



Dean K. Matsuura
Manager
Regulatory Affairs

August 30, 2013

The Honorable Chair and Members
of the Hawaii Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawaii 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 July 2013 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.

Very truly yours,

Enclosure

cc: Service List

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

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COMMISSION

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 July 31, 2013):

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 Hawaii 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 Hawaii 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 July 31, 2013):

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 July. Maui Electric and Hawaii 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 did not have any under frequency load shed events for the month of July.

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 did not have any demand response activations for system events for the month of July. Maui Electric and Hawaii Electric Light currently do not have demand response programs. Therefore, Attachment 5 is not being provided for this reporting period.

- (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 July 31, 2013):

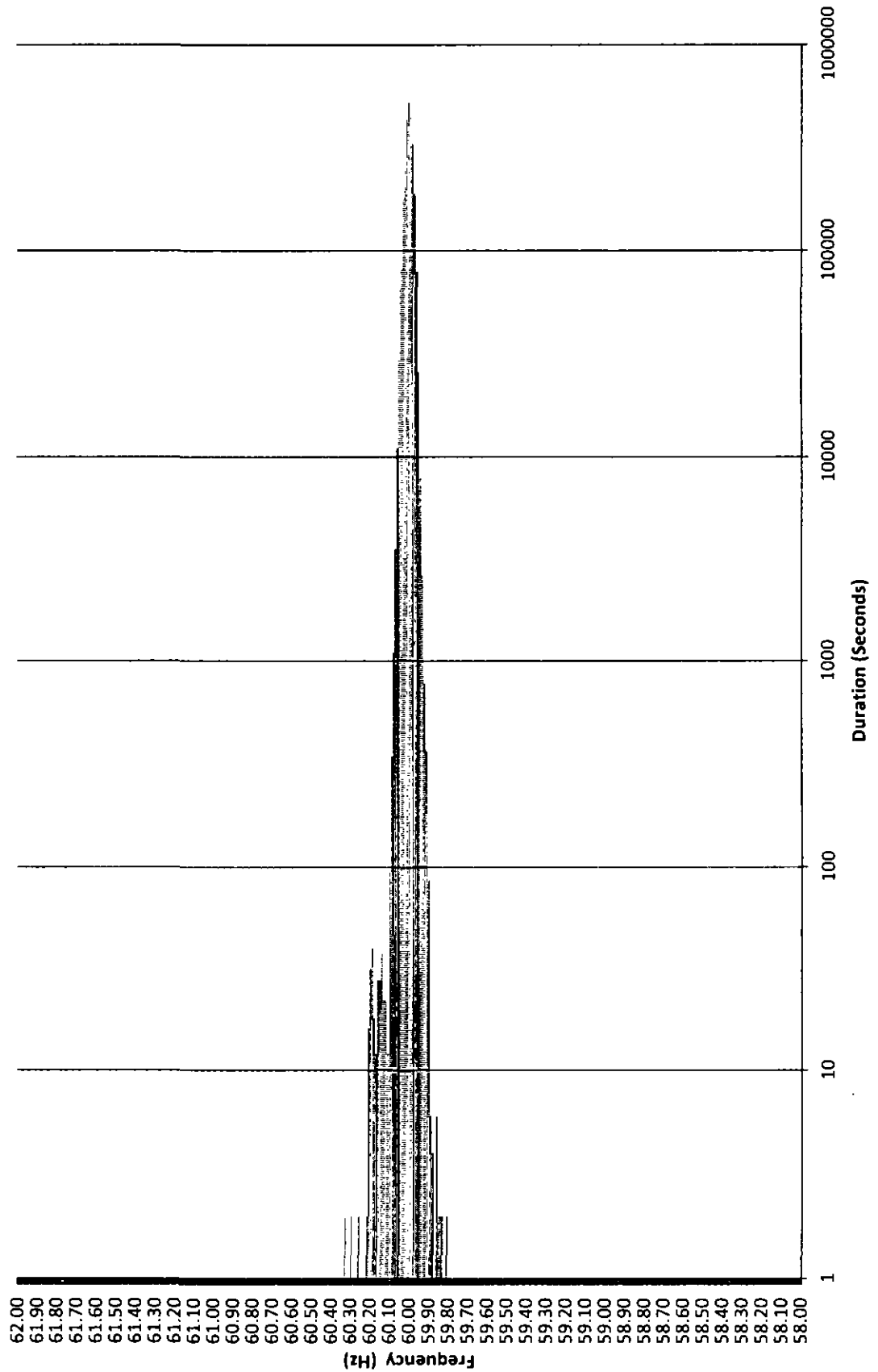
3a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment:

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

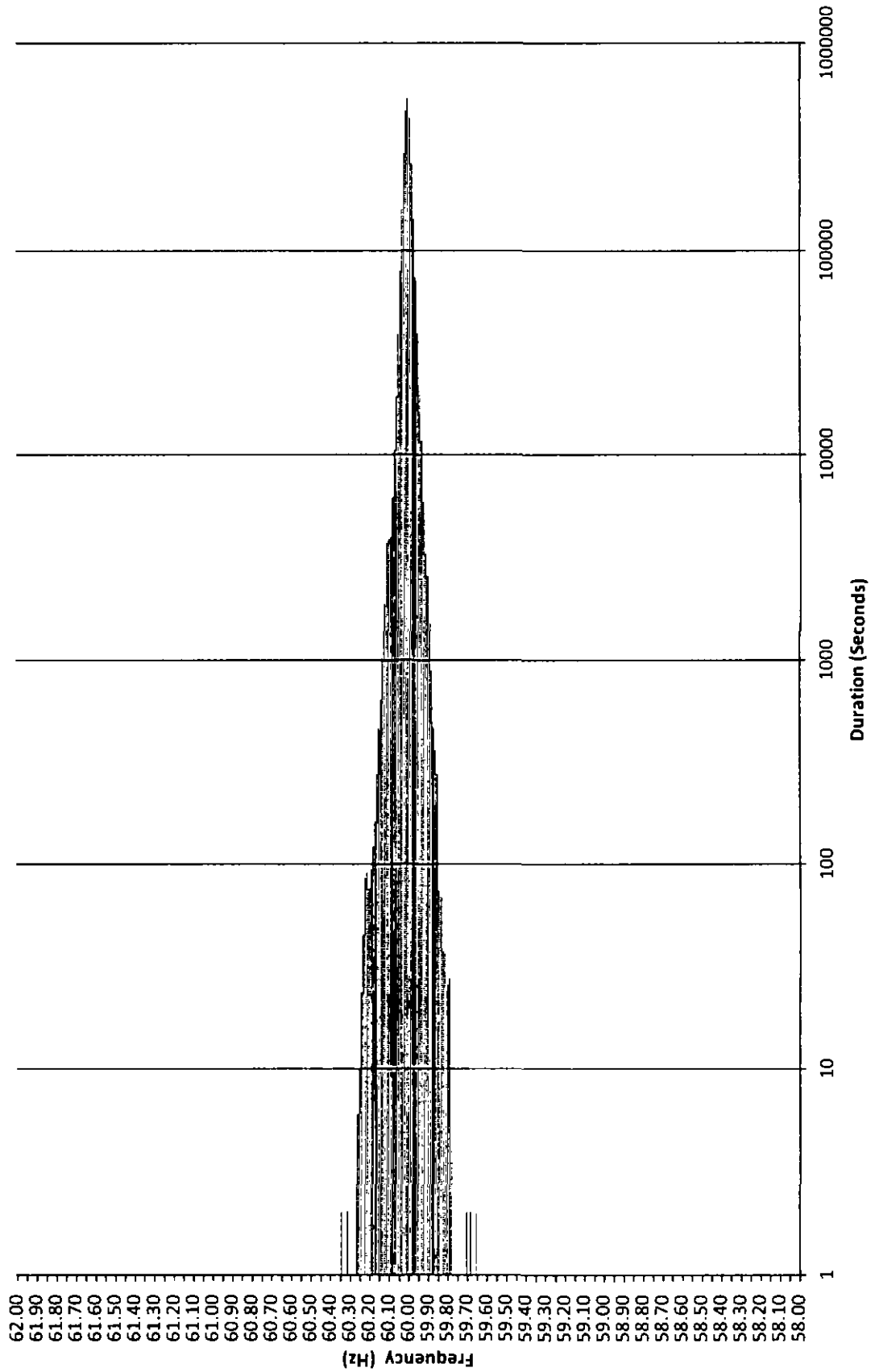
3b) Total MWh of non-dispatchable renewable resources curtailed for the month:

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. Hawaii Electric Light is not providing an estimate of curtailed MWh, as this information is not provided to Hawaii 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.

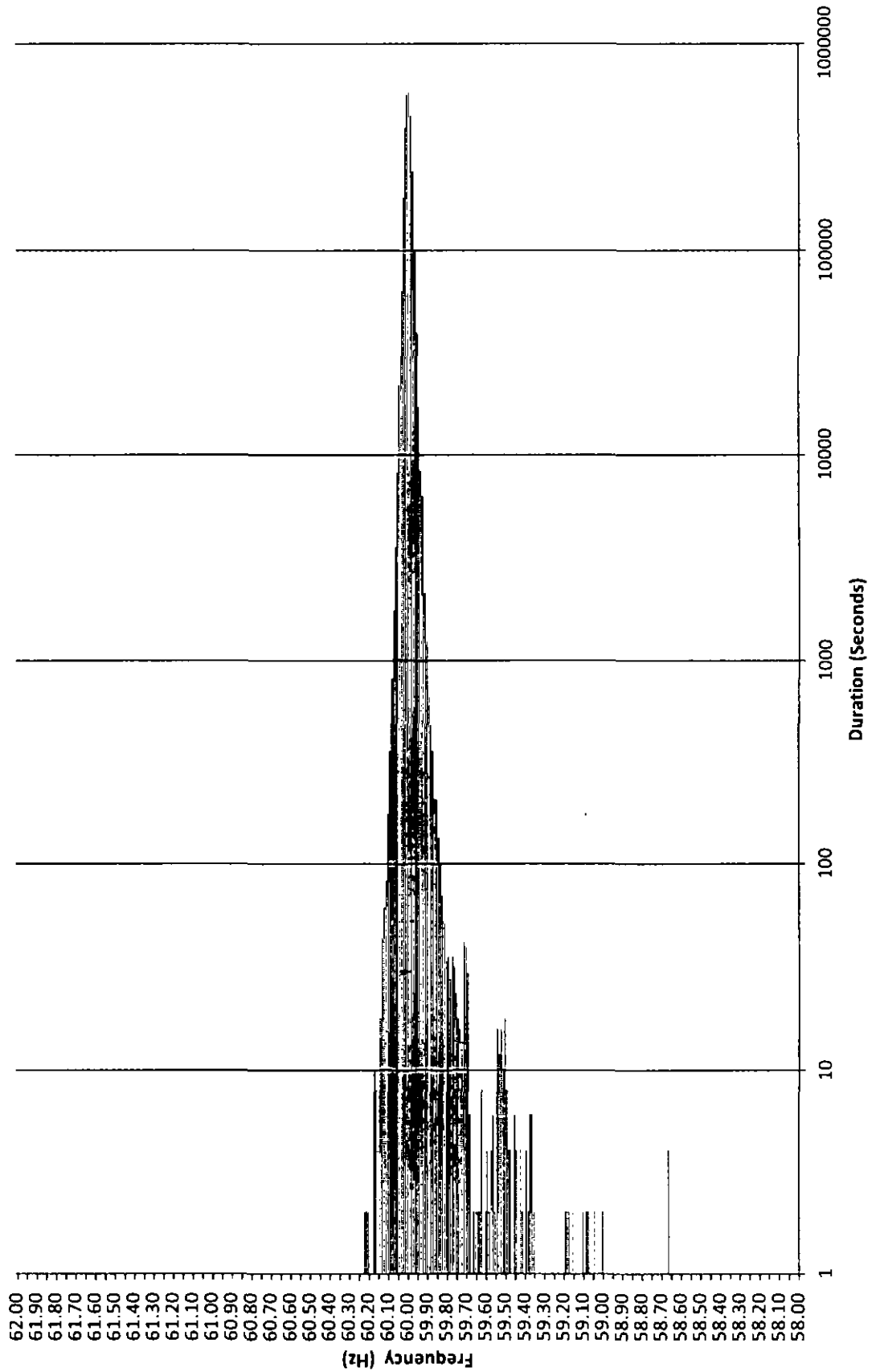
Frequency Distribution Plot - Hawaiian Electric July 2013



Maui Electric Frequency Distribution Plot - Maui July 2013



Frequency Distribution Plot - Hawaii Electric Light July 2013



Hawaiian Electric Frequency Excursion Statistics July 2013		
Data Rounded to the nearest	<59.95 Hz	>60.05 Hz
Number of Excursions	1218	1313
Maximum Duration (sec)	512	462
Maximum Deviation (Hz)	59.807	60.334
Total Duration of Excursions (sec)	20798	26494

Maui Electric Frequency Excursion Statistics July 2013		
	<59.95 Hz	>60.05 Hz
Number of Excursions	7176	5824
Maximum Duration (sec)	490	1588
Maximum Deviation (Hz)	59.64648	60.337
Total Duration of Excursions (sec)	65296	64456

Hawaii Electric Light Frequency Excursion Statistics July 2013		
	<59.95 Hz	>60.05 Hz
Number of Excursions	7161	1818
Maximum Duration (sec)	482	56
Maximum Deviation (Hz)	58.65527	60.21777
Total Duration of Excursions (sec)	53594	10194

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Hawaiian Electric Curtailment Report July 2013

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
07/05/13 05:29	0.0	0.00	07/05/13 07:15	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/05/13 07:15	2.5	0.00	07/07/13 20:54	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/11/13 06:54	0.0	9.00	07/11/13 09:11	0	*	Makai	Pole replacement on Koolau-Kahuku 46kV line
07/11/13 16:38	0.0	9.40	07/11/13 17:35	0	*	Makai	Pole replacement on Koolau-Kahuku 46kV line
07/12/13 05:35	0.0	0.00	07/12/13 07:18	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/12/13 07:18	2.5	0.00	07/14/13 17:35	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/14/13 17:35	0.0	2.10	07/14/13 19:08	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/18/13 06:41	0.0	29.00	07/18/13 08:14	0	*	Mauka	Equipment replacement at Kawailoa Makai substation
07/18/13 06:41	0.0	1.00	07/18/13 16:57	0	*	Makai	Equipment replacement at Kawailoa Makai substation
07/18/13 10:27	0.0	29.00	07/18/13 16:58	0	*	Mauka	Equipment replacement at Kawailoa Makai substation
07/19/13 05:00	0.0	0.00	07/19/13 06:56	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/19/13 06:56	2.5	0.00	07/21/13 16:28	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/21/13 16:28	0.0	2.25	07/21/13 17:44	0	*	KL52	Kahe-Standard Oil 2 line clearance required for 138kV structure replacement
07/26/13 06:01	0.0	0.00	07/26/13 10:24	0	*	KL52	Kahe-Standard Oil 2 line clearance required for shield wire replacement
07/26/13 10:24	2.5	0.00	07/28/13 17:12	0	*	KL52	Kahe-Standard Oil 2 line clearance required for shield wire replacement
07/28/13 17:12	0.0	2.30	07/28/13 18:31	0	*	KL52	Kahe-Standard Oil 2 line clearance required for shield wire replacement
07/25/13 05:52	0.0	0.00	07/25/13 06:28	0	*	Mauka	Waiialua Tsf 2 installation
07/25/13 05:53	0.0	0.00	07/25/13 17:47	0	*	Makai	Waiialua Tsf 2 installation
07/25/13 17:03	0.0	5.10	07/28/13 17:46	0	*	Mauka	Waiialua Tsf 2 installation
07/30/13 08:38	0.0	0.00	07/30/13 08:52	0	*	Makai	Waiialua Tsf 2 installation
07/30/13 08:38	0.0	1.30	07/30/13 08:52	0	*	Mauka	Waiialua Tsf 2 installation
07/31/13 06:02	0.0	5.30	07/31/13 07:13	0	*	Makai	Pole replacement on Koolau-Kahuku 46kV line
07/31/13 16:53	0.0	11.10	07/31/13 18:34	0	*	Makai	Pole replacement on Koolau-Kahuku 46kV line/Communication system problems
07/31/13 16:53	0.0	24.90	07/31/13 17:34	0	*	Mauka	Communication system problems resulting in loss of Direct Transfer Trip scheme

KL52 = Kalaheo Solar 2 PV Farm
 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 HECO does not make any representations as to its accuracy.
 * Data has not been provided by IPP.

Maul Electric - Maul Curtailment Report July 2013

Start Date and Time	Duration	#P Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reason for Curtailment
7/1/2013 0:01	6:37	KWPII	77 198	20 708	AGC MAVG - calculated
7/1/2013 0:47	0:01	AWE	0 003	0 200	AGC MAVG - calculated
7/1/2013 2:22	0:01	AWE	0 003	0 200	AGC MAVG - calculated
7/1/2013 4:57	0:02	AWE	0 007	0 200	AGC MAVG - calculated
7/1/2013 6:39	0:02	KWPII	0 015	20 708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 6:42	0:02	KWPII	0 014	20 708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 7:14	0:01	KWPII	0 007	20 707	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 7:39	0:01	AWE	0 003	0 200	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 8:07	0:01	AWE	0 005	0 300	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 8:28	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 9:22	0:01	AWE	0 002	0 200	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 9:37	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 9:42	0:01	AWE	0 002	0 100	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 9:52	0:01	KWPII	0 000	20 323	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 9:54	0:03	KWPII	0 035	20 415	AGC MAVG - calculated and Good Engineering and Operating Practices
7/1/2013 11:36	0:01	AWE	0 005	0 300	AGC MAVG - calculated
7/1/2013 11:40	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/1/2013 11:48	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/1/2013 11:51	0:01	AWE	0 003	0 200	AGC MAVG - calculated
7/1/2013 13:46	0:02	KWPII	0 049	20 023	AGC MAVG - calculated
7/1/2013 13:49	0:02	KWPII	0 041	20 253	AGC MAVG - calculated
7/1/2013 13:52	0:06	KWPII	0 275	20 590	AGC MAVG - calculated
7/1/2013 13:54	0:01	KWPII	0 026	20 142	AGC MAVG - calculated
7/1/2013 14:01	0:10	KWPII	0 251	20 699	AGC MAVG - calculated
7/1/2013 14:12	0:01	KWPII	0 035	20 874	AGC MAVG - calculated
7/1/2013 14:14	0:08	KWPII	0 244	20 676	AGC MAVG - calculated
7/1/2013 14:24	0:20	KWPII	1 391	20 681	AGC MAVG - calculated
7/1/2013 14:45	0:09	KWPII	0 507	20 708	AGC MAVG - calculated
7/1/2013 14:55	0:01	KWPII	0 011	20 632	AGC MAVG - calculated
7/1/2013 14:57	0:01	KWPII	0 018	20 680	AGC MAVG - calculated
7/1/2013 14:59	0:01	KWPII	0 005	20 651	AGC MAVG - calculated
7/1/2013 15:17	0:01	KWPII	0 007	20 668	AGC MAVG - calculated
7/1/2013 15:57	0:03	KWPII	0 026	20 667	AGC MAVG - calculated
7/1/2013 16:06	0:11	KWPII	0 079	20 664	AGC MAVG - calculated
7/1/2013 16:18	0:01	KWPII	0 003	20 564	AGC MAVG - calculated
7/1/2013 16:21	0:04	KWPII	0 024	20 603	AGC MAVG - calculated
7/1/2013 16:26	0:04	KWPII	0 041	20 704	AGC MAVG - calculated
7/1/2013 16:42	0:04	KWPII	0 026	20 703	AGC MAVG - calculated
7/1/2013 16:48	0:01	KWPII	0 007	20 708	AGC MAVG - calculated
7/1/2013 16:51	0:04	KWPII	0 044	20 708	AGC MAVG - calculated
7/1/2013 18:13	0:01	KWPII	0 001	20 842	AGC MAVG - calculated
7/1/2013 22:53	0:02	KWPII	0 040	18 045	AGC MAVG - calculated
7/1/2013 22:56	0:03	KWPII	0 054	18 157	AGC MAVG - calculated
7/1/2013 23:00	5:45	KWPII	84 815	20 700	AGC MAVG - calculated
7/2/2013 0:29	0:01	AWE	0 007	0 800	AGC MAVG - calculated
7/2/2013 2:23	0:48	AWE	4 477	1 400	AGC MAVG - entered - Excess Energy
7/2/2013 3:49	0:28	AWE	0 253	1 100	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
7/2/2013 4:21	0:04	AWE	0 030	2 100	AGC MAVG - calculated
7/2/2013 4:28	0:01	AWE	0 009	2 700	AGC MAVG - calculated
7/2/2013 4:33	0:04	AWE	0 021	4 000	AGC MAVG - calculated
7/2/2013 4:42	0:01	AWE	0 001	5 600	AGC MAVG - calculated
7/2/2013 4:50	1:20	KWPII	12 400	20 080	AGC MAVG - calculated
7/2/2013 4:51	0:01	AWE	0 010	7 600	AGC MAVG - calculated
7/2/2013 4:55	0:01	AWE	0 001	6 800	AGC MAVG - calculated
7/2/2013 4:57	0:01	AWE	0 002	8 200	AGC MAVG - calculated
7/2/2013 9:11	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/2/2013 10:34	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/2/2013 18:00	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/2/2013 21:06	0:01	KWPII	0 003	20 701	AGC MAVG - calculated
7/2/2013 21:34	0:25	KWPII	0 828	20 702	AGC MAVG - calculated
7/2/2013 22:00	0:07	KWPII	0 126	20 400	AGC MAVG - calculated
7/2/2013 22:14	6:52	KWPII	106 496	20 707	AGC MAVG - calculated
7/3/2013 0:26	0:55	AWE	3 937	21 000	AGC MAVG - calculated
7/3/2013 1:26	0:01	AWE	0 007	6 300	AGC MAVG - calculated
7/3/2013 1:33	0:02	AWE	0 006	5 700	AGC MAVG - calculated
7/3/2013 1:36	0:01	AWE	0 001	5 300	AGC MAVG - calculated
7/3/2013 1:40	0:03	AWE	0 014	4 300	AGC MAVG - calculated
7/3/2013 1:44	0:04	AWE	0 048	4 100	AGC MAVG - calculated
7/3/2013 1:50	0:11	AWE	6 907	16 100	AGC MAVG - calculated
7/3/2013 2:52	0:11	AWE	0 300	7 100	AGC MAVG - calculated
7/3/2013 3:04	0:01	AWE	0 017	6 700	AGC MAVG - calculated
7/3/2013 3:06	0:07	AWE	0 156	9 500	AGC MAVG - calculated
7/3/2013 3:14	1:41	AWE	9 713	18 700	AGC MAVG - calculated
7/3/2013 4:57	0:05	AWE	0 081	13 000	AGC MAVG - calculated
7/3/2013 5:08	0:40	KWPII	5 565	20 517	AGC MAVG - calculated
7/3/2013 5:08	0:01	AWE	0 002	10 500	AGC MAVG - calculated
7/3/2013 5:49	0:18	KWPII	0 877	19 069	AGC MAVG - calculated
7/3/2013 6:08	0:03	KWPII	0 075	20 124	AGC MAVG - calculated
7/3/2013 6:17	0:05	KWPII	0 023	19 953	AGC MAVG - calculated
7/3/2013 6:24	0:02	KWPII	0 039	19 484	AGC MAVG - calculated
7/3/2013 7:00	0:03	KWPII	0 071	17 479	AGC MAVG - calculated
7/3/2013 7:07	0:02	KWPII	0 026	17 392	AGC MAVG - calculated
7/3/2013 7:22	0:01	KWPII	0 015	16 514	AGC MAVG - calculated
7/3/2013 7:26	0:01	KWPII	0 009	16 597	AGC MAVG - calculated
7/3/2013 7:45	0:02	KWPII	0 032	18 620	AGC MAVG - calculated
7/3/2013 7:48	0:02	KWPII	0 016	17 705	AGC MAVG - calculated
7/3/2013 7:53	0:06	KWPII	0 148	18 284	AGC MAVG - calculated
7/3/2013 23:41	0:06	KWPII	0 267	16 564	AGC MAVG - calculated
7/3/2013 23:49	0:01	KWPII	0 002	14 474	AGC MAVG - calculated
7/4/2013 1:38	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/4/2013 4:43	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/4/2013 6:51	0:01	AWE	0 003	0 300	AGC MAVG - calculated
7/4/2013 16:53	0:01	KWP	0 001	0 032	AGC MAVG - calculated
7/4/2013 23:06	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/4/2013 23:58	0:01	AWE	0 003	0 200	AGC MAVG - calculated
7/5/2013 0:06	0:01	KWP	0 001	0 032	AGC MAVG - calculated
7/5/2013 0:47	0:01	KWP	0 000	0 018	AGC MAVG - calculated
7/5/2013 0:49	0:01	KWP	0 000	0 018	AGC MAVG - calculated
7/5/2013 1:17	0:01	KWP	0 000	0 048	AGC MAVG - calculated
7/5/2013 1:24	0:01	KWP	0 001	0 032	AGC MAVG - calculated
7/5/2013 1:27	0:01	KWP	0 001	0 032	AGC MAVG - calculated
7/5/2013 1:40	0:01	AWE	0 005	0 300	AGC MAVG - calculated
7/5/2013 8:15	0:01	KWPII	0 000	0 005	AGC MAVG - calculated
7/5/2013 14:55	0:01	KWP	0 000	0 048	AGC MAVG - calculated
7/5/2013 21:23	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/5/2013 21:27	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/6/2013 6:08	0:01	AWE	0 002	0 100	AGC MAVG - calculated
7/6/2013 6:27	0:01	KWPII	0 000	0 015	AGC MAVG - calculated
7/6/2013 10:53	0:01	KWPII	0 000	0 029	AGC MAVG - calculated
7/6/2013 15:17	0:01	KWPII	0 000	0 001	AGC MAVG - calculated
7/6/2013 20:16	0:01	KWPII	0 000	0 004	AGC MAVG - calculated
7/6/2013 20:29	0:01	KWPII	0 001	0 084	AGC MAVG - calculated

Maul Electric - Maui Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reason for Curtailment
7/7/2013 3:42	0:01	KWPP	0.001	0.032	AGC MAVG - calculated
7/7/2013 14:01	0:01	KWPHI	0.003	0.185	AGC MAVG - calculated
7/7/2013 15:08	0:01	KWPP	0.001	0.080	AGC MAVG - calculated and Good Engineering and Operating Practices
7/7/2013 15:13	0:01	KWPP	0.000	0.018	AGC MAVG - calculated
7/7/2013 15:59	0:02	KWPP	0.004	0.208	AGC MAVG - calculated
7/7/2013 16:02	0:01	KWPP	0.000	0.018	AGC MAVG - calculated
7/7/2013 17:04	0:01	KWPP	0.000	0.018	AGC MAVG - calculated
7/7/2013 17:29	0:01	KWPHI	0.000	0.018	AGC MAVG - calculated
7/7/2013 18:21	0:01	KWPHI	0.000	0.010	AGC MAVG - calculated
7/7/2013 18:30	0:01	KWPHI	0.000	0.006	AGC MAVG - calculated
7/7/2013 19:04	0:01	KWPHI	0.000	0.029	AGC MAVG - calculated
7/7/2013 19:10	0:01	KWPHI	0.000	0.018	AGC MAVG - calculated
7/7/2013 19:34	0:01	KWPHI	0.003	0.205	AGC MAVG - calculated
7/8/2013 0:31	0:01	KWPP	0.001	0.032	AGC MAVG - calculated
7/8/2013 1:03	0:01	KWPHI	0.000	0.029	AGC MAVG - calculated
7/8/2013 1:46	0:01	KWPHI	0.000	5.184	AGC MAVG - calculated
7/8/2013 3:23	0:08	KWPHI	0.259	6.483	AGC MAVG - calculated
7/8/2013 3:32	1:13	KWPHI	5.378	14.699	AGC MAVG - calculated
7/8/2013 4:48	0:01	KWPHI	0.025	12.073	AGC MAVG - calculated
7/8/2013 4:48	0:02	KWPHI	0.001	12.442	AGC MAVG - calculated
7/8/2013 6:37	0:05	KWPHI	0.049	13.852	AGC MAVG - calculated
7/8/2013 6:44	0:02	KWPHI	0.029	13.412	AGC MAVG - calculated
7/8/2013 6:54	0:03	KWPHI	0.103	11.889	AGC MAVG - calculated
7/8/2013 9:12	0:02	KWPP	0.001	0.032	AGC MAVG - calculated and Good Engineering and Operating Practices
7/8/2013 9:16	0:01	KWPP	0.004	0.224	AGC MAVG - calculated and Good Engineering and Operating Practices
7/8/2013 9:48	0:01	KWPHI	0.000	0.023	AGC MAVG - calculated
7/8/2013 10:03	0:01	KWPHI	0.000	0.001	AGC MAVG - calculated
7/8/2013 10:05	0:01	KWPHI	0.000	0.028	AGC MAVG - calculated
7/8/2013 22:11	0:01	KWPP	0.001	0.178	AGC MAVG - calculated
7/8/2013 22:39	0:01	KWPHI	0.003	0.173	AGC MAVG - calculated
7/8/2013 23:59	0:02	KWPHI	0.046	7.229	AGC MAVG - calculated
7/9/2013 0:04	1:08	KWPHI	12.372	18.841	AGC MAVG - calculated
7/9/2013 0:36	0:01	AWE	0.005	20.700	AGC MAVG - calculated
7/9/2013 0:44	0:01	AWE	0.001	21.000	AGC MAVG - calculated
7/9/2013 0:48	0:02	AWE	0.009	21.000	AGC MAVG - calculated
7/9/2013 0:52	0:01	AWE	0.001	20.800	AGC MAVG - calculated
7/9/2013 0:56	0:01	AWE	0.003	20.800	AGC MAVG - calculated
7/9/2013 0:58	0:05	AWE	0.085	21.000	AGC MAVG - calculated
7/9/2013 1:05	0:01	AWE	0.008	21.000	AGC MAVG - calculated
7/9/2013 1:12	1:21	KWPHI	18.063	19.509	AGC MAVG - calculated
7/9/2013 1:19	0:03	AWE	0.038	21.000	AGC MAVG - calculated
7/9/2013 2:24	0:04	AWE	0.074	21.000	AGC MAVG - calculated
7/9/2013 2:33	0:01	AWE	0.000	21.000	AGC MAVG - calculated
7/9/2013 2:34	0:23	KWPHI	3.097	11.888	AGC MAVG - calculated
7/9/2013 2:36	0:12	AWE	0.322	21.000	AGC MAVG - calculated
7/9/2013 2:59	1:18	KWPHI	12.945	17.457	AGC MAVG - calculated
7/9/2013 3:08	0:04	AWE	0.087	21.000	AGC MAVG - calculated
7/9/2013 3:19	0:49	AWE	3.977	21.000	AGC MAVG - calculated
7/9/2013 4:17	0:45	KWPHI	10.073	17.858	AGC MAVG - calculated
7/9/2013 4:17	0:01	AWE	0.006	21.000	AGC MAVG - calculated
7/9/2013 4:19	0:01	AWE	0.004	21.000	AGC MAVG - calculated
7/9/2013 4:24	0:04	AWE	0.059	21.000	AGC MAVG - calculated
7/9/2013 4:29	0:10	AWE	0.187	21.000	AGC MAVG - calculated
7/9/2013 4:40	0:01	AWE	0.005	21.000	AGC MAVG - calculated
7/9/2013 4:43	0:09	AWE	0.109	21.000	AGC MAVG - calculated
7/9/2013 4:53	0:02	AWE	0.035	21.000	AGC MAVG - calculated
7/9/2013 5:04	3:05	KWPHI	47.546	19.887	AGC MAVG - calculated
7/9/2013 5:08	0:02	AWE	0.012	21.000	AGC MAVG - calculated
7/9/2013 5:10	0:03	AWE	0.030	21.000	AGC MAVG - calculated
7/9/2013 5:18	0:01	AWE	0.001	20.000	AGC MAVG - calculated
7/9/2013 5:22	0:01	AWE	0.006	20.800	AGC MAVG - calculated
7/9/2013 5:27	0:02	AWE	0.028	21.000	AGC MAVG - calculated
7/9/2013 5:48	0:01	AWE	0.000	20.800	AGC MAVG - calculated
7/9/2013 5:50	0:02	AWE	0.013	19.900	AGC MAVG - calculated
7/9/2013 5:56	1:51	AWE	11.549	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 7:48	0:04	AWE	0.115	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 7:54	0:01	AWE	0.008	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 7:57	0:01	AWE	0.003	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 8:00	0:03	AWE	0.020	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 8:04	0:01	AWE	0.016	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and Testing
7/9/2013 8:11	0:30	KWPHI	9.084	19.588	AGC MAVG - entered - Maintaining Regulating Reserves, Testing, and AGC MAVG - calculated
7/9/2013 8:26	0:01	AWE	0.002	21.000	AGC MAVG - calculated and Testing
7/9/2013 8:34	0:01	AWE	0.009	21.000	AGC MAVG - calculated and Testing
7/9/2013 8:36	0:09	AWE	0.137	21.000	AGC MAVG - calculated and Testing
7/9/2013 8:52	8:48	KWPHI	127.511	20.707	AGC MAVG - calculated and Testing
7/9/2013 9:16	0:01	AWE	0.009	21.000	AGC MAVG - calculated and Testing
7/9/2013 9:18	0:02	AWE	0.019	21.000	AGC MAVG - calculated and Testing
7/9/2013 10:22	0:01	AWE	0.004	21.000	AGC MAVG - calculated and Testing
7/9/2013 10:29	0:39	AWE	0.769	21.000	AGC MAVG - calculated and Testing
7/9/2013 11:09	0:45	AWE	1.139	21.000	AGC MAVG - calculated and Testing
7/9/2013 11:59	0:02	AWE	0.016	21.000	AGC MAVG - calculated and Testing
7/9/2013 11:59	0:04	AWE	0.037	21.000	AGC MAVG - calculated and Testing
7/9/2013 12:04	0:42	AWE	1.519	21.000	AGC MAVG - calculated and Testing
7/9/2013 12:49	0:01	AWE	0.004	21.000	AGC MAVG - calculated and Testing
7/9/2013 13:09	0:20	AWE	0.421	21.000	AGC MAVG - calculated and Testing
7/9/2013 13:34	0:05	AWE	0.040	21.000	AGC MAVG - calculated and Testing
7/9/2013 13:40	0:01	AWE	0.005	21.000	AGC MAVG - calculated and Testing
7/9/2013 13:42	0:04	AWE	0.051	21.000	AGC MAVG - calculated and Testing
7/9/2013 13:47	0:02	AWE	0.011	21.000	AGC MAVG - calculated and Testing
7/9/2013 14:03	1:34	AWE	9.478	21.000	AGC MAVG - calculated and Testing
7/9/2013 15:40	1:32	KWPHI	27.064	20.708	AGC MAVG - calculated and Testing
7/9/2013 15:48	0:03	AWE	0.011	20.000	AGC MAVG - calculated and Testing
7/9/2013 15:51	0:49	AWE	3.540	21.000	AGC MAVG - calculated and Testing
7/9/2013 17:13	6:11	KWPHI	85.170	20.708	AGC MAVG - entered - Maintaining Regulating Reserves, Testing AGC MAVG - calculated, and AGC MAVG - entered - Maintaining Regulating Reserves
7/9/2013 23:26	0:14	KWPHI	3.485	20.708	Maintaining Regulating Reserves
7/9/2013 23:41	1:27	KWPHI	26.393	19.211	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/10/2013 0:16	0:48	AWE	1.376	21.000	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/10/2013 1:10	4:10	KWPHI	76.901	19.211	AGC MAVG - calculated, AGC MAVG - entered, and AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 1:31	2:14	AWE	8.970	21.000	AGC MAVG - calculated
7/10/2013 3:57	1:13	AWE	2.024	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 5:22	0:31	KWPHI	8.828	19.211	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 5:41	0:02	AWE	0.010	20.708	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 5:54	2:28	KWPHI	22.367	19.211	AGC MAVG - entered, AGC MAVG - entered - Maintaining Regulating Reserves, and Testing
7/10/2013 8:16	1:22	AWE	5.495	21.000	Testing, Good Engineering and Operating Practices, and AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 8:39	0:07	AWE	0.208	14.000	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 8:47	0:06	AWE	0.182	14.300	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 9:56	0:34	AWE	1.549	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
7/10/2013 10:32	3:06	KWPHI	22.764	19.211	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/10/2013 12:07	0:02	AWE	0.025	19.800	AGC MAVG - calculated
7/10/2013 12:37	0:01	AWE	0.001	19.500	AGC MAVG - calculated

DOCKET NO. 2011-0206
 ORDER NO. 30371 I.C.(3)(a)&(b)
 ATTACHMENT 6
 PAGE 4 OF 28

Maul Electric - Maui Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reason for Curtailment
7/10/2013 13:47	1:08	AWE	7.347	21.000	AGC MAVG - calculated, Testing, and Good Engineering and Operating Practices
7/10/2013 17:41	13:18	KWPII	184.284	19.211	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered, AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/10/2013 23:03	0:21	AWE	0.527	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
7/11/2013 0:37	0:01	AWE	0.003	21.000	AGC MAVG - calculated
7/11/2013 0:59	5:34	AWE	34.685	21.000	AGC MAVG - calculated, AGC MAVG - entered, AGC MAVG - entered - Excess Energy, AGC MAVG - entered and AGC MAVG - calculated
7/11/2013 8:36	0:01	AWE	0.008	20.300	AGC MAVG - calculated
7/11/2013 8:38	0:03	AWE	0.009	19.900	AGC MAVG - calculated
7/11/2013 8:47	0:01	AWE	0.002	19.900	AGC MAVG - calculated
7/11/2013 6:49	0:05	AWE	0.131	20.800	AGC MAVG - calculated
7/11/2013 6:55	0:04	AWE	0.161	21.000	AGC MAVG - calculated and AGC MAVG - entered
7/11/2013 7:00	16:21	KWPII	235.648	20.708	AGC MAVG - entered, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/11/2013 12:11	0:07	AWE	0.139	20.000	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/11/2013 12:19	0:01	AWE	0.009	18.300	AGC MAVG - calculated
7/11/2013 12:22	0:05	AWE	0.039	19.900	AGC MAVG - calculated
7/11/2013 12:33	0:45	AWE	0.853	19.900	AGC MAVG - calculated
7/11/2013 13:20	0:01	AWE	0.005	19.500	AGC MAVG - calculated
7/11/2013 13:23	0:04	AWE	0.023	19.700	AGC MAVG - calculated
7/11/2013 13:28	0:05	AWE	0.034	20.000	AGC MAVG - calculated
7/11/2013 13:34	0:02	AWE	0.015	20.000	AGC MAVG - calculated
7/11/2013 13:37	0:01	AWE	0.001	20.000	AGC MAVG - calculated
7/11/2013 13:38	0:01	AWE	0.002	20.000	AGC MAVG - calculated
7/11/2013 13:41	0:01	AWE	0.000	20.000	AGC MAVG - calculated
7/11/2013 13:43	0:01	AWE	0.001	19.900	AGC MAVG - calculated
7/11/2013 13:45	0:01	AWE	0.001	19.800	AGC MAVG - calculated
7/11/2013 13:47	0:01	AWE	0.003	19.800	AGC MAVG - calculated
7/11/2013 14:03	0:04	AWE	0.010	21.000	AGC MAVG - calculated
7/11/2013 14:18	0:04	AWE	0.035	21.000	AGC MAVG - calculated
7/11/2013 14:23	0:03	AWE	0.028	21.000	AGC MAVG - calculated
7/11/2013 14:27	0:03	AWE	0.040	21.000	AGC MAVG - calculated
7/11/2013 14:32	0:03	AWE	0.028	21.000	AGC MAVG - calculated
7/11/2013 14:36	0:01	AWE	0.006	21.000	AGC MAVG - calculated
7/11/2013 14:57	0:01	AWE	0.003	21.000	AGC MAVG - calculated
7/11/2013 22:56	0:03	AWE	0.002	19.100	AGC MAVG - entered - Maintaining Regulating Reserves
7/11/2013 23:05	0:02	AWE	0.021	17.000	AGC MAVG - entered - Maintaining Regulating Reserves
7/11/2013 23:11	0:01	AWE	0.002	17.100	AGC MAVG - entered - Maintaining Regulating Reserves
7/11/2013 23:23	1:00	KWPII	19.767	20.808	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - entered
7/12/2013 0:28	4:23	KWPII	68.600	20.533	AGC MAVG - entered and AGC MAVG - calculated
7/12/2013 0:30	0:01	AWE	0.006	18.900	AGC MAVG - entered
7/12/2013 0:33	0:23	AWE	0.573	18.400	AGC MAVG - entered
7/12/2013 1:01	0:01	AWE	0.011	18.200	AGC MAVG - entered
7/12/2013 1:04	0:01	AWE	0.008	18.300	AGC MAVG - entered
7/12/2013 1:06	0:03	AWE	0.031	19.600	AGC MAVG - entered
7/12/2013 1:10	0:48	AWE	3.371	21.000	AGC MAVG - entered
7/12/2013 1:59	2:42	AWE	17.308	20.800	AGC MAVG - entered and AGC MAVG - calculated
7/12/2013 4:50	0:26	KWPII	1.919	9.830	AGC MAVG - calculated
7/12/2013 4:54	0:01	AWE	0.001	18.700	AGC MAVG - calculated
7/12/2013 4:58	0:01	AWE	0.007	18.800	AGC MAVG - calculated
7/12/2013 5:00	0:03	AWE	0.015	18.600	AGC MAVG - calculated
7/12/2013 5:05	0:02	AWE	0.002	17.200	AGC MAVG - calculated
7/12/2013 5:10	0:02	AWE	0.009	16.600	AGC MAVG - calculated
7/12/2013 5:18	0:03	KWPII	8.108	10.178	AGC MAVG - calculated
7/12/2013 5:23	0:47	KWPII	8.632	18.138	AGC MAVG - calculated
7/12/2013 5:32	0:01	AWE	0.006	16.300	AGC MAVG - calculated
7/12/2013 5:43	0:12	AWE	0.186	18.200	AGC MAVG - calculated
7/12/2013 5:57	0:02	AWE	0.003	19.200	AGC MAVG - calculated
7/12/2013 6:12	1:23	KWPII	24.481	20.632	AGC MAVG - calculated
7/12/2013 6:27	0:01	AWE	0.002	20.400	AGC MAVG - calculated
7/12/2013 6:29	0:01	AWE	0.003	20.100	AGC MAVG - calculated
7/12/2013 6:32	0:14	AWE	0.536	19.700	AGC MAVG - calculated
7/12/2013 6:47	0:01	AWE	0.004	14.900	AGC MAVG - calculated
7/12/2013 6:49	0:01	AWE	0.009	15.600	AGC MAVG - calculated
7/12/2013 6:51	0:01	AWE	0.011	16.300	AGC MAVG - calculated
7/12/2013 6:53	0:01	AWE	0.003	15.900	AGC MAVG - calculated
7/12/2013 7:01	0:01	AWE	0.003	18.100	AGC MAVG - calculated
7/12/2013 7:04	0:01	AWE	0.007	19.600	AGC MAVG - calculated
7/12/2013 7:07	0:01	AWE	0.009	17.700	AGC MAVG - calculated
7/12/2013 7:09	0:01	AWE	0.013	18.300	AGC MAVG - calculated
7/12/2013 7:16	0:02	AWE	0.001	20.200	AGC MAVG - calculated
7/12/2013 7:20	0:01	AWE	0.000	20.600	AGC MAVG - calculated
7/12/2013 7:23	0:01	AWE	0.001	20.000	AGC MAVG - calculated
7/12/2013 7:27	0:01	AWE	0.009	20.700	AGC MAVG - calculated
7/12/2013 7:31	0:01	AWE	0.005	20.700	AGC MAVG - calculated
7/12/2013 7:33	0:02	AWE	0.005	20.200	AGC MAVG - calculated
7/12/2013 7:37	0:27	KWPII	8.296	19.182	AGC MAVG - entered
7/12/2013 8:06	3:31	KWPII	38.202	19.097	AGC MAVG - entered, AGC MAVG - entered - Maintaining Regulating Reserves, Good Engineering and Operating Practices, and AGC MAVG - calculated
7/12/2013 11:36	0:31	KWPII	2.068	16.972	AGC MAVG - calculated
7/12/2013 12:10	2:18	KWPII	15.299	19.143	AGC MAVG - calculated
7/12/2013 14:30	0:04	KWPII	0.068	16.686	AGC MAVG - calculated
7/12/2013 14:39	1:23	KWPII	9.365	20.893	AGC MAVG - calculated
7/12/2013 16:03	0:01	KWPII	0.001	20.671	AGC MAVG - calculated
7/12/2013 16:05	1:09	KWPII	6.443	20.676	AGC MAVG - calculated
7/12/2013 17:19	0:03	KWPII	0.044	14.184	AGC MAVG - calculated
7/12/2013 18:21	0:59	KWPII	4.263	20.056	AGC MAVG - calculated
7/12/2013 20:48	0:01	KWPII	0.007	14.978	AGC MAVG - calculated
7/12/2013 20:48	0:01	KWPII	0.015	18.729	AGC MAVG - calculated
7/12/2013 20:50	0:02	KWPII	0.076	17.601	AGC MAVG - calculated
7/12/2013 20:53	0:34	KWPII	5.505	18.056	AGC MAVG - calculated
7/12/2013 21:08	0:02	AWE	0.007	15.000	AGC MAVG - calculated
7/12/2013 21:12	0:02	AWE	0.007	15.100	AGC MAVG - calculated
7/12/2013 21:30	0:56	KWPII	12.275	19.209	AGC MAVG - calculated
7/12/2013 22:00	0:01	AWE	0.002	14.300	AGC MAVG - calculated
7/12/2013 22:10	0:02	AWE	0.017	14.600	AGC MAVG - calculated
7/12/2013 22:16	0:01	AWE	0.003	11.700	AGC MAVG - calculated
7/12/2013 22:18	0:01	AWE	0.003	11.900	AGC MAVG - calculated
7/12/2013 22:28	0:34	KWPII	10.187	20.526	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - entered
7/12/2013 22:46	0:11	AWE	0.255	14.600	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/12/2013 23:04	2:10	KWPII	33.871	20.691	AGC MAVG - calculated, AGC MAVG - entered, AGC MAVG - entered - Excess Energy, and AGC MAVG - entered
7/12/2013 23:18	0:01	AWE	0.002	12.600	AGC MAVG - calculated
7/13/2013 0:10	0:02	AWE	0.007	8.800	AGC MAVG - calculated
7/13/2013 0:18	0:02	AWE	0.009	10.400	AGC MAVG - calculated
7/13/2013 1:00	0:01	AWE	0.006	9.800	AGC MAVG - entered
7/13/2013 1:15	7:25	KWPII	145.567	20.708	AGC MAVG - calculated, AGC MAVG - entered - Excess Energy, and AGC MAVG - calculated
7/13/2013 1:25	0:01	AWE	0.008	7.400	AGC MAVG - entered - Excess Energy
7/13/2013 1:28	0:08	AWE	0.084	10.500	AGC MAVG - entered - Excess Energy
7/13/2013 1:39	0:01	AWE	0.000	6.000	AGC MAVG - entered - Excess Energy

Maul Electric - Maul Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reason for Curtailment
7/13/2013 1:47	2:52	AWE	17,532	16,500	AGC MAVG - entered - Excess Energy
7/13/2013 3:31	0:10	KWP	0 072	29 808	AGC MAVG - entered - Excess Energy
7/13/2013 3:42	0:07	KWP	0 069	29 920	AGC MAVG - entered - Excess Energy
7/13/2013 3:50	0:13	KWP	0 129	30 000	AGC MAVG - entered - Excess Energy
7/13/2013 4:41	0:03	AWE	0 017	2 500	AGC MAVG - entered - Excess Energy
7/13/2013 4:45	0:34	AWE	1 997	15 100	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
7/13/2013 5:20	0:32	AWE	1,615	16 600	AGC MAVG - calculated
7/13/2013 5:55	0:24	AWE	1 015	13 400	AGC MAVG - calculated
7/13/2013 6:24	0:01	AWE	0 002	9 100	AGC MAVG - calculated
7/13/2013 6:28	0:01	AWE	0 003	11 200	AGC MAVG - calculated
7/13/2013 6:31	0:08	AWE	0 211	14 100	AGC MAVG - calculated
7/13/2013 6:40	0:03	AWE	0 018	11 300	AGC MAVG - calculated
7/13/2013 6:44	0:04	AWE	0 041	10 900	AGC MAVG - calculated
7/13/2013 6:51	0:06	AWE	0 084	11 000	AGC MAVG - calculated
7/13/2013 7:01	0:14	AWE	0 604	12 500	AGC MAVG - calculated
7/13/2013 7:17	0:04	AWE	0 049	12 100	AGC MAVG - calculated
7/13/2013 7:22	0:01	AWE	0 013	11 600	AGC MAVG - calculated
7/13/2013 7:24	0:03	AWE	0 041	13 000	AGC MAVG - calculated
7/13/2013 7:28	0:47	AWE	1 889	19 800	AGC MAVG - calculated
7/13/2013 8:20	0:03	AWE	0 039	18 700	AGC MAVG - calculated
7/13/2013 8:24	0:03	AWE	0 071	19 500	AGC MAVG - calculated
7/13/2013 8:42	0:05	KWP	0 285	14 747	AGC MAVG - calculated
7/13/2013 8:48	0:01	KWP	0 011	13 041	AGC MAVG - calculated
7/13/2013 9:01	0:01	KWP	0 005	13 479	AGC MAVG - calculated
7/13/2013 9:11	0:01	KWP	0 017	12 378	AGC MAVG - calculated
7/13/2013 9:27	0:01	KWP	0 002	13 060	AGC MAVG - calculated
7/13/2013 9:44	0:09	KWP	0 140	18 180	AGC MAVG - calculated
7/13/2013 9:54	5:57	KWP	53 124	20 406	AGC MAVG - calculated and Testing
7/13/2013 15:55	0:01	KWP	0 017	14 239	AGC MAVG - calculated and Testing
7/13/2013 15:57	0:01	KWP	0 003	14 675	AGC MAVG - calculated and Testing
7/13/2013 16:14	0:24	KWP	1 015	16 393	AGC MAVG - calculated and Testing
7/13/2013 16:39	0:04	KWP	0 249	14 460	AGC MAVG - calculated and Testing
7/13/2013 16:44	0:16	KWP	1 047	16 717	AGC MAVG - calculated and Testing
7/13/2013 17:01	0:02	KWP	0 091	17 785	AGC MAVG - calculated
7/13/2013 17:04	0:01	KWP	0 014	17 606	AGC MAVG - calculated
7/13/2013 17:07	0:02	KWP	0 020	16 208	AGC MAVG - calculated
7/13/2013 17:11	0:01	KWP	0 024	17 632	AGC MAVG - calculated
7/13/2013 17:17	0:02	KWP	0 022	16 688	AGC MAVG - calculated
7/13/2013 17:20	0:02	KWP	0 068	16 213	AGC MAVG - calculated
7/13/2013 19:13	0:01	KWP	0 001	16 015	AGC MAVG - calculated
7/13/2013 20:34	0:01	KWP	0 017	15 437	AGC MAVG - calculated
7/13/2013 20:36	1:09	KWP	4 906	19 685	AGC MAVG - calculated
7/13/2013 21:46	0:47	KWP	3 823	20 372	AGC MAVG - calculated
7/13/2013 22:34	0:03	KWP	0 026	19 638	AGC MAVG - calculated
7/13/2013 22:40	1:33	KWP	17 008	20 446	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/14/2013 0:16	0:05	KWP	0 303	17 501	AGC MAVG - calculated
7/14/2013 0:24	0:02	KWP	0 039	18 171	AGC MAVG - calculated
7/14/2013 0:27	0:01	KWP	0 001	17 022	AGC MAVG - calculated
7/14/2013 0:36	0:02	KWP	0 015	14 462	AGC MAVG - calculated
7/14/2013 0:41	1:33	KWP	6 713	20 408	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/14/2013 2:15	0:07	KWP	0 237	17 560	AGC MAVG - calculated
7/14/2013 2:23	0:24	KWP	1 301	18 359	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 2:53	0:03	KWP	0 047	11 838	AGC MAVG - calculated
7/14/2013 2:59	0:15	KWP	0 356	13 402	AGC MAVG - calculated
7/14/2013 3:15	1:10	KWP	13 068	19 678	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 3:38	0:06	AWE	0 048	8 400	AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 3:47	0:01	AWE	0 003	8 200	AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 3:52	0:01	AWE	0 005	8 300	AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 4:10	0:01	AWE	0 010	10 900	AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 4:28	0:01	KWP	0 006	8 374	AGC MAVG - calculated
7/14/2013 4:31	0:03	KWP	0 091	7 431	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 4:35	0:19	KWP	2 412	11 998	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/14/2013 4:42	0:02	AWE	0 009	12 700	AGC MAVG - entered - Maintaining Regulating Reserves
7/14/2013 4:57	0:55	KWP	7 621	18 728	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/14/2013 5:53	0:19	KWP	0 620	17 602	AGC MAVG - calculated
7/14/2013 6:15	0:07	KWP	0 137	18 038	AGC MAVG - calculated
7/14/2013 6:23	0:04	KWP	0 111	15 792	AGC MAVG - calculated
7/14/2013 6:28	0:02	KWP	0 014	12 073	AGC MAVG - calculated
7/14/2013 6:31	0:02	KWP	0 038	12 821	AGC MAVG - calculated
7/14/2013 6:36	0:01	KWP	0 026	11 652	AGC MAVG - calculated
7/14/2013 7:04	0:01	KWP	0 009	12 212	AGC MAVG - calculated
7/14/2013 14:03	0:01	KWP	0 000	0 016	AGC MAVG - calculated
7/14/2013 16:40	0:01	KWP	0 001	0 053	AGC MAVG - calculated
7/14/2013 22:03	0:29	KWP	1 107	15 927	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/14/2013 22:44	0:02	KWP	0 028	13 363	AGC MAVG - calculated
7/14/2013 22:48	0:01	KWP	0 005	15 689	AGC MAVG - calculated
7/14/2013 22:59	0:01	KWP	0 000	14 359	AGC MAVG - calculated
7/14/2013 23:02	0:07	KWP	0 175	15 876	AGC MAVG - calculated
7/14/2013 23:12	0:02	KWP	0 037	16 584	AGC MAVG - calculated
7/15/2013 1:58	0:01	KWP	0 003	0 176	AGC MAVG - calculated
7/15/2013 2:03	0:05	KWP	0 064	1 712	AGC MAVG - calculated
7/15/2013 2:05	0:03	AWE	0 012	16 200	AGC MAVG - calculated
7/15/2013 2:09	0:09	KWP	0 149	6 944	AGC MAVG - calculated
7/15/2013 13:51	0:01	KWP	0 000	0 016	AGC MAVG - calculated
7/15/2013 15:17	0:01	KWP	0 001	0 032	AGC MAVG - calculated
7/15/2013 16:28	0:01	KWP	0 000	0 004	AGC MAVG - calculated
7/16/2013 2:54	0:02	AWE	0 006	13 700	AGC MAVG - calculated
7/16/2013 2:57	0:01	AWE	0 016	13 700	AGC MAVG - calculated
7/16/2013 2:58	0:14	AWE	0 377	15 300	AGC MAVG - calculated
7/16/2013 2:59	0:01	KWP	0 001	0 065	AGC MAVG - calculated
7/16/2013 3:04	0:08	KWP	0 011	0 123	AGC MAVG - calculated
7/16/2013 5:13	0:02	KWP	0 001	0 018	AGC MAVG - calculated
7/16/2013 6:24	0:42	KWP	5 287	19 259	AGC MAVG - calculated
7/16/2013 7:07	0:02	KWP	0 033	12 432	AGC MAVG - calculated and Operating Conditions on Company's System
7/16/2013 7:34	1:39	KWP	11 627	20 633	Operating Conditions on Company's System AGC MAVG - calculated and Good Engineering and Operating Practices
7/16/2013 9:15	0:05	KWP	0 093	18 039	AGC MAVG - calculated and Good Engineering and Operating Practices
7/16/2013 9:21	0:02	KWP	0 037	18 516	AGC MAVG - calculated and Good Engineering and Operating Practices
7/16/2013 9:24	0:07	KWP	0 283	19 841	AGC MAVG - calculated and Good Engineering and Operating Practices
7/16/2013 9:34	0:05	KWP	0 126	20 101	AGC MAVG - calculated
7/16/2013 10:55	0:01	KWP	0 031	16 794	AGC MAVG - calculated
7/16/2013 10:57	0:01	KWP	0 003	15 361	AGC MAVG - calculated
7/16/2013 12:06	0:09	AWE	0 272	18 000	AGC MAVG - calculated and Testing
7/16/2013 18:24	0:01	KWP	0 001	0 111	AGC MAVG - calculated and Testing
7/16/2013 23:07	0:05	KWP	0 219	17 731	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/16/2013 23:13	0:11	KWP	0 560	15 487	AGC MAVG - calculated
7/17/2013 1:36	0:04	KWP	0 069	16 969	AGC MAVG - calculated
7/17/2013 1:41	0:05	KWP	0 125	18 225	AGC MAVG - calculated
7/17/2013 1:56	1:19	KWP	20 475	20 646	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and F491AGC MAVG - calculated

Maui Electric - Maui Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reason for Curtailment
7/17/2013 2:57	0:02	AWE	0.000	18.400	AGC MAVG - entered - Maintaining Regulating Reserves
7/17/2013 3:11	0:02	AWE	0.013	15.000	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/17/2013 3:19	0:11	KWPII	2.062	18.666	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/17/2013 3:31	1:24	KWPII	12.081	20.333	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/17/2013 3:45	0:01	AWE	0.000	18.600	AGC MAVG - calculated
7/17/2013 4:58	1:45	KWPII	11.675	20.458	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/17/2013 6:49	0:02	KWPII	0.070	19.033	AGC MAVG - calculated
7/17/2013 6:58	0:01	KWPII	0.005	20.344	AGC MAVG - calculated
7/17/2013 7:00	0:04	KWPII	0.079	20.170	AGC MAVG - calculated
7/17/2013 7:30	0:01	KWPII	0.009	19.076	AGC MAVG - calculated
7/17/2013 7:52	0:02	KWPII	0.006	20.247	AGC MAVG - calculated
7/17/2013 7:58	0:01	KWPII	0.007	19.525	AGC MAVG - calculated
7/17/2013 8:48	0:02	KWPII	0.030	19.855	AGC MAVG - calculated
7/17/2013 8:55	0:03	KWPII	0.035	20.437	AGC MAVG - calculated
7/17/2013 11:13	0:01	KWPII	0.018	18.191	AGC MAVG - calculated
7/17/2013 11:19	0:03	KWPII	0.046	19.918	AGC MAVG - calculated
7/17/2013 12:55	0:01	KWPII	0.002	18.401	AGC MAVG - calculated
7/17/2013 13:46	0:02	KWPII	0.036	16.268	AGC MAVG - calculated
7/17/2013 14:34	0:02	KWPII	0.026	19.244	AGC MAVG - calculated
7/17/2013 20:01	0:13	KWPII	0.430	20.424	AGC MAVG - calculated
7/17/2013 20:19	0:23	KWPII	1.308	19.701	AGC MAVG - calculated
7/17/2013 20:44	0:41	KWPII	4.737	19.468	AGC MAVG - calculated and Testing
7/17/2013 21:39	0:01	KWPII	0.016	19.158	AGC MAVG - calculated
7/17/2013 21:42	2:18	KWPII	29.567	20.708	AGC MAVG - calculated
7/17/2013 23:38	0:02	AWE	0.005	16.800	AGC MAVG - calculated
7/18/2013 3:28	0:01	AWE	0.008	13.600	AGC MAVG - calculated
7/18/2013 3:39	0:01	AWE	0.002	13.700	AGC MAVG - calculated
7/18/2013 7:15	0:39	KWPII	2.788	20.606	AGC MAVG - calculated
7/18/2013 7:55	0:03	KWPII	0.067	19.816	AGC MAVG - calculated
7/18/2013 12:03	0:04	KWPII	0.105	19.245	AGC MAVG - calculated and Testing
7/18/2013 12:08	0:04	KWPII	0.067	17.979	AGC MAVG - calculated and Testing
7/18/2013 15:35	0:02	KWP	0.002	0.064	AGC MAVG - calculated
7/18/2013 17:05	0:01	KWP	0.000	0.016	AGC MAVG - calculated
7/18/2013 21:33	0:01	KWP	0.000	0.016	AGC MAVG - calculated
7/18/2013 21:52	0:01	KWP	0.001	0.206	AGC MAVG - calculated
7/19/2013 10:23	0:01	KWPII	0.000	0.026	AGC MAVG - calculated
7/19/2013 13:44	0:01	KWPII	0.001	0.090	AGC MAVG - calculated
7/19/2013 16:38	0:01	KWPII	0.003	10.335	AGC MAVG - calculated
7/19/2013 18:29	0:02	KWPII	0.012	18.875	AGC MAVG - calculated
7/19/2013 21:43	0:24	KWPII	6.244	20.913	AGC MAVG - calculated
7/19/2013 22:37	0:02	KWPII	0.020	20.647	AGC MAVG - calculated
7/19/2013 22:40	3:09	KWPII	27.801	20.708	AGC MAVG - calculated
7/19/2013 23:59	0:02	AWE	0.015	12.700	AGC MAVG - calculated
7/20/2013 0:02	0:26	AWE	1.016	15.300	AGC MAVG - calculated
7/20/2013 0:29	0:06	AWE	0.116	11.100	AGC MAVG - calculated
7/20/2013 0:37	0:01	AWE	0.014	10.800	AGC MAVG - calculated
7/20/2013 0:51	1:30	KWPII	14.173	20.317	AGC MAVG - calculated
7/20/2013 2:22	0:48	KWPII	3.628	19.647	AGC MAVG - calculated
7/20/2013 3:11	0:01	KWPII	0.013	17.556	AGC MAVG - calculated
7/20/2013 3:13	0:05	KWPII	0.084	17.343	AGC MAVG - calculated
7/20/2013 3:20	0:01	KWPII	0.006	15.088	AGC MAVG - calculated
7/20/2013 3:23	0:01	KWPII	0.017	15.695	AGC MAVG - calculated
7/20/2013 3:27	1:55	KWPII	14.271	20.183	AGC MAVG - calculated
7/20/2013 3:43	0:01	AWE	0.007	14.800	AGC MAVG - calculated
7/20/2013 3:53	0:03	KWPII	0.063	15.463	AGC MAVG - calculated
7/20/2013 5:27	0:49	KWPII	8.963	16.713	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG -
7/20/2013 5:42	0:06	AWE	0.045	18.300	AGC MAVG - entered - Maintaining Regulating Reserves
7/20/2013 5:50	0:02	AWE	0.006	17.300	AGC MAVG - entered - Maintaining Regulating Reserves
7/20/2013 5:55	0:01	AWE	0.013	19.800	AGC MAVG - entered - Maintaining Regulating Reserves
7/20/2013 5:58	0:01	AWE	0.004	19.300	AGC MAVG - entered - Maintaining Regulating Reserves
7/20/2013 6:16	1:24	KWPII	10.940	17.230	AGC MAVG - calculated
7/20/2013 6:34	0:01	AWE	0.008	20.800	AGC MAVG - calculated
7/20/2013 6:37	0:01	AWE	0.000	20.500	AGC MAVG - calculated
7/20/2013 7:45	0:01	KWPII	0.012	11.037	AGC MAVG - calculated
7/20/2013 7:52	0:08	KWPII	0.094	12.717	AGC MAVG - calculated
7/20/2013 8:03	0:02	KWPII	0.068	13.363	AGC MAVG - calculated
7/20/2013 8:12	0:03	KWPII	0.054	12.574	AGC MAVG - calculated
7/20/2013 16:19	0:10	KWPII	0.456	14.018	AGC MAVG - calculated
7/20/2013 16:31	0:01	KWPII	0.006	13.030	AGC MAVG - calculated
7/20/2013 16:46	0:01	KWPII	0.006	17.524	AGC MAVG - calculated
7/20/2013 16:48	0:01	KWPII	0.015	18.729	AGC MAVG - calculated
7/20/2013 16:51	0:01	KWPII	0.002	17.890	AGC MAVG - calculated
7/20/2013 16:56	0:02	KWPII	0.010	18.044	AGC MAVG - calculated
7/20/2013 17:34	0:01	KWPII	0.001	20.581	AGC MAVG - calculated
7/20/2013 17:36	0:01	KWPII	0.006	20.673	AGC MAVG - calculated
7/20/2013 17:43	0:02	KWPII	0.011	20.703	AGC MAVG - calculated
7/20/2013 18:04	0:01	KWPII	0.000	20.648	AGC MAVG - calculated
7/20/2013 20:50	0:40	KWPII	2.888	20.665	AGC MAVG - calculated
7/20/2013 21:32	3:08	KWPII	49.721	20.708	AGC MAVG - calculated
7/20/2013 23:06	0:01	AWE	0.004	17.900	AGC MAVG - calculated
7/20/2013 23:16	0:01	AWE	0.008	19.700	AGC MAVG - calculated
7/20/2013 23:20	0:47	AWE	3.514	20.900	AGC MAVG - calculated
7/21/2013 0:06	0:27	AWE	1.385	19.700	AGC MAVG - calculated
7/21/2013 0:42	3:50	KWPII	75.524	20.708	AGC MAVG - calculated
7/21/2013 1:13	1:23	AWE	2.410	19.700	AGC MAVG - calculated
7/21/2013 2:49	0:02	AWE	0.006	13.300	AGC MAVG - calculated
7/21/2013 3:43	0:06	AWE	0.047	13.800	AGC MAVG - calculated
7/21/2013 3:51	0:02	AWE	0.011	13.000	AGC MAVG - calculated
7/21/2013 3:54	0:03	AWE	0.016	12.700	AGC MAVG - calculated
7/21/2013 3:58	0:55	AWE	3.869	16.800	AGC MAVG - calculated
7/21/2013 3:54	0:03	AWE	0.016	12.700	AGC MAVG - calculated
7/21/2013 4:02	0:01	AWE	0.000	11.600	AGC MAVG - calculated
7/21/2013 4:04	0:01	AWE	0.000	12.300	AGC MAVG - calculated
7/21/2013 4:07	0:10	AWE	0.158	14.400	AGC MAVG - calculated
7/21/2013 4:18	0:09	AWE	0.090	14.500	AGC MAVG - calculated
7/21/2013 4:34	6:54	KWPII	81.389	20.697	AGC MAVG - calculated
7/21/2013 5:11	0:01	AWE	0.000	18.800	AGC MAVG - calculated
7/21/2013 11:20	0:21	KWPII	0.991	18.061	AGC MAVG - calculated
7/21/2013 11:53	0:02	KWPII	0.011	17.242	AGC MAVG - calculated
7/21/2013 12:18	0:01	KWPII	0.006	14.112	AGC MAVG - calculated
7/21/2013 12:20	0:02	KWPII	0.018	15.208	AGC MAVG - calculated
7/21/2013 12:24	1:08	KWPII	5.965	19.698	AGC MAVG - calculated
7/21/2013 13:33	0:02	KWPII	0.045	18.112	AGC MAVG - calculated
7/21/2013 13:36	0:04	KWPII	0.173	19.207	AGC MAVG - calculated
7/21/2013 13:41	0:01	KWPII	0.007	17.964	AGC MAVG - calculated
7/21/2013 13:43	0:01	KWPII	0.069	19.034	AGC MAVG - calculated
7/21/2013 13:50	0:01	KWPII	0.001	17.606	AGC MAVG - calculated
7/21/2013 13:52	0:01	KWPII	0.002	17.777	AGC MAVG - calculated
7/21/2013 13:54	0:33	KWPII	2.008	16.637	AGC MAVG - calculated
7/21/2013 14:28	0:02	KWPII	0.085	17.446	AGC MAVG - calculated
7/21/2013 14:32	0:05	KWPII	0.101	19.381	AGC MAVG - calculated

Mau Electric - Maui Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reason for Curtailment
7/21/2013 14:38	0:04	KWPII	0.052	18.364	AGC MAVG - calculated
7/21/2013 23:08	0:21	KWPII	1.113	18.975	AGC MAVG - calculated
7/21/2013 23:30	0:01	KWPII	0.043	18.172	AGC MAVG - calculated
7/21/2013 23:33	0:02	KWPII	0.052	17.999	AGC MAVG - calculated
7/21/2013 23:35	0:33	KWPII	1.732	19.048	AGC MAVG - calculated
7/22/2013 0:13	0:02	KWPII	0.027	18.127	AGC MAVG - calculated
7/22/2013 0:16	0:01	KWPII	0.022	18.033	AGC MAVG - calculated
7/22/2013 0:26	0:02	KWPII	0.028	17.682	AGC MAVG - calculated
7/22/2013 0:30	0:03	KWPII	0.080	17.231	AGC MAVG - calculated
7/22/2013 0:47	0:01	KWPII	0.005	18.283	AGC MAVG - calculated
7/22/2013 2:01	0:01	KWP	0.001	0.032	AGC MAVG - calculated
7/22/2013 4:13	0:01	KWPII	0.001	0.032	AGC MAVG - calculated
7/22/2013 6:13	0:01	KWPII	0.000	0.027	AGC MAVG - calculated
7/22/2013 6:30	0:01	KWPII	0.000	0.023	AGC MAVG - calculated
7/22/2013 9:12	1:48	AWE	5.010	21.000	AGC MAVG - calculated and Testing
7/22/2013 11:02	0:21	AWE	0.580	19.000	AGC MAVG - calculated and Testing
7/22/2013 11:13	0:01	KWP	0.001	0.080	AGC MAVG - calculated and Testing
7/22/2013 11:24	0:49	AWE	2.984	21.000	AGC MAVG - calculated and Testing
7/22/2013 11:32	0:01	KWP	0.001	0.064	AGC MAVG - calculated and Testing
7/22/2013 12:28	0:08	AWE	0.895	21.000	AGC MAVG - calculated and Testing
7/22/2013 12:45	0:10	AWE	1.168	21.000	AGC MAVG - calculated and Testing
7/23/2013 13:17	0:01	KWP	0.002	0.128	AGC MAVG - calculated
7/24/2013 7:34	0:01	KWPII	0.009	11.802	AGC MAVG - calculated
7/24/2013 7:38	0:02	KWPII	0.032	12.277	AGC MAVG - calculated
7/24/2013 7:42	0:01	KWPII	0.017	12.292	AGC MAVG - calculated
7/24/2013 7:44	0:07	KWPII	0.199	20.254	AGC MAVG - calculated
7/24/2013 8:57	0:18	KWPII	2.065	20.410	AGC MAVG - entered - Maintaining Regulating Reserves, Testing, and AGC MAVG - calculated
7/24/2013 20:35	0:01	KWP	0.001	0.032	AGC MAVG - calculated
7/24/2013 21:47	0:01	KWP	0.002	0.144	AGC MAVG - calculated
7/24/2013 22:29	0:01	KWPII	0.000	0.014	AGC MAVG - calculated
7/25/2013 0:00	0:01	KWPII	0.018	14.021	AGC MAVG - calculated
7/25/2013 0:03	0:01	KWPII	0.004	17.633	AGC MAVG - calculated
7/25/2013 0:05	0:10	KWPII	0.207	19.995	AGC MAVG - calculated
7/25/2013 0:23	0:01	KWPII	0.001	19.152	AGC MAVG - calculated
7/25/2013 0:25	0:01	KWPII	0.008	19.301	AGC MAVG - calculated
7/25/2013 0:46	0:03	KWPII	0.094	17.240	AGC MAVG - calculated
7/25/2013 0:54	0:05	KWPII	0.184	17.913	AGC MAVG - calculated
7/25/2013 1:06	0:03	KWPII	0.056	19.053	AGC MAVG - calculated
7/25/2013 1:51	0:01	KWPII	0.008	19.711	AGC MAVG - calculated
7/25/2013 1:53	0:01	KWPII	0.007	19.523	AGC MAVG - calculated
7/25/2013 1:55	0:02	KWPII	0.041	19.356	AGC MAVG - calculated
7/25/2013 1:59	0:02	KWPII	0.056	17.964	AGC MAVG - calculated
7/25/2013 2:03	0:04	KWPII	0.192	20.373	AGC MAVG - calculated
7/25/2013 3:20	0:18	KWPII	1.473	17.161	AGC MAVG - calculated
7/25/2013 5:55	0:08	KWPII	0.361	18.519	AGC MAVG - calculated
7/25/2013 6:47	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/25/2013 6:48	0:01	KWPII	0.003	17.278	AGC MAVG - calculated
7/25/2013 6:50	0:17	KWPII	0.923	20.513	AGC MAVG - calculated
7/25/2013 7:08	0:47	KWPII	4.849	20.585	AGC MAVG - calculated
7/25/2013 7:56	0:47	KWPII	3.195	20.291	AGC MAVG - calculated
7/25/2013 8:44	0:04	KWPII	0.060	17.815	AGC MAVG - calculated
7/25/2013 8:51	0:02	KWPII	0.031	16.123	AGC MAVG - calculated
7/25/2013 8:54	0:01	KWPII	0.032	14.893	AGC MAVG - calculated
7/25/2013 9:56	0:01	KWPII	0.003	16.864	AGC MAVG - calculated
7/25/2013 17:38	0:01	KWPII	0.004	17.834	AGC MAVG - calculated
7/25/2013 17:40	0:01	KWPII	0.020	18.007	AGC MAVG - calculated
7/25/2013 17:54	0:01	KWPII	0.007	17.854	AGC MAVG - calculated
7/25/2013 18:10	0:01	KWPII	0.001	20.346	AGC MAVG - calculated
7/25/2013 20:08	0:01	KWPII	0.001	20.701	AGC MAVG - entered - Maintaining Regulating Reserves
7/25/2013 20:52	0:13	KWPII	1.048	20.702	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/25/2013 21:23	0:16	KWPII	1.077	20.680	AGC MAVG - calculated
7/25/2013 21:44	3:08	KWPII	29.858	20.708	AGC MAVG - calculated
7/25/2013 23:08	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/25/2013 23:35	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/26/2013 0:13	0:33	AWE	1.230	14.600	AGC MAVG - calculated
7/26/2013 0:47	0:01	AWE	0.001	10.400	AGC MAVG - calculated
7/26/2013 0:53	1:28	KWPII	12.198	20.688	AGC MAVG - calculated
7/26/2013 0:54	0:01	AWE	0.002	14.400	AGC MAVG - calculated
7/26/2013 2:36	0:02	KWPII	0.017	19.952	AGC MAVG - calculated
7/26/2013 2:41	0:01	KWPII	0.005	20.327	AGC MAVG - calculated
7/26/2013 2:47	0:01	KWPII	0.023	19.756	AGC MAVG - calculated
7/26/2013 2:49	0:02	KWPII	0.008	19.230	AGC MAVG - calculated
7/26/2013 2:52	0:05	KWPII	0.125	19.892	AGC MAVG - calculated
7/26/2013 2:58	0:01	KWPII	0.027	20.119	AGC MAVG - calculated
7/26/2013 3:00	0:04	KWPII	0.111	20.245	AGC MAVG - calculated
7/26/2013 3:06	0:05	KWPII	0.035	19.587	AGC MAVG - calculated
7/26/2013 3:12	0:01	KWPII	0.018	18.542	AGC MAVG - calculated
7/26/2013 3:33	0:35	KWPII	4.356	20.681	AGC MAVG - calculated
7/26/2013 3:50	0:03	AWE	0.040	14.000	Good Engineering and Operating Practices and AGC MAVG - calculated
7/26/2013 4:10	0:01	KWPII	0.018	18.544	AGC MAVG - calculated
7/26/2013 4:12	0:42	KWPII	2.842	20.526	AGC MAVG - calculated
7/26/2013 4:56	0:01	KWPII	0.003	15.889	AGC MAVG - calculated
7/26/2013 18:34	0:14	KWPII	0.201	20.638	AGC MAVG - calculated
7/26/2013 18:49	0:01	KWPII	0.001	20.350	AGC MAVG - calculated
7/26/2013 21:07	0:16	KWPII	1.162	20.708	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/26/2013 21:30	0:30	KWPII	1.694	20.704	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
7/26/2013 22:24	0:02	KWPII	0.023	20.673	AGC MAVG - calculated
7/26/2013 22:33	0:04	KWPII	0.101	20.698	AGC MAVG - calculated
7/26/2013 22:52	0:03	KWPII	0.053	20.701	AGC MAVG - calculated
7/26/2013 23:12	0:06	KWPII	1.220	20.708	AGC MAVG - calculated
7/26/2013 23:41	0:01	KWPII	0.005	20.686	AGC MAVG - calculated
7/26/2013 23:58	0:03	KWPII	0.007	20.019	AGC MAVG - calculated
7/27/2013 0:04	0:22	KWPII	0.742	20.639	AGC MAVG - calculated
7/27/2013 0:33	0:12	KWPII	0.521	20.708	AGC MAVG - calculated
7/27/2013 0:49	3:02	KWPII	36.833	20.708	AGC MAVG - calculated
7/27/2013 2:30	0:01	AWE	0.005	20.900	AGC MAVG - calculated
7/27/2013 3:18	0:01	AWE	0.000	20.600	AGC MAVG - calculated
7/27/2013 3:24	0:01	AWE	0.000	19.700	AGC MAVG - calculated
7/27/2013 3:27	0:01	AWE	0.006	19.900	AGC MAVG - calculated
7/27/2013 3:30	0:01	AWE	0.012	20.300	AGC MAVG - calculated
7/27/2013 3:33	0:03	AWE	0.003	21.000	AGC MAVG - calculated
7/27/2013 3:38	0:02	AWE	0.012	21.000	AGC MAVG - calculated
7/27/2013 3:43	0:01	AWE	0.015	20.800	AGC MAVG - calculated
7/27/2013 3:53	1:06	KWPII	8.484	20.597	AGC MAVG - calculated
7/27/2013 5:02	1:14	KWPII	10.945	20.699	AGC MAVG - calculated, AGC MAVG - entered, AGC MAVG - entered - Maintaining Regulating Reserves, and
7/27/2013 6:17	0:01	KWPII	0.000	13.800	AGC MAVG - calculated
7/27/2013 6:28	0:27	KWPII	1.051	15.816	AGC MAVG - calculated
7/27/2013 6:58	0:04	KWPII	0.107	13.984	AGC MAVG - calculated
7/27/2013 7:45	0:01	KWPII	0.008	15.331	AGC MAVG - calculated
7/27/2013 11:00	0:02	KWPII	0.039	18.808	AGC MAVG - entered
7/27/2013 11:11	0:09	KWPII	0.398	20.991	AGC MAVG - calculated

Maul Electric - Maul Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reason for Curtailment
7/27/2013 11:21	0:23	KWPII	1.528	20.494	AGC MAVG - calculated and Good Engineering and Operating Practices
7/27/2013 11:45	0:03	KWPII	0.124	19.711	AGC MAVG - calculated and Good Engineering and Operating Practices
7/27/2013 11:51	0:01	KWPII	0.012	19.838	AGC MAVG - calculated
7/27/2013 11:55	0:01	KWPII	0.018	20.108	AGC MAVG - calculated
7/27/2013 11:58	0:02	KWPII	0.038	18.960	AGC MAVG - calculated
7/27/2013 12:01	0:01	KWPII	0.010	19.211	AGC MAVG - calculated
7/27/2013 12:03	0:02	KWPII	0.019	19.501	AGC MAVG - calculated
7/27/2013 12:07	0:02	KWPII	0.019	20.334	AGC MAVG - calculated
7/27/2013 12:10	0:02	KWPII	0.008	19.524	AGC MAVG - calculated
7/27/2013 12:19	0:03	KWPII	0.041	17.400	AGC MAVG - calculated
7/27/2013 12:23	0:03	KWPII	0.069	15.883	AGC MAVG - calculated
7/27/2013 12:27	0:02	KWPII	0.173	18.202	AGC MAVG - entered
7/27/2013 12:34	1:37	KWPII	8.402	20.683	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG -
7/27/2013 14:12	0:07	KWPII	0.383	20.635	AGC MAVG - calculated
7/27/2013 14:20	0:01	KWPII	0.027	20.205	AGC MAVG - calculated
7/27/2013 14:22	0:01	KWPII	0.034	20.413	AGC MAVG - calculated
7/27/2013 14:25	0:02	KWPII	0.010	20.120	AGC MAVG - calculated
7/27/2013 14:28	0:06	KWPII	0.504	20.633	AGC MAVG - calculated and AGC MAVG - entered - Maintaining Regulating Reserves
7/27/2013 14:42	0:04	KWPII	0.099	20.643	AGC MAVG - calculated
7/27/2013 14:50	0:06	KWPII	0.077	20.674	AGC MAVG - calculated
7/27/2013 14:57	0:01	KWPII	0.011	20.693	AGC MAVG - calculated
7/27/2013 15:10	0:03	KWPII	0.029	20.705	AGC MAVG - calculated
7/27/2013 15:15	0:01	KWPII	0.000	20.708	AGC MAVG - calculated
7/27/2013 22:37	0:01	KWPII	0.009	20.708	AGC MAVG - calculated
7/27/2013 22:38	0:03	KWPII	0.027	20.708	AGC MAVG - calculated
7/28/2013 1:36	0:01	KWPII	0.002	20.672	AGC MAVG - calculated
7/28/2013 1:40	0:01	KWPII	0.001	20.433	AGC MAVG - calculated
7/28/2013 1:42	0:01	KWPII	0.011	20.676	AGC MAVG - calculated
7/28/2013 1:45	0:01	KWPII	0.006	20.698	AGC MAVG - calculated
7/28/2013 1:48	0:01	KWPII	0.000	20.703	AGC MAVG - calculated
7/28/2013 2:01	0:10	KWPII	0.218	20.697	AGC MAVG - calculated
7/28/2013 2:12	0:02	KWPII	0.016	20.676	AGC MAVG - calculated
7/28/2013 2:15	0:01	KWPII	0.005	20.666	AGC MAVG - calculated
7/28/2013 2:21	0:06	KWPII	0.057	20.658	AGC MAVG - calculated
7/28/2013 2:28	0:06	KWPII	0.193	20.633	AGC MAVG - calculated
7/28/2013 2:40	0:02	KWPII	0.002	20.400	AGC MAVG - calculated
7/28/2013 2:47	0:03	KWPII	0.012	20.452	AGC MAVG - calculated
7/28/2013 2:54	0:05	KWPII	0.050	20.233	AGC MAVG - calculated
7/28/2013 3:04	0:02	KWPII	0.012	20.636	AGC MAVG - calculated
7/28/2013 3:08	0:01	KWPII	0.001	20.435	AGC MAVG - calculated
7/28/2013 3:10	0:02	KWPII	0.025	20.615	AGC MAVG - calculated
7/28/2013 3:13	0:04	KWPII	0.072	20.651	AGC MAVG - calculated
7/28/2013 4:08	0:06	KWPII	0.098	20.596	AGC MAVG - calculated
7/28/2013 4:13	0:02	KWPII	0.037	20.492	AGC MAVG - calculated
7/28/2013 5:38	0:46	KWPII	5.645	20.553	AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, and AGC MAVG - entered - Maintaining Regulating Reserves
7/28/2013 6:25	0:57	KWPII	10.459	20.653	AGC MAVG - entered - Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
7/28/2013 7:24	0:01	KWPII	0.000	11.553	AGC MAVG - calculated
7/28/2013 7:26	0:01	KWPII	0.000	11.007	AGC MAVG - calculated
7/28/2013 7:46	0:06	KWPII	0.108	18.573	AGC MAVG - calculated
7/28/2013 7:57	0:01	KWPII	0.010	18.444	AGC MAVG - calculated
7/28/2013 7:59	0:01	KWPII	0.006	17.430	AGC MAVG - calculated
7/28/2013 10:56	0:02	KWPII	0.011	18.668	AGC MAVG - calculated
7/28/2013 10:58	0:28	KWPII	1.578	20.111	AGC MAVG - calculated
7/28/2013 11:28	0:02	KWPII	0.027	16.952	AGC MAVG - calculated
7/28/2013 11:37	0:05	KWPII	0.108	18.949	AGC MAVG - calculated
7/28/2013 11:45	0:18	KWPII	0.432	19.551	AGC MAVG - calculated
7/28/2013 12:04	0:05	KWPII	0.082	19.317	AGC MAVG - calculated
7/28/2013 12:11	0:01	KWPII	0.007	17.781	AGC MAVG - calculated
7/28/2013 12:18	0:02	KWPII	0.066	18.130	AGC MAVG - calculated
7/28/2013 12:23	0:06	KWPII	0.403	19.416	AGC MAVG - calculated
7/28/2013 12:33	0:18	KWPII	0.703	20.142	AGC MAVG - calculated
7/28/2013 12:43	0:05	KWPII	0.142	19.695	AGC MAVG - calculated
7/28/2013 13:00	0:01	KWPII	0.035	20.430	AGC MAVG - calculated
7/28/2013 13:02	0:03	KWPII	0.064	15.804	AGC MAVG - calculated
7/28/2013 13:06	0:30	KWPII	1.569	20.307	AGC MAVG - calculated
7/28/2013 13:47	0:02	KWPII	0.006	19.957	AGC MAVG - calculated
7/28/2013 13:48	0:01	KWPII	0.005	19.505	AGC MAVG - calculated
7/28/2013 13:51	0:01	KWPII	0.015	19.279	AGC MAVG - calculated
7/28/2013 14:03	0:01	KWPII	0.014	19.647	AGC MAVG - calculated
7/28/2013 14:07	0:01	KWPII	0.008	19.457	AGC MAVG - calculated
7/28/2013 20:28	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/28/2013 21:18	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/28/2013 21:21	0:01	AWE	0.006	0.400	AGC MAVG - calculated
7/28/2013 21:39	0:01	AWE	0.003	0.200	AGC MAVG - calculated
7/28/2013 23:54	0:01	KWPII	0.001	20.705	AGC MAVG - calculated
7/29/2013 0:07	0:02	KWPII	0.024	20.705	AGC MAVG - calculated
7/29/2013 0:14	0:12	KWPII	0.190	20.708	AGC MAVG - calculated
7/29/2013 0:27	0:17	KWPII	0.248	20.708	AGC MAVG - calculated
7/29/2013 1:06	0:01	KWPII	0.000	20.708	AGC MAVG - calculated
7/29/2013 1:12	1:35	KWPII	4.289	20.708	AGC MAVG - calculated
7/29/2013 2:48	0:02	KWPII	0.072	20.648	AGC MAVG - calculated
7/29/2013 2:51	0:08	KWPII	0.082	20.681	AGC MAVG - calculated
7/29/2013 3:00	0:03	KWPII	0.036	20.674	AGC MAVG - calculated
7/29/2013 3:08	0:01	KWPII	0.007	20.352	AGC MAVG - calculated
7/29/2013 3:12	0:03	KWPII	0.015	20.368	AGC MAVG - calculated
7/29/2013 4:20	0:01	KWPII	0.000	20.640	AGC MAVG - calculated
7/29/2013 4:28	0:01	KWPII	0.003	20.707	AGC MAVG - calculated
7/29/2013 4:30	0:01	KWPII	0.003	20.708	AGC MAVG - calculated
7/29/2013 4:32	0:10	KWPII	0.075	20.708	AGC MAVG - calculated
7/29/2013 4:43	0:01	KWPII	0.004	20.698	AGC MAVG - calculated
7/29/2013 4:51	0:02	KWPII	0.014	20.688	AGC MAVG - calculated
7/29/2013 5:54	0:06	KWPII	0.102	20.689	AGC MAVG - calculated
7/29/2013 5:01	0:01	KWPII	0.013	20.687	AGC MAVG - calculated
7/29/2013 5:11	0:28	KWPII	1.278	20.707	AGC MAVG - calculated
7/29/2013 5:40	0:21	KWPII	0.686	20.701	AGC MAVG - calculated
7/29/2013 5:41	0:01	AWE	0.004	0.400	AGC MAVG - calculated
7/29/2013 5:44	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 6:02	0:01	KWPII	0.001	20.638	AGC MAVG - calculated
7/29/2013 6:06	0:04	KWPII	0.037	20.615	AGC MAVG - calculated
7/29/2013 9:10	0:01	AWE	0.003	0.200	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 9:21	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 12:38	0:01	AWE	0.003	0.200	AGC MAVG - calculated
7/29/2013 12:53	0:01	AWE	0.005	0.300	AGC MAVG - calculated
7/29/2013 12:56	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 12:58	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 13:06	0:01	AWE	0.003	0.200	AGC MAVG - calculated
7/29/2013 15:08	0:01	AWE	0.003	0.200	AGC MAVG - calculated
7/29/2013 15:18	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 15:29	0:01	AWE	0.002	0.100	AGC MAVG - calculated
7/29/2013 17:46	0:02	KWPII	0.038	20.146	AGC MAVG - calculated

Mauli Electric - Mauli Curtailment Report July 2013

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reason for Curtailment
7/29/2013 17:56	0:05	KWPII	0.100	20.507	AGC MAVG - calculated
7/29/2013 18:03	0:02	KWPII	0.032	20.568	AGC MAVG - calculated
7/29/2013 18:18	0:01	KWPII	0.012	20.338	AGC MAVG - calculated
7/29/2013 18:28	0:05	KWPII	0.177	19.394	AGC MAVG - calculated
7/29/2013 18:33	0:03	KWPII	0.123	19.932	AGC MAVG - calculated
7/29/2013 18:38	0:04	KWPII	0.143	20.032	AGC MAVG - calculated
7/29/2013 19:26	0:01	AWE	0.005	0.300	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 19:33	0:01	AWE	0.005	0.300	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 21:05	0:01	KWPII	0.008	8.100	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 22:44	0:01	AWE	0.002	0.100	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 22:48	0:01	AWE	0.003	0.200	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:08	0:01	KWPII	0.003	2.013	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:29	0:02	AWE	0.005	1.300	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:29	0:10	KWPII	0.090	0.996	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:32	0:07	AWE	0.087	1.400	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:36	0:02	KWP	0.008	5.136	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:41	0:08	KWPII	0.089	0.833	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:42	0:03	AWE	0.008	2.600	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:46	0:02	AWE	0.001	1.600	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:50	0:07	KWPII	0.056	0.721	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:51	0:01	AWE	0.004	1.900	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:55	0:01	AWE	0.000	1.300	AGC MAVG - calculated and Operating Conditions on Company's System
7/29/2013 23:58	0:44	KWPII	1.268	2.918	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:01	0:01	AWE	0.001	0.800	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:03	0:01	AWE	0.001	0.700	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:07	0:15	AWE	0.134	1.100	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:21	0:01	KWP	0.005	2.384	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:24	0:08	AWE	0.033	0.900	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:27	0:01	KWP	0.002	2.258	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 0:35	0:01	AWE	0.006	0.700	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 1:21	0:01	AWE	0.002	0.100	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 1:43	0:01	AWE	0.002	0.100	AGC MAVG - calculated and Operating Conditions on Company's System
7/30/2013 21:48	0:01	KWPII	0.001	18.893	AGC MAVG - calculated
7/30/2013 21:50	0:02	KWPII	0.032	19.713	AGC MAVG - calculated
7/30/2013 22:22	0:09	KWPII	0.098	20.356	AGC MAVG - calculated
7/30/2013 22:32	0:02	KWPII	0.015	17.894	AGC MAVG - calculated
7/31/2013 0:41	0:02	KWPII	0.028	9.514	AGC MAVG - calculated
7/31/2013 0:44	0:03	KWPII	0.034	10.334	AGC MAVG - calculated
7/31/2013 1:22	0:01	KWPII	0.023	5.020	AGC MAVG - calculated
7/31/2013 1:24	0:01	KWPII	0.007	5.134	AGC MAVG - calculated
7/31/2013 1:28	0:03	KWPII	0.043	8.566	AGC MAVG - calculated
7/31/2013 1:30	0:09	KWPII	0.157	9.474	AGC MAVG - calculated
7/31/2013 1:40	4:38	KWPII	58.197	20.708	AGC MAVG - calculated
7/31/2013 7:07	0:01	KWP	0.018	1.184	AGC MAVG - calculated
7/31/2013 8:21	0:01	KWPII	0.011	10.229	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 9:30	0:03	KWPII	0.055	14.720	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 9:30	1:28	KWPII	8.408	20.708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 11:29	0:34	KWPII	1.954	17.714	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 12:30	0:41	KWPII	9.903	20.708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 12:46	0:04	AWE	0.058	19.900	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 12:53	0:14	AWE	0.183	19.900	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 13:10	1:37	KWPII	12.151	20.708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 14:53	0:01	KWPII	0.014	20.708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 15:10	0:30	KWPII	2.360	20.708	AGC MAVG - calculated and Good Engineering and Operating Practices
7/31/2013 16:50	0:03	KWPII	0.039	20.708	AGC MAVG - calculated
7/31/2013 16:56	0:02	KWPII	0.021	20.708	AGC MAVG - calculated
7/31/2013 17:02	0:43	KWPII	2.726	20.708	AGC MAVG - calculated
7/31/2013 17:53	0:04	KWPII	0.050	20.708	AGC MAVG - calculated
7/31/2013 18:24	0:01	KWPII	0.004	20.708	AGC MAVG - calculated
7/31/2013 18:35	0:01	KWPII	0.001	20.708	AGC MAVG - calculated
7/31/2013 18:43	0:04	KWPII	0.128	20.708	AGC MAVG - calculated
7/31/2013 18:58	0:01	KWPII	0.008	20.708	AGC MAVG - calculated
7/31/2013 20:08	0:08	KWPII	0.502	20.708	AGC MAVG - calculated
7/31/2013 20:17	0:02	KWPII	0.037	20.708	AGC MAVG - calculated
7/31/2013 21:05	0:01	KWPII	0.000	20.708	AGC MAVG - calculated
7/31/2013 21:07	0:01	KWPII	0.001	20.708	AGC MAVG - calculated
7/31/2013 21:44	0:07	KWPII	0.089	20.708	AGC MAVG - calculated
7/31/2013 22:14	0:03	KWPII	0.013	20.708	AGC MAVG - calculated
7/31/2013 22:33	1:27	KWPII	11.992	20.708	AGC MAVG - calculated

Notes:

- Curtailment for KWP, Awwats, and KWP II is now controlled by MECCO's Automatic Generation Control System ("AGC"). The AGC curtailment control automatically calculates the amount of Maximum Allowable Variable Generation ("MAVG") that MECCO can accept into.
- The Estimated Curtailed MW and Peak MW Curtailed are formulated with information provided by the IPPs, and MECCO does not make any representation as to its accuracy.
- MECCO recently upgraded the SCADA controls to permit the curtailment of the Maunaloa Hydro facility to Net Zero Protocol and uncurtailment of the Maunaloa Hydro facility without opening and closing the MECCO and Maunaloa Hydro interconnection circuit breaker.
- Estimated Curtailed MW and Peak MW Curtailed data is not provided by the IPPs for Maunaloa Hydro, or AAAAA Rent-A-Space Maui LTD.

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/1/2013 6:58	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:01	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:10	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:18	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 7:49	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 9:40	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 9:58	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 11:03	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 11:28	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 11:33	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 11:40	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 12:13	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 12:33	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 12:57	1:27	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 14:42	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:05	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:09	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:13	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:24	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:30	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:49	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 15:56	0:49	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 16:50	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 16:55	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:03	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:05	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:08	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:13	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:16	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:27	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/1/2013 17:31	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 6:55	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 7:16	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 7:18	0:33	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h.mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/2/2013 7:52	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 7:59	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 8:27	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 8:36	0:18	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 8:59	1:15	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 10:15	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 10:21	0:24	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 10:47	0:17	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 11:05	1:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 12:10	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 12:15	0:28	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 12:44	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 12:51	1:26	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 14:19	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 14:27	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 14:41	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 14:43	0:36	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 15:22	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 16:20	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/2/2013 16:38	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 7:06	0:56	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:03	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:21	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:23	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:26	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:41	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 8:46	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 9:28	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 9:54	1:37	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 11:41	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 11:53	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 11:56	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 14:30	1:47	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 16:18	0:15	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 16:35	0:26	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 17:02	0:54	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 18:00	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/3/2013 18:21	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/4/2013 6:57	0:58	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 7:59	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 8:08	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 8:21	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 8:27	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 8:39	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 8:55	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 9:55	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 15:56	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 16:46	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/4/2013 17:43	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 6:48	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 7:15	1:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 8:22	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 9:03	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 9:21	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 9:57	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 11:23	0:18	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 12:15	0:22	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 12:42	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 13:06	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 13:15	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 14:06	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 14:12	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 14:19	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 15:39	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 15:46	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 16:04	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 16:12	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 17:10	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 17:35	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 17:39	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/5/2013 18:10	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 6:30	0:42	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 7:13	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 7:20	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 7:33	0:31	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 8:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/6/2013 8:25	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 8:27	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 8:34	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 8:39	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 8:44	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 9:00	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 9:17	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 9:22	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 9:31	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 9:57	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 10:03	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 10:09	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 10:41	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 10:57	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 11:51	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 12:07	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 12:10	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 12:43	0:36	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 13:47	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 13:57	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 14:12	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/6/2013 18:22	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 7:15	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 7:38	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 7:42	0:29	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:12	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:24	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:34	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:36	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:47	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:52	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 8:59	0:28	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 9:31	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 9:36	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 9:43	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 9:53	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 10:00	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 10:22	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/7/2013 10:32	1:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 11:40	1:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 12:47	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 13:06	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 13:20	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 14:21	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 15:20	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 15:53	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 16:01	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 16:16	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 18:04	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/7/2013 18:10	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 6:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 6:49	1:43	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 8:35	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 8:46	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 8:55	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 8:59	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 9:37	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 9:42	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 9:52	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 10:07	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 10:28	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 10:43	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 10:59	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 11:03	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 11:11	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 11:20	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 11:35	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 12:00	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 12:08	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 12:29	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 12:36	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 12:45	0:46	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 13:32	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 13:44	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 14:17	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 14:20	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/8/2013 14:25	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 14:43	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 14:54	0:18	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 15:13	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 15:21	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 15:24	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 15:28	0:37	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 16:06	0:41	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 16:51	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/8/2013 17:24	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 6:21	1:42	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 8:04	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 8:10	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 8:34	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 8:42	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 8:51	0:39	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 9:45	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 9:48	0:25	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 10:15	0:36	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 10:52	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 11:16	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 11:43	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 11:50	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 12:00	3:24	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 15:29	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 15:45	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 15:54	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 15:56	0:27	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 16:27	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 16:38	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 17:13	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 17:28	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 17:46	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 17:52	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/9/2013 17:56	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 6:51	0:23	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 7:19	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 7:59	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/10/2013 8:03	0:49	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 8:53	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 9:28	0:29	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 9:59	0:30	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 10:39	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 10:48	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 10:53	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 11:10	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 11:13	0:35	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 11:49	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 12:07	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 12:40	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 12:48	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 12:50	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 12:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 13:56	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 14:05	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 14:11	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 14:17	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 14:23	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 14:32	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 15:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 15:18	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 15:50	1:39	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 17:30	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/10/2013 17:43	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 6:42	0:31	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 7:21	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 7:26	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 7:30	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 7:53	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 7:59	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 8:04	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 8:16	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 9:00	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 9:37	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 9:48	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 10:57	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/11/2013 11:14	0:25	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 11:41	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 12:11	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 12:25	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 12:32	0:39	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:12	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:20	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:31	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:41	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:48	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:53	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 13:56	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 14:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 14:09	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 14:46	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 14:52	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 15:10	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 15:16	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 15:28	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 16:12	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 16:30	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 16:36	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 17:50	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 17:56	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/11/2013 18:07	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 6:28	4:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 10:38	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 10:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 10:49	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 10:57	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 11:08	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 11:16	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 11:22	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 11:49	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 11:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 12:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 12:06	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 12:44	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/12/2013 12:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:00	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:04	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:08	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:20	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:22	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:26	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 13:52	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/12/2013 14:13	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 6:25	0:36	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 7:14	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 7:28	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 7:38	0:42	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 8:21	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 9:13	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 9:25	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 9:36	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 9:57	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 10:09	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 10:25	0:26	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 10:54	0:30	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 11:30	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 11:32	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 11:45	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 11:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 12:17	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 12:24	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 12:30	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 12:34	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 12:52	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 15:30	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 15:37	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 15:39	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 15:53	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 16:17	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 16:26	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 16:29	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 16:39	1:18	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/13/2013 18:03	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/13/2013 18:09	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 6:48	1:39	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 8:28	4:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 12:39	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 12:52	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 13:05	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 13:46	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 13:52	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 13:54	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 14:03	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 14:39	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 15:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 15:07	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 15:35	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/14/2013 15:42	2:22	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 6:41	0:23	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 7:05	1:17	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 8:24	0:38	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 9:04	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 9:25	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 10:03	0:30	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 10:34	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 10:42	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 10:53	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:01	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:13	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:21	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:26	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:37	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:43	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:48	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 11:54	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:01	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:13	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:19	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:21	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:36	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h.mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/15/2013 12:48	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 12:55	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 13:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 13:09	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 13:14	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/15/2013 17:47	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 6:41	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 6:54	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 7:34	0:45	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:21	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:26	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:34	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:41	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:54	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 8:56	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:07	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:09	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:24	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:44	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:51	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 9:56	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 10:10	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:03	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:08	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:50	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 11:54	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 12:59	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 13:30	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 13:45	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 15:29	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/16/2013 15:39	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 6:47	1:35	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 8:23	1:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 9:57	0:35	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 10:34	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 10:39	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/17/2013 10:51	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 10:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 11:01	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 11:08	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 13:09	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 13:34	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 14:48	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 15:01	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 15:14	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 15:30	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 15:50	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 16:10	0:22	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 16:38	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 16:46	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 17:01	0:42	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 17:45	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/17/2013 17:57	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 6:47	0:48	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 7:36	1:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 8:47	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 8:58	1:19	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 11:34	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 11:39	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 11:50	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 12:04	0:32	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 12:38	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 12:43	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 12:52	0:19	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 13:24	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 14:11	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 14:13	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 14:50	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 15:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 15:57	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 16:12	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 16:22	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 16:41	1:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/18/2013 18:06	0:27	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Mau Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/19/2013 6:28	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 6:42	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 7:10	0:28	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 7:51	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 7:54	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 7:56	0:24	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 8:31	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 8:38	0:23	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 9:18	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 9:20	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 9:31	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 9:43	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 9:56	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 10:15	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 10:23	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 10:34	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 10:39	0:19	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:06	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:13	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:16	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:19	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:24	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:26	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:33	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:35	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:48	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:52	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 11:58	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 12:06	0:14	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 12:26	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 12:38	0:21	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 13:02	0:15	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 13:18	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 14:06	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 16:45	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/19/2013 17:47	0:49	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 6:38	0:23	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:09	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/20/2013 7:23	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:28	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:32	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:38	0:13	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:52	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 7:54	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:06	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:12	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:16	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:21	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:24	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:27	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:44	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 8:58	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 9:12	0:26	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 9:40	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 9:45	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 9:52	0:16	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:10	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:15	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:19	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:27	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:30	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:40	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:49	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:55	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 10:57	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 11:20	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 12:05	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 12:09	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 12:32	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 12:46	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 12:51	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 13:09	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 13:12	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 13:18	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 13:34	0:25	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 15:14	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/20/2013 15:19	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 15:23	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 15:36	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 15:48	1:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 16:59	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 17:27	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/20/2013 18:00	0:19	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 6:47	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 7:00	0:35	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 7:36	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 7:49	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 8:40	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 8:54	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 8:59	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:09	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:18	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:30	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:36	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:48	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 9:54	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 10:33	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 10:37	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 10:40	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 10:48	0:31	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 11:22	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 11:36	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 11:47	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 11:52	0:20	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 12:13	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 12:21	0:19	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 12:43	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 12:46	1:53	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 14:41	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 14:49	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/21/2013 14:55	2:42	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 7:31	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 7:41	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 7:56	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/22/2013 8:03	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 8:16	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 8:25	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 9:19	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 9:22	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 9:41	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 9:55	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 10:04	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 10:14	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 10:16	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 10:30	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 10:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 11:30	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 11:49	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 11:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 12:01	0:34	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 12:37	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 12:40	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 12:49	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 12:57	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:05	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:19	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:23	0:11	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:35	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:42	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:46	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 13:51	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 15:22	0:22	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 15:48	0:41	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 16:31	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 16:41	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 16:49	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 16:56	0:15	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 17:13	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 17:15	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 17:20	0:22	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/22/2013 17:58	0:18	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 6:47	0:12	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/23/2013 7:06	0:17	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:26	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:30	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:39	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:47	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:54	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 7:57	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 8:22	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 9:01	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 9:03	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 10:43	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 10:56	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 11:00	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 11:17	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 15:05	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 16:11	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/23/2013 16:19	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/26/2013 14:37	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 6:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 6:55	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 7:03	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 7:28	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:15	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:23	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:26	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:28	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:36	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/28/2013 17:41	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 8:04	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 8:11	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 8:51	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 8:54	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 8:56	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 9:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 9:14	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 9:19	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 9:29	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 9:32	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Maui Electric Company - Lanai Curtailment Report July 2013

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
7/29/2013 9:37	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 10:07	0:09	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 10:23	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 10:30	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 10:34	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 11:18	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 11:47	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 11:51	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 11:58	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:02	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:04	0:04	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:09	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:11	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:15	0:03	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:21	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 12:25	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 14:58	0:05	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 15:21	0:10	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/29/2013 15:47	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 14:13	0:27	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 14:41	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 15:03	0:08	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 15:49	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:00	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:04	0:02	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:09	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:11	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:19	0:07	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:31	0:06	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:39	0:01	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices
7/31/2013 16:41	1:51	LSR-La Ola PV	Data not available	Data not available	Good Engineering and Operating Practices

Notes:

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

LSR possible output data is not available. Therefore, Maui Electric Company 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.

Hawaii Electric Light Curtailment Report July 2013				
Start Date/Time	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released	Reason for Curtailment
07/13/13 07:18	4.4 MW	07/13/13 11:09	5.5 MW	HRD curtailment at HRD's request for maintenance.
07/25/13 16:35	5.2 MW	07/25/13 20:30	5.4 MW	HRD curtailed - scheduled switching 3300 line.
07/26/13 09:39	4.9 MW	07/26/13 16:00	2.6 MW	HRD curtailed - scheduled switching 3300 line.
07/31/13 07:58	18.5 MW	07/31/13 13:34	18.2 MW	Tawhiri - High wind curtailment at Tawhiri's request.