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February 27, 2014

PUBLIC UTILITIES
COMMISSION

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2011-0206
Reliability Standards Working Group
Monthly Report

Pursuant to Ordering Paragraph 3 of the Commission's Order No. 30371, filed on May 4, 2012, in the above subject proceeding, enclosed as Exhibit A is the Hawaiian Electric Companies'¹ monthly report for January 2014 on (1) system frequency control performance during month; (2) significant system events during month; and (3) curtailment of non-dispatchable renewable resources.

In addition, an electronic copy of each report is also included with this filing. These files are voluminous, and therefore, the Company is providing a compact disc ("CD") containing the electronic files to both the Commission and the Consumer Advocate. Copies of the CD will be available to any Party to this proceeding. Interested Parties should email Marisa Chun at marisa.chun@heco.com to request a copy.

If you have any questions on this matter, please contact Marisa Chun at (808) 543-4723.

Sincerely,

Daniel G. Brown
Manager
Non-Rate Proceedings

Enclosure

cc: Service List

¹ Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc., and Maui Electric Company, Limited are collectively referred to as the "Hawaiian Electric Companies" or "Companies".

SERVICE LIST
(Docket No. 2011-0206)

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The Commission's Order No. 30371 (Docket No 2011-0206 – Relating To Various Matters in RSWG Process), filed May 4, 2012, ordered the following information for each island grid:

- (1) System frequency control performance during month:
 - a) Frequency duration plot based on the highest resolution SCADA data available for the month detailing how many seconds each power system operated at frequencies above 60 hertz and at frequencies below 60 Hz.
 - b) Tabulation of the number, magnitude and duration of frequency excursions (high and low) outside normal frequency control range (59.95 to 60.05 Hz).

The following provides information with respect to items 1a) through 1b) – (all statements are current as of the month ending January 31, 2014):

1a) Frequency duration plot based on the highest resolution SCADA data available for the month detailing how many seconds each power system operated at frequencies above 60 hertz and at frequencies below 60 Hz:

The frequency duration plots for Hawaiian Electric, Maui Electric (Maui Division) and Hawai'i Electric Light based on two-second data are provided in Attachment 1, and the enclosed Excel files. Refer to the electronic files for the individual data points because the information is voluminous and does not translate well to a hard copy.

1b) Tabulation of the number, magnitude and duration of frequency excursions (high and low) outside normal frequency control range (59.95 to 60.05 Hz):

Tabulation of the number, magnitude and duration of frequency excursions outside of the frequency range of 59.95 Hz to 60.05 Hz for Hawaiian Electric, Maui Electric (Maui Division) and Hawai'i Electric Light are provided in Attachment 2, and the enclosed Excel files. Refer to the electronic files for the individual data points because the information is voluminous and does not translate well to a hard copy.

- (2) Significant system events during month:
 - a) Tabulation of contingency reserve activations including date and time, MW magnitude, duration, and triggering event.
 - b) Tabulation of under frequency load shed activations including date and time, triggering frequency, MW magnitude, duration, and triggering event.
 - c) Tabulation of demand response activations for system events, including date and time, MW magnitude, duration, and triggering event. (excluding demand response utilization for unit commitment deferral or system operations economics.)

The following provides information with respect to items 2a) through 2c) – (all statements are current as of the month ending January 31, 2014):

2a) Tabulation of contingency reserve activations including date and time, MW magnitude, duration, and triggering event:

Hawaiian Electric did not have any contingency reserve activations for the month of January. Maui Electric and Hawai'i Electric Light do not operate with contingency reserve requirements. Therefore, Attachment 3 is not being provided for this reporting period.

2b) Tabulation of under frequency load shed activations including date and time, triggering frequency, MW magnitude, duration, and triggering event:

The tabulation of under frequency load shed events is provided in Attachment 4. Hawaiian Electric and Hawai'i Electric Light did not have any under frequency load shed events for the month of January.

2c) Tabulation of demand response activations for system events, including date and time, MW magnitude, duration, and triggering event, (excluding demand response utilization for unit commitment deferral or system operations economics.)

Hawaiian Electric's demand response activations for system events is provided in Attachment 5. Hawai'i Electric Light currently does not have demand response program. Maui Electric has implemented the Fast Demand Response pilot program on a limited basis. Hawai'i Electric Light plans to use the findings of Maui Electric's pilot program to help in the evaluation and development of future demand response programs. Maui Electric executes a weekly testing protocol which measures customer participation. This program is not currently used in response to actual system events.

- (3) Curtailment of non-dispatchable renewable resources:
- (a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment.
 - (b) Total MWh of non-dispatchable renewable resources curtailed for the month.

The following provides information with respect to items 3a) through 3b) – (all statements are current as of the month ending January 31, 2014):

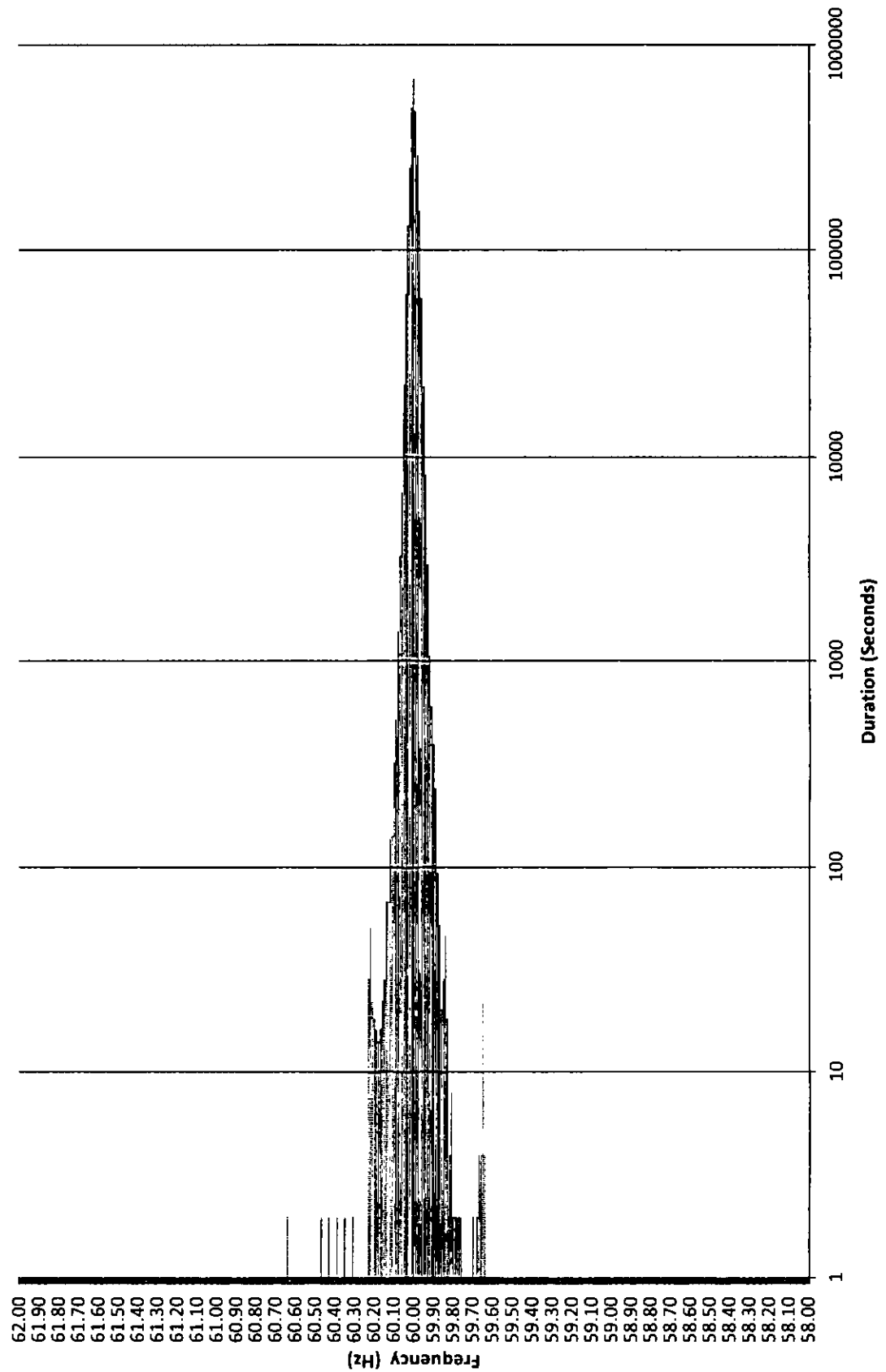
3a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment:

The tabulation of each curtailment event for each resource is provided in Attachment 6.

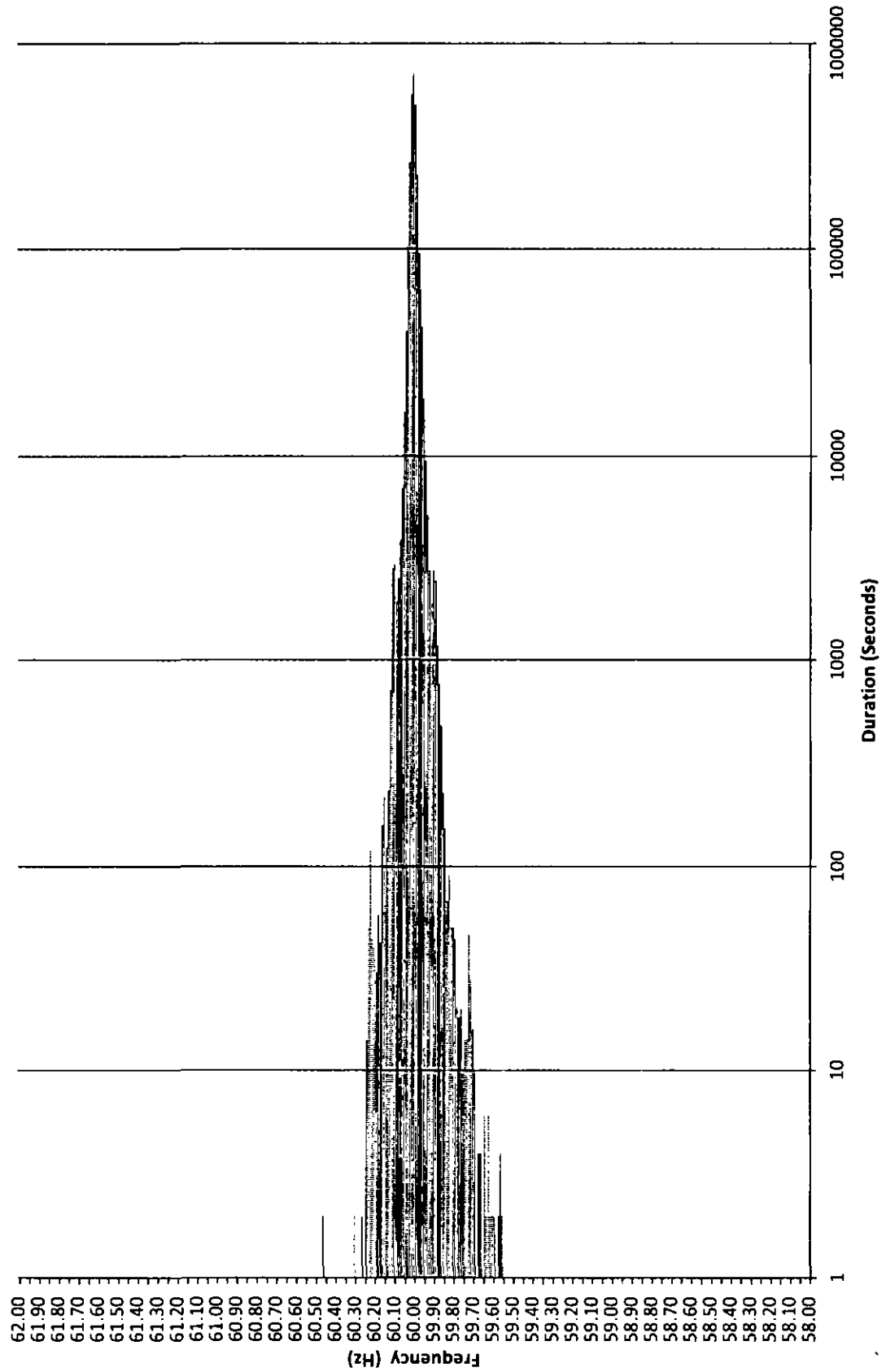
3b) Total MWh of non-dispatchable renewable resources curtailed for the month:

Curtailed MWh from non-dispatchable resources are difficult to determine due to the variability of the resource during curtailment periods. In some cases, the curtailed MWh estimates were provided by the IPPs under curtailment. Hawai'i Electric Light is not providing an estimate of curtailed MWh, as this information is not provided to Hawai'i Electric Light from the IPP. The Hawaiian Electric Companies do not make any representations as to the accuracy of the curtailed MWh. The estimated MWh of non-dispatchable resources curtailed for the month are provided in Attachment 6, corresponding to each curtailment event.

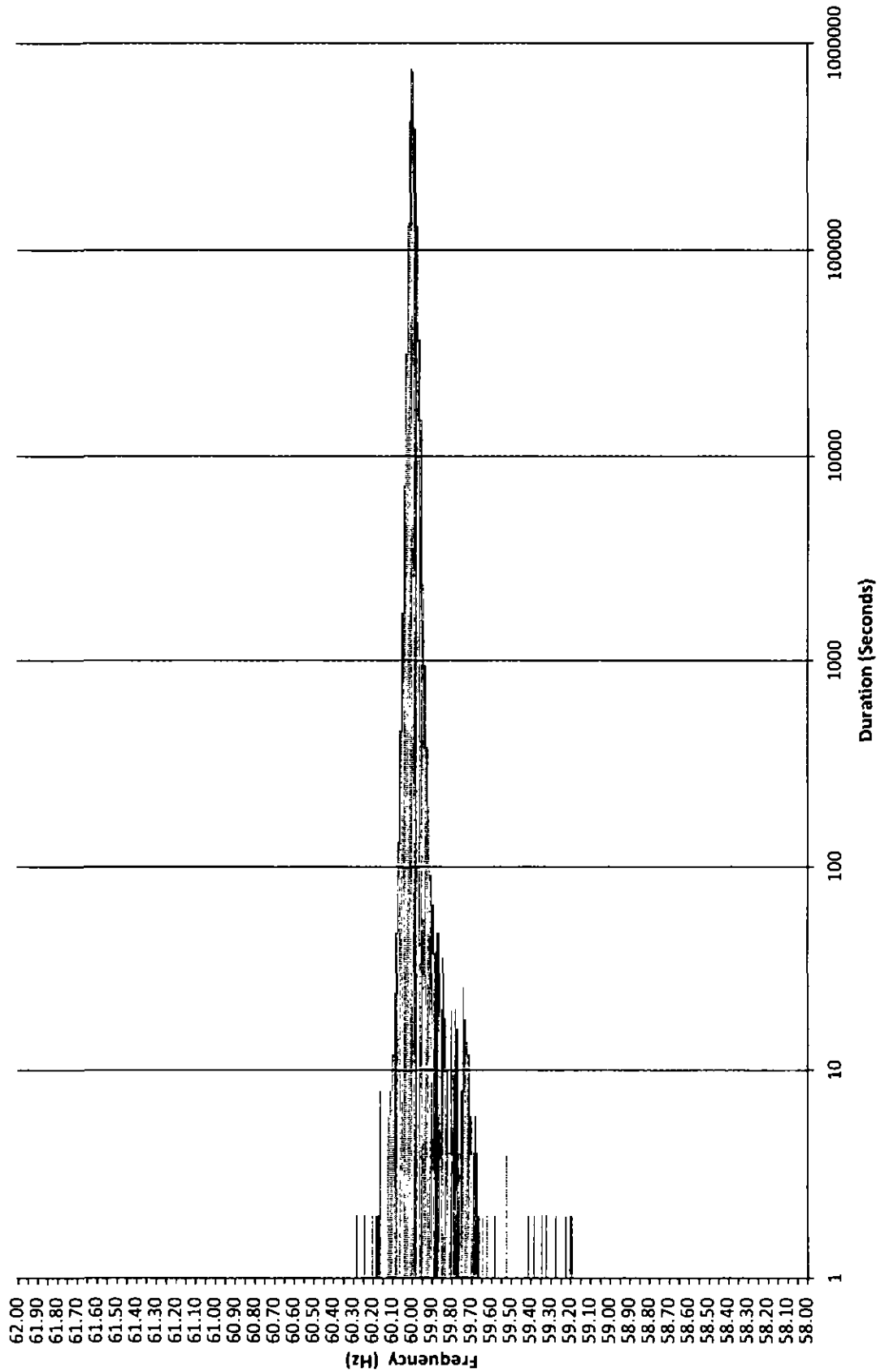
Frequency Distribution Plot - Hawaiian Electric January 2014



Maui Electric Frequency Distribution Plot - Maui January 2014



Frequency Distribution Plot - Hawai'i Electric Light January 2014



Hawaiian Electric Frequency Excursion Statistics January 2014		
Data Rounded to the nearest	<59.95 Hz	>60.05 Hz
Number of Excursions	864	871
Maximum Duration (sec)	712	798
Maximum Deviation (Hz)	59.638	60.639
Total Duration of Excursions (sec)	21802	20678

Maui Electric Frequency Excursion Statistics January 2014		
	<59.95 Hz	>60.05 Hz
Number of Excursions	2819	1981
Maximum Duration (sec)	766	624
Maximum Deviation (Hz)	59.546	60.4582
Total Duration of Excursions (sec)	35730	28396

Hawai'i Electric Light Frequency Excursion Statistics January 2014		
	<59.95 Hz	>60.05 Hz
Number of Excursions	1788	265
Maximum Duration (sec)	186	28
Maximum Deviation (Hz)	59.188	60.282
Total Duration of Excursions (sec)	11644	1224

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Hawaiian Electric Curtailment Report January 2014

Start Date/Time	Curtailment Set Point	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released	Estimated MWh of curtailed energy during event (1)	IPP	Reason for Curtailment
01/06/14 07:36	0.0	4.00	01/06/14 07:55	0	*	KWF	Fault indicator antennae pole installation on Koolau-Kahuku 46kV line
01/06/14 07:36	0.0	1.00	01/06/14 07:56	0	*	Makai	Fault indicator antennae pole installation on Koolau-Kahuku 46kV line
01/06/14 15:59	0.0	4.50	01/06/14 16:40	0	*	KWF	Fault indicator antennae pole installation on Koolau-Kahuku 46kV line
01/06/14 16:00	0.0	7.00	01/06/14 16:40	0	*	Makai	Fault indicator antennae pole installation on Koolau-Kahuku 46kV line
01/07/14 07:11	0.0	5.00	01/07/14 08:39	0	*	KWF	Switch repairs at Waialua Substation, Structure repairs on Wahiawa-Waialua 1 46kV line
01/07/14 07:11	0.0	5.00	01/07/14 08:40	0	*	Mauka	Switch repairs at Waialua Substation, Structure repairs on Wahiawa-Waialua 1 46kV line
01/07/14 07:11	0.0	16.00	01/07/14 18:43	0	*	Mauka	Switch repairs at Waialua Substation, Structure repairs on Wahiawa-Waialua 1 46kV line
01/07/14 17:28	0.0	4.00	01/07/14 18:17	0	*	KWF	Switch repairs at Waialua Substation, Structure repairs on Wahiawa-Waialua 1 46kV line
01/07/14 17:29	0.0	5.00	01/07/14 18:17	0	*	Makai	Switch repairs at Waialua Substation, Structure repairs on Wahiawa-Waialua 1 46kV line
01/08/14 07:21	0.0	0.00	01/08/14 08:20	0	*	KLS2	Switch repairs at Barbers Pt Tank Farm Substation
01/08/14 14:45	0.0	3.60	01/08/14 16:06	0	*	KLS2	Switch repairs at Barbers Pt Tank Farm Substation
01/15/14 06:43	0.0	0.00	01/15/14 08:02	0	*	KREP	Pole replacement on Waiuu-Barbers Pt 46kV line
01/15/14 14:26	0.0	3.20	01/15/14 15:26	0	*	KREP	Pole replacement on Waiuu-Barbers Pt 46kV line
01/18/14 06:40	0.0	0.00	01/18/14 17:14	0	*	KREP	Structure replacement on Kahe-CEIP 1 138kV line
01/21/14 06:34	0.0	0.00	01/21/14 18:28	0	*	KWF	Pole replacement on Wahiawa-Waialua 2 46kV line
01/21/14 06:34	0.0	8.00	01/21/14 07:13	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/21/14 06:36	0.0	5.00	01/21/14 18:30	0	*	Makai	Pole replacement on Wahiawa-Waialua 2 46kV line
01/21/14 18:01	0.0	20.50	01/21/14 18:29	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/22/14 06:40	0.0	5.10	01/22/14 17:59	0	*	KWF	Pole replacement on Wahiawa-Waialua 2 46kV line
01/22/14 06:41	0.0	10.00	01/22/14 08:01	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/22/14 06:42	0.0	12.70	01/22/14 18:03	0	*	Makai	Pole replacement on Wahiawa-Waialua 2 46kV line
01/22/14 17:02	0.0	22.70	01/22/14 18:00	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/23/14 06:28	0.0	0.00	01/23/14 16:14	0	*	KWF	Pole replacement on Wahiawa-Waialua 2 46kV line
01/23/14 06:30	0.0	0.00	01/23/14 16:15	0	*	Makai	Pole replacement on Wahiawa-Waialua 2 46kV line
01/23/14 06:30	0.0	0.00	01/23/14 07:17	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/23/14 15:26	0.0	2.00	01/23/14 16:15	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line
01/24/14 06:23	0.0	0.00	01/24/14 13:02	0	*	KLS2	Switching error
01/24/14 06:28	0.0	0.00	01/24/14 19:33	0	*	Makai	Pole replacement on Wahiawa-Waialua 2 46kV line, Guy removal on Waialua-Kawailoa-Makai 46kV line
01/24/14 06:29	0.0	2.50	01/24/14 19:21	0	*	KWF	Pole replacement on Wahiawa-Waialua 2 46kV line, Guy removal on Waialua-Kawailoa-Makai 46kV line
01/24/14 06:29	0.0	1.00	01/24/14 08:43	0	*	Mauka	Pole replacement on Wahiawa-Waialua 2 46kV line, Guy removal on Waialua-Kawailoa-Makai 46kV line
01/24/14 06:47	0.0	0.00	01/24/14 18:43	0	*	KREP	Structure replacement on Kahe-CEIP 2 138kV line
01/29/14 00:54	0.0	10.10	01/29/14 04:40	0	*	Makai	Curtailed for excess energy
01/29/14 01:04	20.0	40.20	01/29/14 02:00	18.1	*	Mauka	Curtailed for excess energy
01/29/14 02:00	20.0	38.30	01/29/14 03:28	9.97	*	Mauka	Curtailed for excess energy
01/29/14 03:28	20.0	9.97	01/29/14 04:25	20.12	*	Mauka	Curtailed for excess energy

KLS2 = Kalaheo Solar 2 PV Farm
 KREP = Kalaheo Renewable Energy Park
 KWF = Kahuku Wind Farm
 Makai = Kawailoa Makai Wind Farm
 Mauka = Kawailoa Mauka Wind Farm

(1) The estimated MWh of energy curtailed during the event is supplied by Kahuku Wind Farm and/or Kawailoa Wind Farm, and Hawaiian Electric does not make any representations as to its accuracy
 * Data has not been provided by IPP

RSG Maui Curtailment Report January 2014

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reasons for Curtailment
1/1/2014 0 12	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 0 31	0 03	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 2 52	0 04	KWPII	0 166	9 127	AGC MAVG - calculated
1/1/2014 3 00	0 16	KWPII	0 497	11 361	AGC MAVG - calculated
1/1/2014 11 28	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/1/2014 11 51	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/1/2014 12 21	0 01	KWPI	0 002	0 096	AGC MAVG - calculated
1/1/2014 12 24	0 01	KWPI	0 001	0 032	AGC MAVG - calculated
1/1/2014 13 58	0 01	KWPI	0 000	0 016	AGC MAVG - calculated
1/1/2014 13 58	0 01	AWE	0 005	0 300	AGC MAVG - calculated
1/1/2014 15 03	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 15 13	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 15 46	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 16 41	0 01	KWPI	0 001	0 064	AGC MAVG - calculated
1/1/2014 16 45	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/1/2014 20 06	0 01	KWPI	0 000	0 016	AGC MAVG - calculated
1/2/2014 5 56	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/2/2014 8 06	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/2/2014 9 52	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/2/2014 11 01	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/2/2014 12 01	0 01	KWPII	0 007	15 753	AGC MAVG - calculated
1/2/2014 12 10	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/2/2014 12 31	0 03	KWPII	0 048	16 494	AGC MAVG - calculated
1/2/2014 12 37	0 01	KWPII	0 004	17 487	AGC MAVG - calculated
1/2/2014 12 39	0 01	KWPII	0 038	17 868	AGC MAVG - calculated
1/2/2014 21:14	0 01	KWPII	0 007	19 331	AGC MAVG - calculated
1/2/2014 23 15	2 20	KWPI	23 849	20 608	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/3/2014 1 22	0 01	AWE	0 003	4 400	AGC MAVG - entered - Excess Energy
1/3/2014 1 39	0 02	KWPII	0 126	15 187	AGC MAVG - calculated
1/3/2014 1 51	0 14	KWPII	1 069	16 181	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - entered - Excess Energy
1/3/2014 2 08	0 06	KWPII	0 536	14 587	AGC MAVG - calculated and AGC MAVG - entered - Excess Energy
1/3/2014 2 15	2 22	KWPII	30 648	20 604	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/3/2014 2 30	2 01	AWE	11 990	20 000	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/3/2014 2 34	0 47	SA			AGC MAVG - entered - Excess Energy
1/3/2014 2 34	0 17	MH			AGC MAVG - entered - Excess Energy
1/3/2014 2 37	0 03	KWPI	0 091	25 584	AGC MAVG - entered - Excess Energy
1/3/2014 2 54	0 22	MH			AGC MAVG - entered - Excess Energy
1/3/2014 2 57	0 06	KWPI	0 134	25 632	AGC MAVG - entered - Excess Energy
1/3/2014 4 32	0 01	AWE	0 054	17 500	AGC MAVG - calculated
1/3/2014 4 51	0 57	KWPII	14 358	19 856	AGC MAVG - calculated
1/3/2014 4 54	0 03	AWE	0 015	19 103	AGC MAVG - calculated
1/3/2014 4 58	0 48	AWE	5 991	21 509	AGC MAVG - calculated
1/3/2014 5 49	0 01	KWPII	0 007	4 447	AGC MAVG - calculated
1/3/2014 5 52	0 01	KWPII	0 011	6 676	AGC MAVG - calculated
1/3/2014 7 46	0 01	KWPI	0 000	0 016	AGC MAVG - calculated
1/3/2014 8 32	0 01	KWPII	0 000	0 021	AGC MAVG - calculated
1/3/2014 11 44	0 01	AWE	0 006	0 400	AGC MAVG - calculated
1/3/2014 12 02	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/3/2014 17 24	0 01	KWPI	0 001	0 048	AGC MAVG - calculated
1/3/2014 17 33	0 01	KWPI	0 001	0 064	AGC MAVG - calculated
1/4/2014 1 30	0 04	KWPII	0 026	9 140	AGC MAVG - entered - Maintaining Regulating Reserves
1/4/2014 1 35	0 01	KWPII	0 006	9 215	AGC MAVG - entered - Maintaining Regulating Reserves
1/4/2014 1 37	0 03	KWPII	0 087	10 305	AGC MAVG - entered - Maintaining Regulating Reserves
1/4/2014 2 02	0 01	KWPII	0 013	6 591	AGC MAVG - entered - Maintaining Regulating Reserves
1/4/2014 2 06	3 40	KWPII	62 367	20 682	AGC MAVG - entered - Maintaining Regulating Reserves
1/4/2014 2 39	3 00	SA			AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/4/2014 2 39	2 59	MH			AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/4/2014 2 43	2 47	KWPI	18 129	29 472	AGC MAVG - entered - Excess Energy
1/4/2014 3 11	0 03	KWPI	0 119	29 584	AGC MAVG - entered - Excess Energy
1/4/2014 5 38	0 01	KWPI	0 026	28 608	AGC MAVG - entered - Excess Energy
1/4/2014 5 52	1 24	KWPII	8 363	20 053	AGC MAVG - entered - Excess Energy
1/4/2014 7 18	0 01	KWPII	0 007	19 565	AGC MAVG - calculated
1/4/2014 9 47	0 01	KWPII	0 001	20 669	AGC MAVG - calculated
1/4/2014 10 30	0 01	KWPII	0 001	20 669	AGC MAVG - calculated
1/4/2014 10 31	0 01	AWE	0 005	3 300	AGC MAVG - calculated
1/4/2014 10 38	0 16	KWPII	0 656	20 702	AGC MAVG - calculated
1/4/2014 11 03	0 01	KWPII	0 016	19 999	AGC MAVG - calculated
1/4/2014 11 07	0 02	KWPII	0 015	20 129	AGC MAVG - calculated
1/4/2014 11 11	0 04	KWPII	0 018	20 596	AGC MAVG - calculated
1/4/2014 11 16	0 02	KWPII	0 014	20 687	AGC MAVG - calculated
1/4/2014 11 21	0 01	KWPII	0 000	20 696	AGC MAVG - calculated
1/4/2014 11 28	1:13	KWPII	8 056	20 708	AGC MAVG - calculated
1/4/2014 12 42	0 09	KWPII	0 557	20 845	AGC MAVG - calculated
1/4/2014 12 53	0 01	KWPII	0 052	20 654	AGC MAVG - calculated
1/4/2014 12 53	0 01	AWE	0 003	0 100	AGC MAVG - calculated
1/4/2014 12 55	0 05	KWPII	0 173	20 315	AGC MAVG - calculated
1/4/2014 13 03	0 09	KWPII	0 246	20 891	AGC MAVG - calculated
1/4/2014 13 14	0 01	KWPII	0 010	20 685	AGC MAVG - calculated
1/4/2014 13 17	0 04	KWPII	0 091	20 511	AGC MAVG - calculated
1/4/2014 13 23	0 09	KWPII	0 318	20 835	AGC MAVG - calculated
1/4/2014 13 37	0 01	KWPII	0 011	20 671	AGC MAVG - calculated
1/4/2014 13 38	0 08	KWPII	0 283	20 654	AGC MAVG - calculated
1/4/2014 13 48	0 05	KWPII	0 134	20 496	AGC MAVG - calculated
1/4/2014 13 56	0 02	KWPII	0 020	20 398	AGC MAVG - calculated
1/4/2014 14 01	0 04	KWPII	0 046	20 379	AGC MAVG - calculated
1/4/2014 14 07	0 01	KWPII	0 015	20 590	AGC MAVG - calculated
1/4/2014 14 09	0 04	KWPII	0 082	20 872	AGC MAVG - calculated
1/4/2014 14 16	0 02	KWPII	0 035	20 620	AGC MAVG - calculated
1/4/2014 14 20	0 01	KWPII	0 003	20 360	AGC MAVG - calculated
1/4/2014 14 27	0 01	KWPII	0 009	20 589	AGC MAVG - calculated
1/4/2014 14 29	0 09	KWPII	0 297	20 665	AGC MAVG - calculated
1/4/2014 14 41	0 03	KWPII	0 069	20 639	AGC MAVG - calculated
1/4/2014 14 44	0 15	KWPII	0 471	20 612	AGC MAVG - calculated
1/4/2014 18 09	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/4/2014 18 48	0 01	AWE	0 003	0 200	AGC MAVG - calculated
1/4/2014 18 48	0 01	AWE	0 005	0 300	AGC MAVG - calculated
1/4/2014 19 36	0 01	AWE	0 002	0 100	AGC MAVG - calculated
1/4/2014 23 03	0 01	KWPII	0 015	15 654	AGC MAVG - calculated
1/4/2014 23 09	0 01	KWPII	0 011	16 283	AGC MAVG - calculated
1/4/2014 23 15	1 53	KWPII	15 829	17 513	AGC MAVG - calculated and Operating Conditions on Company's System
1/5/2014 1 08	4 57	KWPII	56 351	16 036	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/5/2014 1 55	1 58	KWPI	8 128	22 288	AGC MAVG - entered - Excess Energy
1/5/2014 3 54	0 07	KWPI	0 198	16 206	AGC MAVG - entered - Excess Energy
1/5/2014 4 10	0 06	KWPI	0 173	15 564	AGC MAVG - entered - Excess Energy
1/5/2014 4 17	0 04	KWPI	0 033	15 104	AGC MAVG - entered - Excess Energy
1/5/2014 4 22	0 03	KWPI	0 020	14 576	AGC MAVG - entered - Excess Energy
1/5/2014 4 27	0 04	KWPI	0 101	17 312	AGC MAVG - entered - Excess Energy
1/5/2014 4 33	0 03	KWPI	0 061	16 274	AGC MAVG - entered - Excess Energy
1/5/2014 8 07	0 20	KWPII	0 614	16 481	AGC MAVG - calculated
1/5/2014 8 29	0 02	KWPII	0 068	16 047	AGC MAVG - calculated
1/5/2014 8 31	0 04	KWPII	0 068	16 262	AGC MAVG - calculated
1/5/2014 8 38	0 03	KWPII	0 042	16 419	AGC MAVG - calculated
1/5/2014 8 45	0 01	KWPII	0 002	16 602	AGC MAVG - calculated

DOCKET NO. 2011-0206
 ORDER NO. 30371 I.C.(3)(a)&(b)
 ATTACHMENT 6
 PAGE 3 OF 14

R5WG Maui Curtailment Report January 2014



Start Date and Time	Duration	IPP Curtailled	Estimated Curtailment MWH	Peak MW Curtailled	Reasons for Curtailment
1/5/2014 0:51	0:01	KWPII	0 014	16 744	AGC MAVG - calculated
1/5/2014 0:53	0:01	KWPII	0 011	17 444	AGC MAVG - calculated
1/5/2014 0:55	0:03	KWPII	0 064	17 637	AGC MAVG - calculated
1/5/2014 10:10	0:01	AWE	0 005	0 300	AGC MAVG - calculated and Good Engineering and Operating Practices
1/5/2014 10:35	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Good Engineering and Operating Practices
1/5/2014 11:18	0:01	KWPII	0 030	18 718	AGC MAVG - calculated
1/5/2014 11:48	0:03	KWPII	0 054	19 148	AGC MAVG - calculated
1/5/2014 11:52	0:01	KWPII	0 016	19 281	AGC MAVG - calculated
1/5/2014 11:57	0:01	KWPII	0 010	17 774	AGC MAVG - calculated
1/5/2014 12:11	0:02	KWPII	0 049	19 508	AGC MAVG - calculated
1/5/2014 12:18	0:05	KWPII	0 112	18 863	AGC MAVG - calculated
1/5/2014 12:24	0:01	KWPII	0 020	17 102	AGC MAVG - calculated
1/5/2014 12:27	0:01	KWPII	0 022	17 247	AGC MAVG - calculated
1/5/2014 12:31	0:01	KWPII	0 025	18 146	AGC MAVG - calculated
1/5/2014 12:34	0:01	KWPII	0 021	18 450	AGC MAVG - calculated
1/5/2014 12:36	0:01	KWPII	0 025	18 498	AGC MAVG - calculated
1/5/2014 12:43	0:01	KWPII	0 007	18 302	AGC MAVG - calculated
1/5/2014 12:58	0:01	KWPII	0 001	18 871	AGC MAVG - calculated
1/5/2014 13:00	0:01	KWPII	0 017	18 906	AGC MAVG - calculated
1/5/2014 13:02	0:06	KWPII	0 094	19 441	AGC MAVG - calculated
1/5/2014 13:10	0:01	KWPII	0 028	18 253	AGC MAVG - calculated
1/5/2014 13:12	0:01	KWPII	0 003	18 261	AGC MAVG - calculated
1/5/2014 13:21	0:01	KWPII	0 015	18 046	AGC MAVG - calculated
1/5/2014 13:24	0:05	KWPII	0 078	19 211	AGC MAVG - calculated
1/5/2014 13:30	0:01	KWPII	0 008	19 117	AGC MAVG - calculated
1/5/2014 17:33	0:01	AWE	0 003	0 200	AGC MAVG - calculated
1/5/2014 20:58	0:01	AWE	0 002	0 100	AGC MAVG - calculated
1/5/2014 21:44	0:01	AWE	0 002	0 100	AGC MAVG - calculated
1/5/2014 22:41	0:01	KWPII	0 001	19 102	AGC MAVG - calculated
1/5/2014 22:43	7:52	KWPII	111 310	19 200	AGC MAVG - calculated
1/5/2014 23:47	0:01	AWE	0 002	0 100	AGC MAVG - calculated
1/5/2014 23:51	0:01	AWE	0 003	0 200	AGC MAVG - calculated
1/6/2014 0:10	0:39	AWE	0 164	0 400	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/6/2014 0:16	5:01	SA	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/6/2014 0:16	4:57	MH	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/6/2014 0:19	0:01	KWP	0 017	25 808	AGC MAVG - entered - Excess Energy
1/6/2014 0:24	0:03	KWP	0 053	25 584	AGC MAVG - entered - Excess Energy
1/6/2014 0:32	4:29	KWP	30 147	26 384	AGC MAVG - entered - Excess Energy
1/6/2014 1:35	0:01	AWE	0 003	0 200	AGC MAVG - entered - Excess Energy
1/6/2014 3:06	0:01	AWE	0 003	0 200	AGC MAVG - entered - Excess Energy
1/6/2014 3:24	0:08	AWE	0 012	0 200	AGC MAVG - entered - Excess Energy
1/6/2014 3:31	0:02	AWE	0 003	0 100	AGC MAVG - entered - Excess Energy
1/6/2014 4:37	0:02	AWE	0 003	0 100	AGC MAVG - entered - Excess Energy
1/6/2014 5:02	0:01	KWP	0 040	23 376	AGC MAVG - entered - Excess Energy
1/6/2014 5:04	0:07	KWP	0 131	25 350	AGC MAVG - entered - Excess Energy
1/6/2014 8:41	0:01	KWPII	0 001	20 602	AGC MAVG - calculated, Testing, and Good Engineering and Operating Practices
1/6/2014 10:10	0:01	AWE	0 003	0 200	AGC MAVG - calculated and Testing
1/6/2014 10:18	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Testing
1/6/2014 10:30	0:01	KWPII	0 004	20 640	AGC MAVG - calculated and Testing
1/6/2014 11:23	0:01	KWPII	0 002	20 601	AGC MAVG - calculated and Testing
1/6/2014 11:26	0:50	KWPII	3 344	20 708	AGC MAVG - calculated and Testing
1/6/2014 12:06	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Testing
1/6/2014 12:26	0:47	KWPII	3 021	20 708	AGC MAVG - calculated and Testing
1/6/2014 13:14	0:01	KWPII	0 001	20 707	AGC MAVG - calculated and Testing
1/6/2014 13:18	0:02	KWPII	0 006	20 708	AGC MAVG - calculated and Testing
1/6/2014 13:26	0:02	KWPII	0 018	20 703	AGC MAVG - calculated and Testing
1/6/2014 13:31	0:02	KWPII	0 014	20 706	AGC MAVG - calculated and Testing
1/6/2014 13:36	0:01	KWPII	0 004	20 701	AGC MAVG - calculated and Testing
1/6/2014 13:39	0:01	KWPII	0 004	20 702	AGC MAVG - calculated and Testing
1/6/2014 13:41	0:01	KWPII	0 009	20 694	AGC MAVG - calculated and Testing
1/6/2014 14:41	0:02	KWPII	0 038	19 553	AGC MAVG - calculated and Testing
1/6/2014 14:44	0:01	KWPII	0 006	20 187	AGC MAVG - calculated and Testing
1/6/2014 20:57	0:01	AWE	0 003	0 200	AGC MAVG - calculated
1/6/2014 22:29	7:34	KWPII	143 493	20 708	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - entered - Excess Energy
1/6/2014 23:42	6:11	BS	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/6/2014 23:43	6:07	SA	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - entered - Excess Energy
1/6/2014 23:56	7:04	MH	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/7/2014 0:05	0:01	KWP	0 038	26 288	AGC MAVG - entered - Excess Energy
1/7/2014 0:10	0:01	KWP	0 021	25 280	AGC MAVG - entered - Excess Energy
1/7/2014 0:12	0:01	KWP	0 029	26 037	AGC MAVG - entered - Excess Energy
1/7/2014 0:14	0:03	KWP	0 116	26 006	AGC MAVG - entered - Excess Energy
1/7/2014 0:15	2:18	AWE	0 827	1 000	AGC MAVG - entered - Excess Energy
1/7/2014 0:19	0:01	KWP	0 010	23 600	AGC MAVG - entered - Excess Energy
1/7/2014 0:21	0:01	KWP	0 054	26 256	AGC MAVG - entered - Excess Energy
1/7/2014 0:23	0:01	KWP	0 011	23 280	AGC MAVG - entered - Excess Energy
1/7/2014 0:26	5:19	KWP	64 180	20 084	AGC MAVG - entered - Excess Energy
1/7/2014 2:37	0:01	AWE	0 002	0 100	AGC MAVG - entered - Excess Energy
1/7/2014 3:08	0:01	AWE	0 002	0 100	AGC MAVG - entered - Excess Energy
1/7/2014 3:10	0:08	AWE	0 015	0 200	AGC MAVG - entered - Excess Energy
1/7/2014 3:50	0:01	AWE	0 003	0 200	AGC MAVG - entered - Excess Energy
1/7/2014 3:53	0:02	AWE	0 003	0 100	AGC MAVG - entered - Excess Energy
1/7/2014 3:56	0:01	AWE	0 002	0 100	AGC MAVG - entered - Excess Energy
1/7/2014 4:06	0:04	AWE	0 008	0 200	AGC MAVG - entered - Excess Energy
1/7/2014 4:16	0:01	AWE	0 003	0 200	AGC MAVG - entered - Excess Energy
1/7/2014 5:24	0:02	AWE	0 003	0 100	AGC MAVG - entered - Excess Energy
1/7/2014 5:27	0:30	AWE	0 122	0 400	AGC MAVG - entered - Excess Energy
1/7/2014 6:05	0:37	KWPII	4 725	20 708	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/7/2014 6:43	0:01	KWPII	0 001	20 708	AGC MAVG - calculated
1/7/2014 7:49	0:01	AWE	0 005	0 300	AGC MAVG - calculated
1/7/2014 9:36	0:01	AWE	0 002	0 100	AGC MAVG - calculated
1/7/2014 22:38	0:02	KWPII	0 011	20 708	AGC MAVG - calculated
1/7/2014 22:42	7:22	KWPII	123 083	20 708	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/8/2014 0:15	4:41	BS	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/8/2014 0:16	4:39	SA	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/8/2014 0:16	4:37	MH	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/8/2014 0:23	3:45	KWP	30 324	26 976	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/8/2014 1:38	0:01	AWE	0 002	0 100	AGC MAVG - entered - Excess Energy
1/8/2014 1:48	2:15	AWE	1 135	1 400	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/8/2014 4:08	0:01	AWE	0 003	0 200	AGC MAVG - calculated
1/8/2014 4:09	0:18	KWP	0 566	24 117	AGC MAVG - calculated
1/8/2014 4:28	0:01	KWP	0 008	20 784	AGC MAVG - calculated
1/8/2014 4:28	0:32	AWE	0 053	0 100	AGC MAVG - calculated
1/8/2014 6:39	0:01	AWE	0 003	0 300	AGC MAVG - calculated
1/8/2014 11:06	0:06	KWPII	0 177	20 708	AGC MAVG - calculated
1/8/2014 11:13	0:20	KWPII	1 026	20 705	AGC MAVG - calculated
1/8/2014 12:11	0:03	KWPII	0 065	20 812	AGC MAVG - calculated and Testing
1/8/2014 12:15	0:02	KWPII	0 005	20 630	AGC MAVG - calculated, Testing, and Operating Conditions on Company's System
1/8/2014 15:27	0:01	AWE	0 003	0 200	AGC MAVG - calculated
1/8/2014 15:48	0:01	AWE	0 002	0 100	AGC MAVG - calculated

DOCKET NO. 2011-0206
 ORDER NO. 30371 I.C.(3)(a)&(b)
 ATTACHMENT 6
 PAGE 4 OF 14

RSWG Maui Curtailment Report January 2014

Start Date and Time	Duration	IPP Curtailled	Estimated Curtailled MWh	Peak MW Curtailled	Reasons for Curtailment
1/8/2014 16:32	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/9/2014 1:10	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/9/2014 3:24	0:01	KWPII	0.001	0.047	AGC MAVG - calculated
1/9/2014 3:28	0:01	AWE	0.000	7.900	AGC MAVG - calculated
1/9/2014 3:29	0:04	KWPII	0.018	0.450	AGC MAVG - calculated
1/9/2014 3:34	0:10	KWPII	0.234	2.800	AGC MAVG - calculated
1/9/2014 3:36	0:01	AWE	0.001	6.800	AGC MAVG - calculated
1/9/2014 3:38	0:01	AWE	0.000	7.100	AGC MAVG - calculated
1/9/2014 12:51	0:01	KWP	0.001	0.080	AGC MAVG - calculated and Testing
1/9/2014 14:44	0:01	KWP	0.000	0.018	AGC MAVG - calculated
1/9/2014 18:48	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/9/2014 21:30	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/9/2014 21:32	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/9/2014 21:53	0:03	KWPII	0.088	18.782	AGC MAVG - calculated
1/9/2014 21:57	0:01	KWPII	0.014	19.056	AGC MAVG - calculated
1/10/2014 0:10	0:01	KWPII	0.001	11.716	AGC MAVG - calculated
1/10/2014 0:30	1:09	KWPII	7.932	16.031	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
1/10/2014 1:02	0:01	AWE	0.001	1.300	AGC MAVG - calculated
1/10/2014 1:54	0:01	KWPII	0.017	6.542	AGC MAVG - entered - Maintaining Regulating Reserves
1/10/2014 1:56	0:32	KWPII	1.738	8.738	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
1/10/2014 2:28	0:01	KWPII	0.016	7.552	AGC MAVG - calculated
1/10/2014 2:35	0:04	KWPII	0.051	8.794	AGC MAVG - calculated
1/10/2014 2:40	0:10	KWPII	0.238	9.077	AGC MAVG - calculated
1/10/2014 2:51	0:01	KWPII	0.007	9.355	AGC MAVG - calculated
1/10/2014 2:53	0:01	KWPII	0.008	8.898	AGC MAVG - calculated
1/10/2014 2:55	0:38	KWPII	1.683	9.870	AGC MAVG - calculated
1/10/2014 3:34	0:01	KWPII	0.006	6.791	AGC MAVG - calculated
1/10/2014 3:36	0:01	KWPII	0.013	6.957	AGC MAVG - calculated
1/10/2014 5:02	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/10/2014 5:20	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/10/2014 7:36	0:01	AWE	0.003	0.200	AGC MAVG - calculated and Good Engineering and Operating Practices
1/10/2014 12:08	0:01	AWE	0.002	0.100	AGC MAVG - calculated and Testing
1/11/2014 3:28	0:02	KWPII	0.015	3.595	AGC MAVG - calculated
1/11/2014 7:44	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/11/2014 12:02	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/11/2014 12:32	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/11/2014 12:35	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/11/2014 13:14	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/11/2014 23:13	0:08	KWPII	0.183	7.564	AGC MAVG - calculated
1/11/2014 23:23	0:04	KWPII	0.078	7.534	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
1/11/2014 23:30	0:13	KWPII	0.443	7.642	AGC MAVG - calculated
1/11/2014 23:39	0:02	AWE	0.000	20.800	AGC MAVG - calculated
1/11/2014 23:44	0:01	KWPII	0.004	2.733	AGC MAVG - calculated
1/12/2014 0:04	0:01	KWPII	0.008	0.777	AGC MAVG - calculated
1/12/2014 5:47	0:01	KWP	0.001	0.064	AGC MAVG - calculated
1/12/2014 14:34	0:01	KWP	0.000	0.018	AGC MAVG - calculated
1/13/2014 20:14	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/13/2014 22:58	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/14/2014 4:48	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/14/2014 11:48	0:04	KWPII	0.105	12.621	AGC MAVG - calculated
1/14/2014 14:30	0:05	KWPII	0.275	15.547	AGC MAVG - calculated
1/14/2014 14:56	0:02	KWPII	0.056	14.424	AGC MAVG - calculated
1/14/2014 15:03	0:01	KWPII	0.018	14.815	AGC MAVG - calculated
1/14/2014 15:11	0:01	KWPII	0.012	15.718	AGC MAVG - calculated
1/18/2014 1:26	0:17	KWPII	1.576	17.873	AGC MAVG - calculated
1/18/2014 1:44	0:01	KWPII	0.007	9.358	AGC MAVG - calculated
1/18/2014 1:53	0:08	KWPII	0.158	10.040	AGC MAVG - calculated
1/18/2014 2:04	0:14	KWPII	1.457	11.284	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 2:14	0:04	AWE	0.086	5.400	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 2:19	0:13	AWE	0.734	7.600	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 2:19	2:34	KWPII	15.346	10.278	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
1/18/2014 2:57	0:17	AWE	0.368	5.900	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 3:02	0:10	SA	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 3:02	0:10	MH	Data is not available	Data is not available	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 3:04	0:01	KWP	0.008	21.264	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 3:06	0:02	KWP	0.038	19.392	AGC MAVG - entered - Maintaining Regulating Reserves
1/18/2014 3:16	1:33	AWE	10.338	18.200	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
1/18/2014 4:50	0:03	AWE	0.030	19.000	AGC MAVG - calculated
1/18/2014 4:54	0:01	AWE	0.000	18.700	AGC MAVG - calculated
1/18/2014 4:54	0:07	KWPII	0.115	13.477	AGC MAVG - calculated
1/18/2014 4:57	0:01	AWE	0.000	19.500	AGC MAVG - calculated
1/18/2014 5:02	0:16	KWPII	0.423	3.396	AGC MAVG - calculated
1/18/2014 5:04	0:02	AWE	0.002	16.300	AGC MAVG - calculated
1/18/2014 5:08	0:05	AWE	0.009	18.000	AGC MAVG - calculated
1/18/2014 5:19	0:01	AWE	0.018	3.291	AGC MAVG - calculated
1/18/2014 10:34	0:01	AWE	0.003	0.200	AGC MAVG - calculated and Testing
1/18/2014 10:35	0:01	AWE	0.002	0.100	AGC MAVG - calculated and Testing
1/18/2014 3:45	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/18/2014 12:12	0:01	KWP	0.000	0.018	AGC MAVG - calculated
1/18/2014 22:27	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/19/2014 16:25	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/19/2014 17:00	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/20/2014 9:40	0:01	AWE	0.003	0.200	AGC MAVG - calculated and Good Engineering and Operating Practices
1/21/2014 7:03	0:01	KWPII	0.000	12.830	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 7:23	0:01	KWPII	0.008	13.092	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 7:26	0:01	KWPII	0.008	13.288	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:37	0:02	KWPII	0.045	16.730	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:41	0:01	KWPII	0.032	16.460	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:43	0:08	KWPII	0.157	17.431	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:52	0:02	KWPII	0.050	17.196	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:55	0:02	KWPII	0.043	16.820	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 8:58	0:01	KWPII	0.033	17.003	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:05	0:01	KWPII	0.027	18.243	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:08	0:02	KWPII	0.037	18.283	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:11	0:01	KWPII	0.006	18.110	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:13	0:01	KWPII	0.025	17.850	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:17	0:02	KWPII	0.046	18.058	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:20	0:02	KWPII	0.050	17.766	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:24	0:04	KWPII	0.082	17.856	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:30	0:05	KWPII	0.052	18.131	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:37	0:01	KWPII	0.019	17.583	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:39	0:05	KWPII	0.052	17.321	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 9:46	0:21	KWPII	1.029	17.114	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:09	0:01	KWPII	0.038	16.241	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:11	0:02	KWPII	0.031	16.515	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:21	0:02	KWPII	0.039	17.752	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:28	0:02	KWPII	0.018	17.595	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:31	0:03	KWPII	0.032	17.858	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:35	0:13	KWPII	0.274	18.218	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:50	0:01	KWPII	0.010	17.367	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:53	0:05	KWPII	0.127	18.927	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 10:59	0:12	KWPII	0.427	19.292	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 11:12	0:13	KWPII	0.417	18.888	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 11:26	3:35	KWPII	19.476	18.875	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 15:02	0:16	KWPII	0.507	16.000	AGC MAVG - calculated and Operating Conditions on Company's System

DOCKET NO. 2011-0206
 ORDER NO. 30371 I.C.(3)(a)&(b)
 ATTACHMENT 6
 PAGE 5 OF 14

RSWG Maui Curtailment Report January 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
1/21/2014 15 19	0:01	KWPII	0.001	15 812	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 15 22	0:04	KWPII	0.056	15 324	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 15 28	0:01	KWPII	0.013	14 887	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 15 37	0:01	KWPII	0.011	14 453	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 18 12	1:24	KWPII	5.029	20.322	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 17 37	0:01	KWPII	0.003	18.973	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 22	0:01	KWPII	0.014	19.834	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 24	0:01	KWPII	0.003	19.809	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 26	0:01	KWPII	0.014	19.884	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 28	0:02	KWPII	0.029	19.725	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 31	0:07	KWPII	0.108	19.659	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 40	0:05	KWPII	0.056	19.650	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 47	0:01	KWPII	0.003	19.712	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 50	0:01	KWPII	0.005	19.987	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 54	0:03	KWPII	0.014	20.274	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 21 58	0:06	KWPII	0.060	20.353	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 22 05	0:03	KWPII	0.026	20.411	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 22 09	0:01	KWPII	0.006	20.406	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 22 11	0:11	KWPII	0.435	20.433	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 22 53	0:01	KWPII	0.004	20.876	AGC MAVG - calculated and Operating Conditions on Company's System
1/21/2014 22 55	6:26	KWPII	105.147	20.708	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/22/2014 0 21	0:01	AWE	0.000	2.800	AGC MAVG - calculated
1/22/2014 0 24	4:53	AWE	19.488	15.100	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/22/2014 0 40	4:00	SA			Data is not available
1/22/2014 0 42	3:55	NIH			Data is not available
1/22/2014 0 44	0:17	KWP	0.267	20.760	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/22/2014 1 00	3:33	KWP	17.807	29.984	AGC MAVG - calculated
1/22/2014 4 36	0:01	KWP	0.003	29.472	AGC MAVG - calculated
1/22/2014 4 38	0:02	KWP	0.026	29.760	AGC MAVG - calculated
1/22/2014 4 43	0:01	KWP	0.005	29.488	AGC MAVG - calculated
1/22/2014 5 23	0:01	KWPII	0.030	9.332	AGC MAVG - calculated
1/22/2014 5 25	0:03	KWPII	0.195	9.883	AGC MAVG - calculated
1/22/2014 5 33	0:14	KWPII	2.229	17.099	AGC MAVG - calculated
1/22/2014 5 41	0:01	AWE	0.001	14.800	AGC MAVG - calculated
1/22/2014 5 49	1:13	KWPII	13.454	20.708	AGC MAVG - calculated
1/22/2014 5 52	0:01	AWE	0.010	13.400	AGC MAVG - calculated
1/22/2014 7 35	0:03	KWPII	0.172	20.000	AGC MAVG - calculated
1/22/2014 7 39	0:01	KWPII	0.034	20.589	AGC MAVG - calculated
1/22/2014 7 41	0:02	KWPII	0.098	18.984	AGC MAVG - calculated
1/22/2014 7 45	0:11	KWPII	0.954	20.705	AGC MAVG - calculated
1/22/2014 8 18	0:01	KWPII	0.003	14.886	AGC MAVG - calculated
1/22/2014 8 35	0:01	KWPII	0.036	15.217	AGC MAVG - calculated
1/22/2014 8 55	0:13	KWPII	0.746	20.687	AGC MAVG - calculated
1/22/2014 11 00	0:02	KWPII	0.084	14.518	AGC MAVG - calculated and Good Engineering and Operating Practices
1/22/2014 11 50	0:03	KWPII	0.133	16.878	AGC MAVG - calculated and Good Engineering and Operating Practices
1/22/2014 11 54	0:02	KWPII	0.023	17.186	AGC MAVG - calculated and Good Engineering and Operating Practices
1/22/2014 13 18	0:01	KWPII	0.001	7.239	AGC MAVG - calculated
1/22/2014 13 40	0:21	KWPII	1.246	12.084	AGC MAVG - calculated
1/22/2014 14 08	0:13	KWPII	0.491	7.167	AGC MAVG - calculated
1/22/2014 23 38	0:01	KWPII	0.013	17.534	AGC MAVG - calculated
1/22/2014 23 57	0:12	KWPII	0.580	20.025	AGC MAVG - calculated
1/23/2014 1 24	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/23/2014 2 28	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/23/2014 2 30	0:01	AWE	0.001	0.100	AGC MAVG - calculated
1/23/2014 2 42	0:01	KWPII	0.014	13.505	AGC MAVG - calculated
1/23/2014 11 05	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/23/2014 14 54	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/23/2014 15 07	0:01	KWP	0.000	0.018	AGC MAVG - calculated
1/23/2014 15 24	0:01	KWP	0.001	0.084	AGC MAVG - calculated
1/23/2014 15 27	0:01	KWP	0.001	0.080	AGC MAVG - calculated
1/23/2014 22 05	0:02	KWP	0.001	0.048	AGC MAVG - calculated
1/24/2014 0 40	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/24/2014 10 14	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/24/2014 12 02	0:01	AWE	0.005	0.300	AGC MAVG - calculated
1/24/2014 12 17	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/24/2014 12 37	0:01	KWPII	0.000	0.010	AGC MAVG - calculated
1/24/2014 13 02	0:01	KWPII	0.000	0.010	AGC MAVG - calculated and Good Engineering and Operating Practices
1/24/2014 17 16	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/24/2014 17 18	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/24/2014 17 25	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/24/2014 18 03	0:02	KWP	0.001	0.064	AGC MAVG - calculated
1/24/2014 18 08	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/24/2014 18 17	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/24/2014 18 33	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/24/2014 18 38	0:01	KWP	0.001	0.064	AGC MAVG - calculated
1/24/2014 18 46	0:01	KWP	0.001	0.032	AGC MAVG - calculated
1/24/2014 18 53	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/24/2014 18 58	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/24/2014 19 01	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/24/2014 19 58	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/24/2014 21 03	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/24/2014 21 45	0:01	AWE	0.002	0.200	AGC MAVG - calculated
1/25/2014 1 45	3:35	KWPII	19.660	14.612	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated
1/25/2014 5 21	1:05	KWPII	5.940	17.808	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/25/2014 6 30	0:01	KWPII	0.018	17.989	AGC MAVG - calculated
1/25/2014 6 34	0:16	KWPII	0.188	19.270	AGC MAVG - calculated
1/25/2014 6 54	0:01	KWPII	0.016	18.583	AGC MAVG - calculated
1/25/2014 10 48	0:15	KWPII	0.503	18.082	AGC MAVG - calculated
1/25/2014 11 04	0:14	KWPII	0.348	18.139	AGC MAVG - calculated
1/25/2014 11 18	0:02	KWPII	0.055	17.887	AGC MAVG - calculated
1/25/2014 11 22	0:20	KWPII	1.001	18.188	AGC MAVG - calculated
1/25/2014 11 43	0:16	KWPII	0.808	19.840	AGC MAVG - calculated
1/25/2014 12 00	0:02	KWPII	0.028	20.135	AGC MAVG - calculated
1/25/2014 12 03	2:18	KWPII	16.652	19.987	AGC MAVG - calculated
1/25/2014 14 22	0:06	KWPII	0.218	19.350	AGC MAVG - calculated
1/25/2014 14 30	0:05	KWPII	0.170	18.684	AGC MAVG - calculated
1/25/2014 14 43	0:01	KWPII	0.007	18.988	AGC MAVG - calculated
1/25/2014 14 45	0:01	KWPII	0.001	18.820	AGC MAVG - calculated
1/25/2014 14 54	0:09	KWPII	0.273	19.207	AGC MAVG - calculated
1/25/2014 15 05	0:03	KWPII	0.035	19.449	AGC MAVG - calculated
1/25/2014 15 08	0:36	KWPII	3.397	20.001	AGC MAVG - calculated and Good Engineering and Operating Practices
1/25/2014 23 02	0:03	KWPII	0.045	15.536	AGC MAVG - calculated
1/25/2014 23 07	0:01	KWPII	0.021	18.090	AGC MAVG - calculated
1/25/2014 23 09	0:03	KWPII	0.053	16.771	AGC MAVG - calculated
1/25/2014 23 35	1:24	KWPII	13.640	16.166	AGC MAVG - calculated and AGC MAVG - entered - Excess Energy
1/26/2014 0 27	0:06	AWE	0.073	11.000	AGC MAVG - entered - Excess Energy
1/26/2014 0 34	0:02	AWE	0.007	10.300	AGC MAVG - entered - Excess Energy
1/26/2014 1 01	0:37	KWPII	5.796	13.378	AGC MAVG - entered - Excess Energy
1/26/2014 1 08	0:02	AWE	0.001	12.500	AGC MAVG - entered - Excess Energy
1/26/2014 1 11	0:01	AWE	0.002	11.000	AGC MAVG - entered - Excess Energy
1/26/2014 1 40	1:44	KWPII	12.036	12.339	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/26/2014 2 09	0:01	AWE	0.001	14.800	AGC MAVG - entered - Excess Energy
1/26/2014 2 35	0:01	AWE	0.000	15.000	AGC MAVG - calculated

R5WG Maui Curtailment Report January 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reasons for Curtailment
1/28/2014 2:38	0:01	AWE	0.000	15.000	AGC MAVG - calculated
1/28/2014 2:52	0:02	AWE	0.014	16.000	AGC MAVG - calculated
1/28/2014 3:00	0:01	AWE	0.001	16.700	AGC MAVG - calculated
1/28/2014 3:09	0:01	AWE	0.001	16.900	AGC MAVG - calculated
1/28/2014 3:26	0:20	KWPII	0.655	10.937	AGC MAVG - calculated
1/28/2014 3:48	0:08	KWPII	0.247	11.307	AGC MAVG - calculated
1/28/2014 3:58	0:06	KWPII	0.177	11.783	AGC MAVG - calculated
1/28/2014 4:13	0:03	KWPII	0.019	11.348	AGC MAVG - calculated
1/28/2014 4:17	0:02	KWPII	0.013	11.989	AGC MAVG - calculated
1/28/2014 4:21	0:01	KWPII	0.031	13.958	AGC MAVG - calculated
1/28/2014 23:04	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/27/2014 0:52	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/27/2014 15:15	0:01	KWP	0.001	0.048	AGC MAVG - calculated
1/27/2014 15:40	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/27/2014 16:12	0:01	KWP	0.000	0.016	AGC MAVG - calculated
1/27/2014 21:01	0:01	AWE	0.001	0.200	AGC MAVG - calculated
1/27/2014 23:15	0:05	KWPII	0.159	20.610	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/27/2014 23:21	2:27	KWPII	31.050	20.815	AGC MAVG - calculated and AGC MAVG - entered - Excess Energy
1/28/2014 1:29	0:10	AWE	0.063	0.300	AGC MAVG - entered - Excess Energy
1/28/2014 1:50	3:20	KWPII	60.870	20.696	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/28/2014 2:44	2:01	SA	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/28/2014 2:46	1:57	MH	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/28/2014 2:49	1:29	KWP	7.534	26.567	AGC MAVG - entered - Excess Energy
1/28/2014 4:19	0:16	KWP	0.369	26.126	AGC MAVG - entered - Excess Energy
1/28/2014 4:39	0:01	KWP	0.008	25.477	AGC MAVG - entered - Excess Energy
1/28/2014 4:42	0:13	AWE	0.007	1.000	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
1/28/2014 4:56	0:01	AWE	0.002	1.100	AGC MAVG - calculated
1/28/2014 5:12	0:45	KWPII	5.377	20.685	AGC MAVG - calculated
1/28/2014 5:59	0:03	KWPII	0.042	20.548	AGC MAVG - calculated
1/28/2014 6:12	0:01	AWE	0.003	0.300	AGC MAVG - calculated
1/28/2014 6:26	0:01	AWE	0.001	0.100	AGC MAVG - calculated
1/28/2014 6:28	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/28/2014 10:13	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/28/2014 14:56	0:01	AWE	0.001	0.100	AGC MAVG - calculated
1/28/2014 15:21	0:12	KWPII	0.804	19.211	Operating Conditions on Company's System
1/28/2014 15:36	0:11	KWPII	0.533	19.211	Operating Conditions on Company's System
1/28/2014 15:53	2:10	KWPII	8.395	19.211	Operating Conditions on Company's System and AGC MAVG - calculated
1/28/2014 21:08	0:26	KWPII	1.854	17.714	AGC MAVG - calculated
1/28/2014 21:36	0:01	KWPII	0.008	17.698	AGC MAVG - calculated
1/28/2014 22:00	3:15	KWPII	43.299	19.211	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/28/2014 22:57	0:01	AWE	0.001	19.000	AGC MAVG - calculated
1/28/2014 23:03	2:10	AWE	28.587	21.000	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/28/2014 0:14	0:46	SA	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/28/2014 0:14	0:37	MH	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/28/2014 0:18	0:08	KWP	0.082	27.872	AGC MAVG - entered - Excess Energy
1/28/2014 0:26	0:01	KWP	0.011	26.640	AGC MAVG - entered - Excess Energy
1/28/2014 0:30	0:02	KWP	0.037	27.058	AGC MAVG - entered - Excess Energy
1/28/2014 0:33	0:02	KWP	0.045	27.552	AGC MAVG - entered - Excess Energy
1/28/2014 0:36	0:01	KWP	0.011	25.664	AGC MAVG - entered - Excess Energy
1/28/2014 0:38	0:01	KWP	0.001	25.264	AGC MAVG - entered - Excess Energy
1/28/2014 2:28	0:01	KWPII	0.001	0.089	AGC MAVG - calculated
1/28/2014 2:36	0:02	KWPII	0.066	7.240	AGC MAVG - calculated and AGC MAVG - entered - Excess Energy
1/29/2014 2:36	3:16	KWPII	54.037	17.617	AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/29/2014 2:44	1:23	AWE	7.627	15.000	AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, and AGC MAVG - entered - Excess Energy
1/29/2014 2:58	2:31	MH	Data is not available	Data is not available	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, and AGC MAVG - entered - Excess Energy
1/29/2014 3:01	0:01	KWP	0.003	21.424	AGC MAVG - entered - Excess Energy
1/29/2014 3:04	0:10	KWP	0.346	22.576	AGC MAVG - entered - Excess Energy
1/29/2014 3:18	0:03	KWP	0.039	20.448	AGC MAVG - entered - Excess Energy
1/29/2014 3:20	0:17	KWP	1.118	25.424	AGC MAVG - entered - Excess Energy
1/29/2014 3:40	0:02	KWP	0.037	21.072	AGC MAVG - entered - Excess Energy
1/29/2014 3:43	0:02	KWP	0.039	20.592	AGC MAVG - entered - Excess Energy
1/29/2014 3:47	1:11	KWP	5.632	27.328	AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, and AGC MAVG - entered - Excess Energy
1/29/2014 4:38	0:03	AWE	0.003	0.300	AGC MAVG - entered - Excess Energy
1/29/2014 4:40	1:12	AWE	0.807	1.800	AGC MAVG - entered - Excess Energy
1/29/2014 4:58	0:08	KWP	0.438	27.664	AGC MAVG - entered - Excess Energy
1/29/2014 5:09	0:01	KWP	0.001	25.040	AGC MAVG - entered - Excess Energy
1/29/2014 5:11	0:02	KWP	0.046	27.344	AGC MAVG - entered - Excess Energy
1/29/2014 5:16	0:01	KWP	0.016	26.976	AGC MAVG - entered - Excess Energy
1/29/2014 5:21	0:01	KWP	0.011	27.648	AGC MAVG - entered - Excess Energy
1/29/2014 6:00	0:05	KWPII	0.238	17.698	AGC MAVG - calculated
1/29/2014 7:39	0:07	KWPII	0.168	17.668	AGC MAVG - calculated
1/29/2014 13:40	0:01	KWPII	0.013	17.876	AGC MAVG - calculated
1/29/2014 13:43	0:01	KWPII	0.007	17.704	AGC MAVG - calculated
1/29/2014 13:48	1:09	KWPII	8.405	19.153	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
1/29/2014 14:56	0:06	KWPII	0.212	19.190	AGC MAVG - calculated
1/29/2014 15:03	0:01	KWPII	0.019	19.021	AGC MAVG - calculated
1/29/2014 16:23	0:09	KWPII	0.391	18.579	Good Engineering and Operating Practices
1/29/2014 16:34	0:04	KWPII	0.092	18.531	Good Engineering and Operating Practices
1/29/2014 16:43	0:03	KWPII	0.039	17.525	Good Engineering and Operating Practices
1/29/2014 16:50	0:02	KWPII	0.032	18.263	Good Engineering and Operating Practices
1/29/2014 16:53	0:01	KWPII	0.030	18.757	Good Engineering and Operating Practices
1/29/2014 20:35	0:10	KWPII	0.241	20.687	AGC MAVG - calculated
1/29/2014 20:53	0:02	KWPII	0.005	20.403	AGC MAVG - calculated
1/29/2014 20:57	0:01	KWPII	0.006	20.274	AGC MAVG - calculated
1/29/2014 21:04	0:05	KWPII	0.092	20.854	AGC MAVG - calculated
1/29/2014 21:43	3:05	KWPII	35.490	20.708	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/29/2014 22:32	0:01	AWE	0.003	21.000	AGC MAVG - calculated
1/29/2014 22:35	0:03	AWE	0.005	20.800	AGC MAVG - calculated
1/29/2014 22:38	0:09	AWE	0.221	20.800	AGC MAVG - calculated
1/29/2014 22:50	1:55	AWE	24.377	21.000	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
1/30/2014 0:14	0:27	SA	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/30/2014 0:15	0:25	MH	Data is not available	Data is not available	AGC MAVG - entered - Excess Energy
1/30/2014 0:21	0:14	KWP	0.335	26.608	AGC MAVG - entered - Excess Energy
1/30/2014 0:46	0:05	AWE	0.065	16.700	AGC MAVG - calculated
1/30/2014 0:52	0:09	AWE	0.064	16.500	AGC MAVG - calculated
1/30/2014 1:04	1:36	AWE	5.013	18.800	AGC MAVG - calculated
1/30/2014 1:18	1:11	KWPII	2.219	3.500	AGC MAVG - calculated
1/30/2014 2:38	0:05	KWPII	0.015	0.417	AGC MAVG - calculated
1/30/2014 2:41	0:01	AWE	0.005	11.500	AGC MAVG - calculated
1/30/2014 3:16	0:01	AWE	0.001	10.200	AGC MAVG - calculated
1/30/2014 3:19	0:33	KWPII	0.615	2.411	AGC MAVG - calculated
1/30/2014 3:20	0:01	AWE	0.000	8.500	AGC MAVG - calculated
1/30/2014 3:22	0:12	AWE	0.351	8.300	AGC MAVG - calculated
1/30/2014 3:45	0:01	AWE	0.001	8.700	AGC MAVG - calculated
1/30/2014 3:53	0:01	KWPII	0.000	1.439	AGC MAVG - calculated
1/30/2014 11:21	0:01	AWE	0.006	0.300	AGC MAVG - calculated
1/31/2014 2:31	0:01	KWPII	0.587	4.849	AGC MAVG - calculated
1/31/2014 2:44	0:06	AWE	0.060	12.400	AGC MAVG - calculated
1/31/2014 2:51	0:01	AWE	0.002	10.600	AGC MAVG - calculated



RSWG Maui Curtailment Report January 2014

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
1/31/2014 10:47	0:01	AWE	0.003	0.200	AGC MAVG - calculated
1/31/2014 14:39	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/31/2014 14:56	0:01	AWE	0.002	0.100	AGC MAVG - calculated
1/31/2014 15:06	0:01	AWE	0.002	0.100	AGC MAVG - calculated

Notes:

- Curtailment for Kahawe Wind Power ("KWP"), Awaiki Wind Energy ("AWE"), and Kahawe Wind Power II ("KWPII") is now controlled by Maui Electric's Automatic Generation Control System ("AGC"). The AGC curtailment control automatically calculates the amount of Maximum Allowable Variable Generation ("MAVG") that Maui Electric can accept into the Maui system, based on the system current available variable generation ("CAVG"), regulating reserve down requirement ("RRDR"), and available regulating reserves down ("ARRD"). Thus, the AGC MAVG - calculated is equal to CAVG less (RRDR less ARRD). Additionally, the AGC curtailment control allows the Maui Electric operator to enter an AGC MAVG value. The AGC curtailment control will employ the lesser of the AGC MAVG - calculated and AGC MAVG - entered values in the control logic.
- Maui Electric upgraded the SCADA controls to permit the curtailment of the Makaha Hydroelectric ("MH") facility to Net Zero Protocol and uncurtailment of the MH facility without opening and closing the Maui Electric and MH interconnection circuit breaker.
- In October 2013, Maui Electric changed the regulating reserve policy to the Hawaii Solar Integration Study recommendation.
- On November 22, 2013, Maui Electric established Biosol Solar, LLC ("BS") curtailment control. BS is in the same curtailment priority group as AAAAA Rent-A-Space Maui LTD ("SA").
- The Estimated Curtailed MWH and Peak MW Curtailed are calculated with information provided by AWE, KWP, and KWPII. Maui Electric does not make any representation as to its accuracy.
- The data to calculate the Estimated Curtailed MWH and Peak MW Curtailed is not provided by SA, BS, or MH.



Start Date/Time	Stop Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
1/30/2014 8:06	1/30/2014 9:31	1:26	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 9:33	1/30/2014 9:42	0:10	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 9:49	1/30/2014 9:49	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 9:54	1/30/2014 13:13	3:20	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 13:15	1/30/2014 14:26	1:12	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 14:30	1/30/2014 14:42	0:13	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/30/2014 14:57	1/30/2014 17:38	2:40	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 8:50	1/31/2014 8:50	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:37	1/31/2014 9:38	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:42	1/31/2014 9:43	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:45	1/31/2014 9:45	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:48	1/31/2014 9:48	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:50	1/31/2014 9:51	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:53	1/31/2014 9:55	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 9:59	1/31/2014 10:04	0:06	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:08	1/31/2014 10:08	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:25	1/31/2014 10:25	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:35	1/31/2014 10:35	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:37	1/31/2014 10:39	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:43	1/31/2014 10:43	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:50	1/31/2014 10:51	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:55	1/31/2014 10:55	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 10:57	1/31/2014 10:59	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:02	1/31/2014 11:09	0:08	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:41	1/31/2014 11:41	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:47	1/31/2014 11:48	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:52	1/31/2014 11:53	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:57	1/31/2014 11:57	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 11:59	1/31/2014 12:07	0:09	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 12:09	1/31/2014 12:10	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 12:13	1/31/2014 12:15	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 12:17	1/31/2014 12:17	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 12:21	1/31/2014 12:22	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 12:28	1/31/2014 12:51	0:24	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:11	1/31/2014 13:11	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:14	1/31/2014 13:16	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:19	1/31/2014 13:20	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:45	1/31/2014 13:48	0:03	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:50	1/31/2014 13:53	0:04	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 13:55	1/31/2014 13:56	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 14:01	1/31/2014 14:02	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 14:04	1/31/2014 14:04	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 14:09	1/31/2014 14:09	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 14:11	1/31/2014 14:11	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 14:15	1/31/2014 14:15	0:01	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices
1/31/2014 17:16	1/31/2014 17:17	0:02	LSR	Data is not available	Data is not available	Good Engineering and Operating Practices

Notes:

On June 27, 2012, Maui Electric notified LSR that although LSR has not operated in compliance with the revised ramp rate of 360 kW/minute, Maui Electric would conditionally allow LSR to operate at the allowed capacity of 1.2 MW while the Maui Electric-Lane'i Diesel Operator was in the control room.

LSR possible output data is not available. Therefore, Maui Electric assumes LSR is curtailed if the LSR curtailment set point is less than 1,200 kW and LSR's output is within 50 kW of the curtailment set point.

Hawai'i Electric Light Company Curtailment Report January 2014

Start Date/Time	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released	Reason for Curtailment
01/21/14 14:17	6.3 MW	01/21/14 14:27	6.3 MW	Tawhiri - Curtailment testing at Tawhiri's request.
01/21/14 14:35	8.5 MW	01/21/14 14:36	8.2 MW	Tawhiri - Curtailment testing at Tawhiri's request.
01/22/14 09:50	19.9 MW	01/22/14 09:57	18.7 MW	Tawhiri - Curtailment testing at Tawhiri's request.
01/22/14 12:56	19.8 MW	01/22/14 13:19	19.5 MW	Tawhiri - High wind curtailment at Tawhiri's request.
01/22/14 14:23	19.8 MW	01/22/14 15:38	17.9 MW	Tawhiri - High wind curtailment at Tawhiri's request.
01/28/14 18:12	18.7 MW	01/29/14 04:57	18.6 MW	Tawhiri - High wind curtailment at Tawhiri's request.