MWh), capacity factor and heat rate for each ML&P generating unit for each month since January of 2012.

Response: ML&P object to the request because it requires ML&P to perform analysis or calculations, which ML&P is not required to do in response to discovery. Without waiving the foregoing objection, see documents produced as MLP25020 to MLP25361. The availability factor is listed as "A.F.%" for each unit in the monthly Availability Reports. Net generation (Mwh) for each unit can be calculated by subtracting the Station Service Power (KWh) from the Gross Power Generated (KWh) for each unit in the monthly Generation reports. The capacity factor for each unit can be calculated by taking the net generated power divided by the number of hours ran in the month (found in the monthly Generation Report) multiplied by the unit capacity from the document previously produced as MLP17272.

Person(s) Supplying Information: Jeff Warner and Eugene Ori.

REDACTED

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(907) 277-1604

ML&P AVAILABILITY REPORT

January 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	744:00	00:54	100.00	0.00	1
Unit #2	00:00	00:00	744:00	00:35	100.00	0.00	1
Unit #3	46:59	00:00	744:00	373:34	93.69	11.17	27
Unit #4	00:00	00:00	744:00	146:31	100.00	0.00	15
PLANT 1	46:59	00:00	2976:00	521:34	98.42	8.26	44

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	02:38	00:00	744:00	721:12	99.65	0.36	3
Unit #6	05:25	00:00	744:00	736:35	99.27	0.73	1
Unit #7	00:07	00:00	744:00	743:30	99.98	0.02	1
Unit #8	00:00	32:23	744:00	13:39	95.65	0.00	2
Unit #5B	19:38	02:35	744:00	707:21	97.01	2.70	4
Unit #7B	00:00	00:00	744:00	732:43	100.00	0.00	2
PLANT 2	27:48	34:58	4464:00	3655:00	98.59	0.75	13

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	74:47	34:58	7440:00	4176:34	98.52	1.76	57
PL 2 GT	02:45	32:23	2232:00	1478:21	98.43	0.19	
PL 1&2 GT	49:44	32:23	5208:00	1999:55	98.42	2.43	

KEY: FOH = UNPLANNED (forced outage hours)

SOH = PLANNED (outage hours)

PH = PERIOD HOURS (number of hours in the calendar period being considered)

SH = SERVICE HOURS (The total number of hours a unit was electrically connected to the system)

AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#3 - 20:21 FOH - FCV-2080 FMVO driver failure
#3 - 26:38 FOH - FCV 2080 FMVO driver failure 990 / FMVO demand vs. feedback 989
#5 - 2:38 FOH - Lube Oil Temperature Trip
#6 - 5:25 FOH - Protec 203 Test
#7 - 0:07 FOH - Occurred during F.O. Transfer
#8 - 0:01 POH - Gas system maintenance
#8 - 10:52 POH - Gas system maintenance
#8 - 2:40 POH - Replace Main Gas Line High Pressure Shut Off Valve.
#8 - 9:07 POH - Gas system maintenance
#8 - 9:43 POH - Gas system maintenance
5B - 19:38 FOH - Drum pressure safety valve bolts loose/gasket leaking
5B - 2:35 POH - Replacing Damper Cable Clamp

ML&P AVAILABILITY REPORT

February 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	696:00	03:38	100.00	0.00	1
Unit #2	00:00	00:00	696:00	02:12	100.00	0.00	1
Unit #3	00:00	00:00	696:00	386:41	100.00	0.00	26
Unit #4	00:00	00:00	696:00	160:09	100.00	0.00	12
PLANT 1	00:00	00:00	2784:00	552:40	100.00	0.00	40

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	696:00	696:00	100.00	0.00	0
Unit #6	00:00	00:00	696:00	696:00	100.00	0.00	0
Unit #7	00:00	00:00	696:00	696:00	100.00	0.00	0
Unit #8	00:00	47:15	696:00	29:00	93.21	0.00	4
Unit #5B	00:00	00:00	696:00	696:00	100.00	0.00	0
Unit #7B	00:00	00:00	696:00	696:00	100.00	0.00	0
PLANT 2	00:00	47:15	4176:00	3509:00	98.87	0.00	4

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	00:00	47:15	6960:00	4061:40	99.32	0.00	44
PL 2 GT	00:00	47:15	2088:00	1421:00	97.74	0.00	
PL 1&2 GT	00:00	47:15	4872:00	1973:40	99.03	0.00	

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SH = SERVICE HOURS (The total number of hours a unit was electrically connected to the system)

AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#8 - 10:08 POH - Gas Pigtail Modifications
#8 - 10:18 POH - Gas Pigtail Modifications
#8 - 4:20 POH - Install accoustic test probes for tuning
#8 - 5:06 POH - Combustor Inspection
#8 - 8:11 POH - Gas Pigtail Modifications
#8 - 9:12 POH - Gas Pigtail Modifications

ML&P AVAILABILITY REPORT

April 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	720:00	02:58	100.00	0.00	1
Unit #2	00:00	00:00	720:00	02:51	100.00	0.00	1
Unit #3	720:00	00:00	720:00	00:00	0.00	100.00	0
Unit #4	00:00	00:00	720:00	02:21	100.00	0.00	1
PLANT 1	720:00	00:00	2880:00	08:10	75.00	98.88	3

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	720:00	720:00	00:00	0.00	0.00	0
Unit #6	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #7	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #8	00:40	00:00	720:00	719:20	99.91	0.09	1
Unit #5B	00:00	720:00	720:00	00:00	0.00	0.00	0
Unit #7B	00:00	00:00	720:00	720:00	100.00	0.00	0
PLANT 2	00:40	1440:00	4320:00	2879:20	66.65	0.02	1

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	720:40	1440:00	7200:00	2887:30	69.99	19.97	4
PL 2 GT	00:40	720:00	2160:00	1439:20	66.64	0.05	
PL 1&2 GT	720:40	720:00	5040:00	1447:30	71.42	33.24	

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AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#3 - 720:00 FOH - Unit #3 Turbine Change Out

#5 - 720:00 POH - Unit 5 Hot Gas Path Inspection

#8 - 0:40 FOH - High Exhaust Temperature Spread

5B - 720:00 POH - Unit 5 Boiler outage due to Unit 5 Turbine Hot Gas Path Inspection

ML&P AVAILABILITY REPORT

August 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	744:00	05:25	100.00	0.00	1
Unit #2	00:00	00:00	744:00	05:27	100.00	0.00	1
Unit #3	00:00	00:00	744:00	326:49	100.00	0.00	22
Unit #4	00:00	00:00	744:00	46:17	100.00	0.00	8
PLANT 1	00:00	00:00	2976:00	383:58	100.00	0.00	32

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #6	00:00	744:00	744:00	00:00	0.00	0.00	0
Unit #7	00:00	720:00	744:00	01:27	3.23	0.00	3
Unit #8	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #5B	00:00	744:00	744:00	00:00	0.00	0.00	0
Unit #7B	00:00	744:00	744:00	00:00	0.00	0.00	0
PLANT 2	00:00	2952:00	4464:00	1489:27	33.87	0.00	3

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	00:00	2952:00	7440:00	1873:25	60.32	0.00	35
PL 2 GT	00:00	720:00	2232:00	1489:27	67.74	0.00	
PL 1&2 GT	00:00	720:00	5208:00	1873:25	86.18	0.00	

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SH = SERVICE HOURS (The total number of hours a unit was electrically connected to the system)

AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#6 - 744:00 POH - Unit 6 Bearing Inspection
#7 - 708:52 FOH - Unit 7 Major Overhaul
5B - 744:00 POH - Unit 5 Boiler Outage Due to Unit 6 Bearing Inspection
7B - 744:00 POH - Unit 7 Boiler Outage Due to Unit 6 Bearing Inspection

ML&P AVAILABILITY REPORT

December 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	416:56	04:22	744:00	02:39	43.37	99.37	3
Unit #2	327:00	190:46	744:00	02:16	30.41	99.31	1
Unit #3	00:39	00:00	744:00	14:02	99.91	4.43	3
Unit #4	04:50	00:00	744:00	02:29	99.35	66.06	2
PLANT 1	749:25	195:08	2976:00	21:26	68.26	97.22	9

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #6	04:46	00:00	744:00	739:14	99.36	0.64	1
Unit #7	05:28	00:00	744:00	737:53	99.27	0.74	1
Unit #8	00:00	01:50	744:00	06:11	99.75	0.00	1
Unit #5B	00:00	00:00	744:00	739:14	100.00	0.00	1
Unit #7B	00:00	00:00	744:00	729:23	100.00	0.00	2
PLANT 2	10:14	01:50	4464:00	3695:55	99.73	0.28	6

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	759:39	196:58	7440:00	3717:21	87.14	16.97	15
PL 2 GT	05:28	01:50	2232:00	1488:04	99.67	0.37	
PL 1&2 GT	754:53	196:58	5208:00	1509:30	81.72	33.34	

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PH = PERIOD HOURS (number of hours in the calendar period being considered)

SH = SERVICE HOURS (The total number of hours a unit was electrically connected to the system)

AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#1 - 0:01 FOH - Mixed Fuel Operation (63% Gas) - High Combustor Temperature Spread
#1 - 18:59 FOH - Air Regulator Repair
#1 - 216:49 FOH - Fuel Valve Inspection
#1 - 23:11 FOH - Fuel Oil System Maintenance
#1 - 4:22 POH - Cleaning and Calibration of Fuel Oil Throttle Valve
#1 - 5:57 FOH - Electrical Maintenance - HMI Screen
#1 - 5:57 FOH - Transformer Inspection
#1 - 68:13 FOH - Fuel Oil Operational Issues
#1 - 77:49 FOH - Class 1 Combustion Inspection
#2 - 190:46 POH - Class 1 Combustion Inspection
#2 - 327:00 FOH - Starting Motor Inspection
#3 - 0:39 FOH - Frozen Air line to Discharge Valve Failure to Shut
#4 - 4:50 FOH - Exciter Limit high/low alarm- also had Gen. Protection alarm 3430+3420. Gen. Bus Phase A was 13.3Kva B was 6.4Kva
#6 - 4:46 FOH - BFP 6A & 6C tripped and would not reset; low drum water level; 5B damper runback; Unit 6 generator breaker opened by
#7 - 5:28 FOH - High Exhaust Temperature Spread Trip While On Fuel Oil
#8 - 1:50 POH - Turbine Compartment Spray Shield Installation

ML&P AVAILABILITY REPORT

July 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	744:00	02:35	100.00	0.00	1
Unit #2	00:00	00:00	744:00	02:48	100.00	0.00	1
Unit #3	05:33	00:00	744:00	291:12	99.25	1.87	16
Unit #4	00:00	25:08	744:00	111:41	96.62	0.00	12
PLANT 1	05:33	25:08	2976:00	408:16	98.97	1.34	30

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	744:00	730:21	100.00	0.00	1
Unit #6	03:56	176:51	744:00	541:04	75.70	0.72	1
Unit #7	00:01	543:08	744:00	168:57	27.00	0.01	1
Unit #8	00:00	111:00	744:00	640:34	85.08	0.00	3
Unit #5B	00:00	176:51	744:00	417:03	76.23	0.00	2
Unit #7B	00:00	176:51	744:00	166:58	76.23	0.00	0
PLANT 2	03:57	1184:41	4464:00	2664:57	73.37	0.15	8

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	09:30	1209:49	7440:00	3073:13	83.61	0.31	38
PL 2 GT	00:01	654:08	2232:00	1539:52	70.69	0.00	
PL 1&2 GT	05:34	679:16	5208:00	1948:08	86.85	0.28	

KEY: FOH = UNPLANNED (forced outage hours)

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PH = PERIOD HOURS (number of hours in the calendar period being considered)

SH = SERVICE HOURS (The total number of hours a unit was electrically connected to the system)

AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#3 - 5:33 FOH - BOP Computer Trip/Gas Compressor Emergency Trip
#4 - 25:08 POH - Unit #4 Generator Louver Repair
#6 - 176:51 POH - Unit 6 Bearing Inspection
#6 - 3:56 FOH - Simplex Grinnell Fire System Unit 6 Trip
#7 - 0:01 FOH - Overspeed Trip Test Prior to Scheduled Outage
#7 - 543:08 POH - Unit 7 Major Overhaul
#8 - 111:00 POH - Control System Problems per Rocky Roos
5B - 176:51 POH - Unit 5 Boiler Outage Due to Unit 6 Bearing Inspection
7B - 176:51 POH - Unit 7 Boiler Outage Due to Unit 6 Bearing Inspection

ML&P AVAILABILITY REPORT

June 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	720:00	01:59	100.00	0.00	1
Unit #2	00:00	00:00	720:00	00:33	100.00	0.00	1
Unit #3	00:00	01:36	720:00	152:16	99.78	0.00	16
Unit #4	00:00	00:00	720:00	02:25	100.00	0.00	1
PLANT 1	00:00	01:36	2880:00	157:13	99.94	0.00	19

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:08	03:04	720:00	676:25	99.56	0.02	3
Unit #6	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #7	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #8	32:45	137:16	720:00	65:48	76.39	33.23	8
Unit #5B	00:00	00:00	720:00	658:33	100.00	0.00	5
Unit #7B	00:00	00:00	720:00	718:59	100.00	0.00	1
PLANT 2	32:53	140:20	4320:00	3559:45	95.99	0.92	17

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	32:53	141:56	7200:00	3716:58	97.57	0.88	36
PL 2 GT	32:53	140:20	2160:00	1462:13	91.98	2.20	
PL 1&2 GT	32:53	141:56	5040:00	1619:26	96.53	1.99	

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AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#3 - 1:36 POH - Clearance #12-024, change out HP recoup orifice
#5 - 0:01 FOH - U5 63-9DS Fuel Pump Inlet Pressure Low - U5 Shutdown_015
#5 - 0:07 FOH - U5 63-9DS Fuel Pump Inlet Pressure Low - U5 Shutdown_015
#5 - 3:04 POH - Unit 5 Fuel Oil PRV Replacement
#8 - 1:13 POH - Repair Acoustic Probes for Unit Tuning
#8 - 126:22 POH - Out Of Service as per Rocky Roos
#8 - 2:29 POH - Secondary fuel nozzles #3 and #8 exchange.
#8 - 32:45 FOH - High Exhaust Temperature Spread
#8 - 7:12 POH - Combustion Secondary Fuel Nozzle Change Out

ML&P AVAILABILITY REPORT

March 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	744:00	00:00	100.00	0.00	0
Unit #2	00:00	00:00	744:00	02:20	100.00	0.00	1
Unit #3	305:00	335:05	744:00	24:57	13.97	92.44	2
Unit #4	00:00	00:00	744:00	22:15	100.00	0.00	3
PLANT 1	305:00	335:05	2976:00	49:32	78.49	86.03	6

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	86:02	744:00	614:31	88.44	0.00	1
Unit #6	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #7	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #8	00:00	00:00	744:00	145:14	100.00	0.00	3
Unit #5B	00:00	88:02	744:00	486:02	88.17	0.00	0
Unit #7B	00:00	00:00	744:00	744:00	100.00	0.00	0
PLANT 2	00:00	174:04	4464:00	3477:47	96.10	0.00	4

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	305:00	509:09	7440:00	3527:19	89.06	7.96	10
PL 2 GT	00:00	86:02	2232:00	1503:45	96.15	0.00	
PL 1&2 GT	305:00	421:07	5208:00	1553:17	86.06	16.41	

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AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#3 - 305:00 FOH - Unit #3 Turbne Damage - Turbine sent to G.E. depot for repair

#3 - 335:05 POH - Unit 3/Gas Compressor Annual Inspection

#5 - 86:02 POH - Unit 5 Hot Gas Path Inspection

5B - 88:02 POH - Unit 5 Boiler Outage due to Turbine 5 Hot Gas Path Inspection

ML&P AVAILABILITY REPORT

May 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	03:01	744:00	02:24	99.59	0.00	1
Unit #2	00:00	02:18	744:00	01:17	99.69	0.00	1
Unit #3	708:17	00:00	744:00	03:05	4.80	99.57	3
Unit #4	00:01	00:00	744:00	66:30	100.00	0.03	8
PLANT 1	708:18	05:19	2976:00	73:16	76.02	90.63	13

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	10:43	744:00	519:16	98.56	0.00	2
Unit #6	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #7	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #8	00:00	00:00	744:00	232:26	100.00	0.00	0
Unit #5B	00:00	58:46	744:00	511:42	92.10	0.00	1
Unit #7B	00:00	00:00	744:00	744:00	100.00	0.00	0
PLANT 2	00:00	69:29	4464:00	3495:24	98.44	0.00	3

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	708:18	74:48	7440:00	3568:40	89.47	16.56	16
PL 2 GT	00:00	10:43	2232:00	1495:42	99.52	0.00	
PL 1&2 GT	708:18	16:02	5208:00	1568:58	86.09	31.10	

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AF = AVAILABILITY FACTOR % (AH/PH)*100 (PH-FOH-POH)/(PH)*100

FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#1 - 3:01 POH - Replacement of Air Intake Filters
#2 - 2:18 POH - Replacement of Air Intake Filters
#3 - 1:51 FOH - Turbine Lube Oil "A" Sump Scavenger Temp Sensor Failure
#3 - 706:26 FOH - Unit #3 Turbine Replacement
#4 - 0:01 FOH - Fuel Oil Pump Breaker Trip
#5 - 10:43 POH - Unit 5 Hot Gas Path Inspection
5B - 58:46 POH - Outage Due to Unit 5 Turbine Hot Gas Path Inspection

ML&P AVAILABILITY REPORT

November 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	00:00	00:00	720:00	02:36	100.00	0.00	1
Unit #2	00:01	00:00	720:00	02:20	100.00	0.71	1
Unit #3	00:00	49:30	720:00	62:07	93.13	0.00	6
Unit #4	171:28	00:00	720:00	02:19	76.19	98.67	1
PLANT 1	171:29	49:30	2880:00	69:22	92.33	71.20	9

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #6	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #7	05:26	00:00	720:00	704:49	99.25	0.76	1
Unit #8	05:22	67:42	720:00	21:51	89.85	19.72	2
Unit #5B	00:00	00:00	720:00	720:00	100.00	0.00	0
Unit #7B	00:00	00:00	720:00	702:02	100.00	0.00	1
PLANT 2	10:48	67:42	4320:00	3588:42	98.18	0.30	4

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	182:17	117:12	7200:00	3658:04	95.84	4.75	13
PL 2 GT	10:48	67:42	2160:00	1446:40	96.37	0.74	
PL 1&2 GT	182:17	117:12	5040:00	1516:02	94.06	10.73	

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FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#2 - 0:01 FOH - Vibration
#3 - 34:21 POH - Unit 3 Annual Maintenance
#3 - 9:15 POH - Unit 3 Annual Maintenance
#4 - 132:38 FOH - Generator Testing
#4 - 16:50 FOH - Exciter Cover Installation
#4 - 22:00 FOH - Battery Problems
#7 - 5:26 FOH - Generator Hydrogen Seal Oil Pressure Regulator Replacement
#8 - 24:26 POH - Aux Skid Lube Oil Leaks
#8 - 27:22 POH - Aux Skid Lube Oil Leaks
#8 - 5:22 FOH - Turning Gear Clutch Trouble

ML&P AVAILABILITY REPORT

October 2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	11:50	00:00	744:00	02:40	98.41	81.61	1
Unit #2	20:38	02:50	744:00	00:24	96.85	98.10	1
Unit #3	00:00	00:00	744:00	66:41	100.00	0.00	5
Unit #4	00:00	256:53	744:00	02:26	65.47	0.00	1
PLANT 1	32:28	259:43	2976:00	72:11	90.18	31.02	8

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #6	00:00	56:22	744:00	687:38	92.42	0.00	1
Unit #7	00:00	00:00	744:00	744:00	100.00	0.00	0
Unit #8	00:00	62:26	744:00	00:00	91.61	0.00	0
Unit #5B	00:00	56:23	744:00	687:22	92.42	0.00	2
Unit #7B	00:00	59:05	744:00	684:55	92.06	0.00	1
PLANT 2	00:00	234:16	4464:00	3547:55	94.75	0.00	4

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	32:28	493:59	7440:00	3620:06	92.92	0.89	12
PL 2 GT	00:00	62:26	2232:00	1488:00	97.20	0.00	
PL 1&2 GT	32:28	322:09	5208:00	1560:11	93.19	2.04	

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FOR = FORCED OUTAGE RATE % (FOH/(FOH+SH))*100

NOTES:

#1 - 11:50 FOH - Loss of Control Air
#2 - 2:50 POH - Starting Motor Breaker Maintenance
#2 - 20:38 FOH - High Compressor Discharge Temperature
#4 - 1:35 POH - Electrical Maintenance
#4 - 224:35 POH - Class 2 Combustion Inspection
#4 - 4:32 POH - Preventative Maintenance - Electrical
#4 - 6:11 POH - Preventative Maintenance - Electrical
#4 - 6:16 POH - Preventative Maintenance - Electrical
#4 - 6:38 POH - Electrical Relay Maintenance
#4 - 7:06 POH - Electrical Breaker Maintenance
#6 - 56:22 POH - Inspect Stainless Steel Strainer in Unit #6 Gimpel Valve
#8 - 46:55 POH - Inspection/repair of transformer blast wall cracks and #5 Boiler flashtank vent piping insulation
5B - 56:23 POH - Inspect Stainless Steel Strainer in Unit #6 Gimpel Valve
7B - 59:05 POH - Inspect Stainless Steel Strainer in Unit #6 Gimpel Valve

ML&P AVAILABILITY REPORT

2012

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #1	428:46	07:23	8784:00	28:49	95.03	93.70	13
Unit #2	347:39	195:54	8784:00	24:18	93.81	93.47	12
Unit #3	1786:28	391:31	8784:00	1890:54	75.21	48.58	140
Unit #4	176:25	299:23	8784:00	587:36	94.58	23.09	68
PLANT 1	2739:18	894:11	35136:00	2531:37	89.66	51.97	233

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
Unit #5	02:46	819:49	8784:00	7573:51	90.64	0.04	12
Unit #6	115:57	1089:23	8784:00	7396:41	86.28	1.54	7
Unit #7	112:52	1263:08	8784:00	7154:59	84.34	1.55	13
Unit #8	38:47	459:52	8784:00	2936:33	94.32	1.30	26
Unit #5B	121:28	1984:37	8784:00	5898:34	76.02	2.02	18
Unit #7B	248:57	1121:22	8784:00	6872:21	84.40	3.50	10
PLANT 2	640:47	6738:11	52704:00	37832:59	86.00	1.67	86

	F.O.H.	P.O.H.	P.H.	S.H.	A.F.%	F.O.R.%	STARTS
PLANT 1&2	3380:05	7632:22	87840:00	40364:36	87.46	7.73	319
PL 2 GT	154:25	2542:49	26352:00	17665:23	89.76	0.87	
PL 1&2 GT	2893:43	3437:00	61488:00	20197:00	89.70	12.53	

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