



November 19, 2015

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PUBLIC UTILITIES
COMMISSION

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

Dear Commissioners:

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

Pursuant to Ordering Paragraph 3 of the Commission's Order No. 30371, filed on May 4, 2012, in the above subject proceeding, enclosed as Exhibit A is the Hawaiian Electric Companies'¹ monthly report for October 2015 on (1) system frequency control performance during month; (2) significant system events during month; and (3) curtailment of non-dispatchable renewable resources.

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

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

Sincerely,

Daniel G. Brown
Manager
Regulatory Non-Rate Proceedings

Enclosure

cc: Service List

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

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(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 October 31, 2015):

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

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

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

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

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

The following provides information with respect to items 2a) through 2c) – (all statements are current as of the month ending October 31, 2015):

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

Hawaiian Electric's contingency reserve activations are provided in Attachment 3. Maui Electric and Hawai'i Electric Light do not operate with contingency reserve requirements.

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

Maui Electric's under frequency load shed events is provided in Attachment 4. Hawaiian Electric, and Hawai'i Electric Light did not have any under frequency load shed activations for the month of October.

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

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

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

The following provides information with respect to items 3a) through 3b) – (all statements are current as of the month ending October 31, 2015):

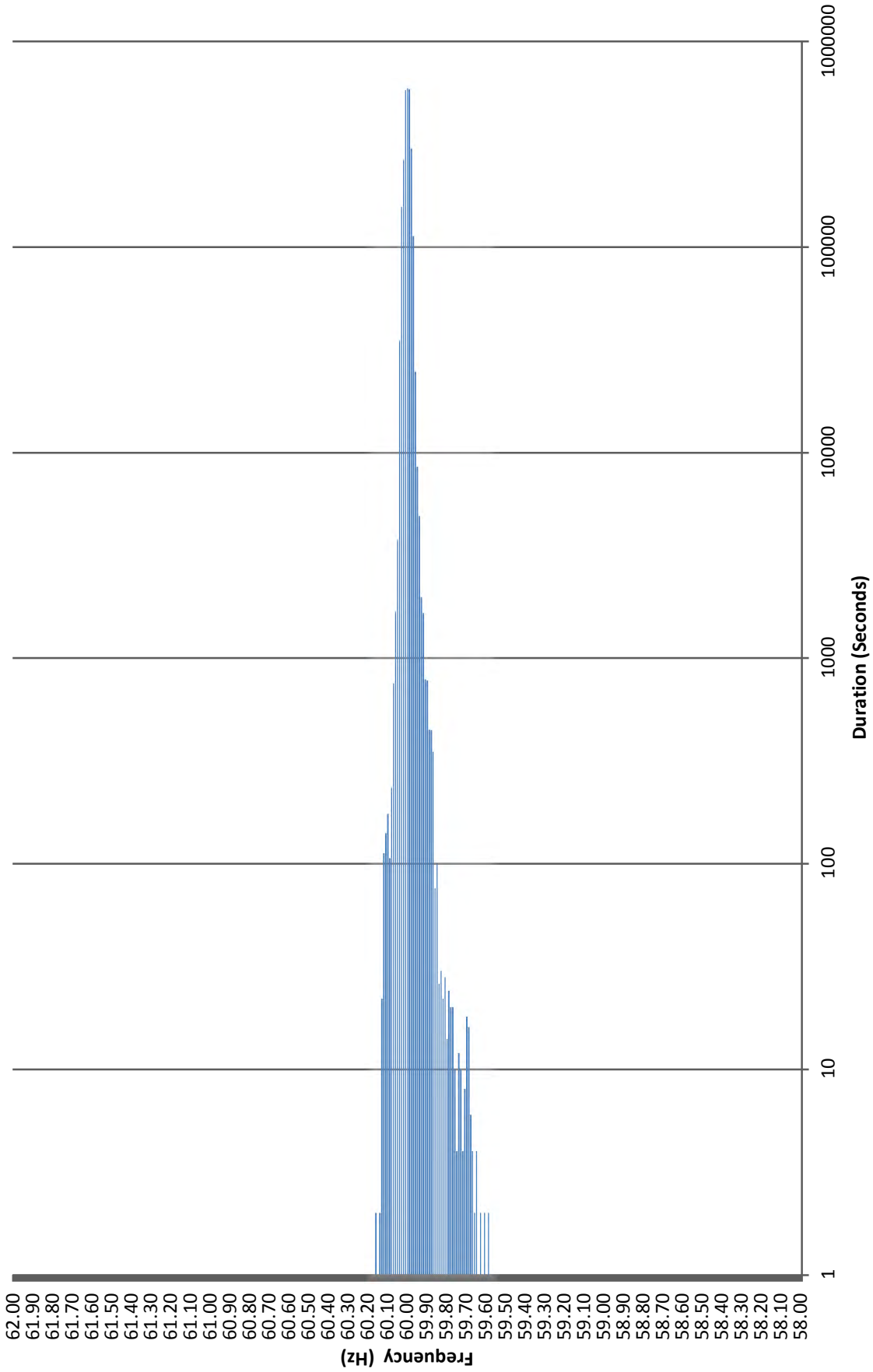
3a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment:

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

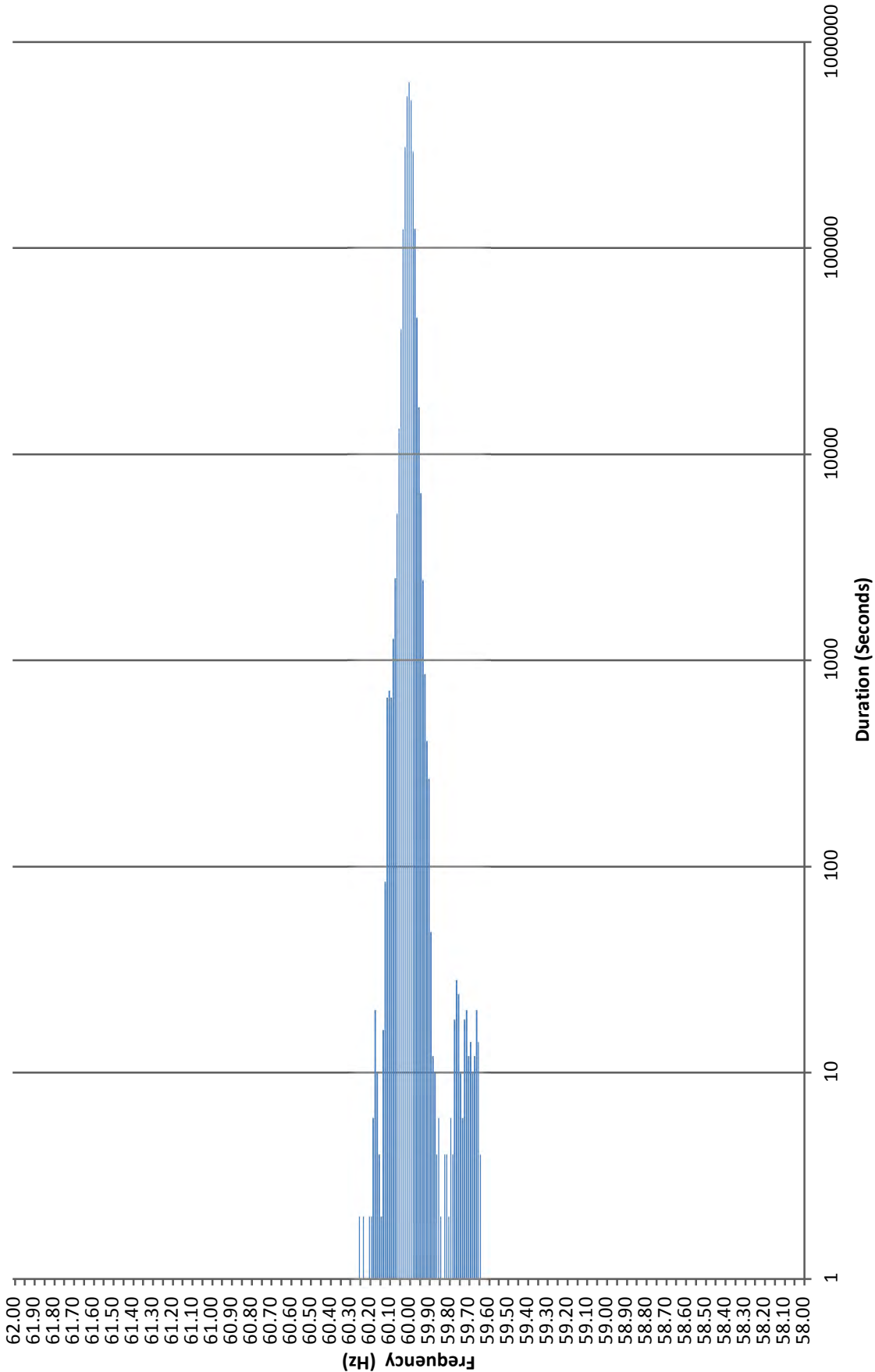
3b) Total MWh of non-dispatchable renewable resources curtailed for the month:

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. 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.

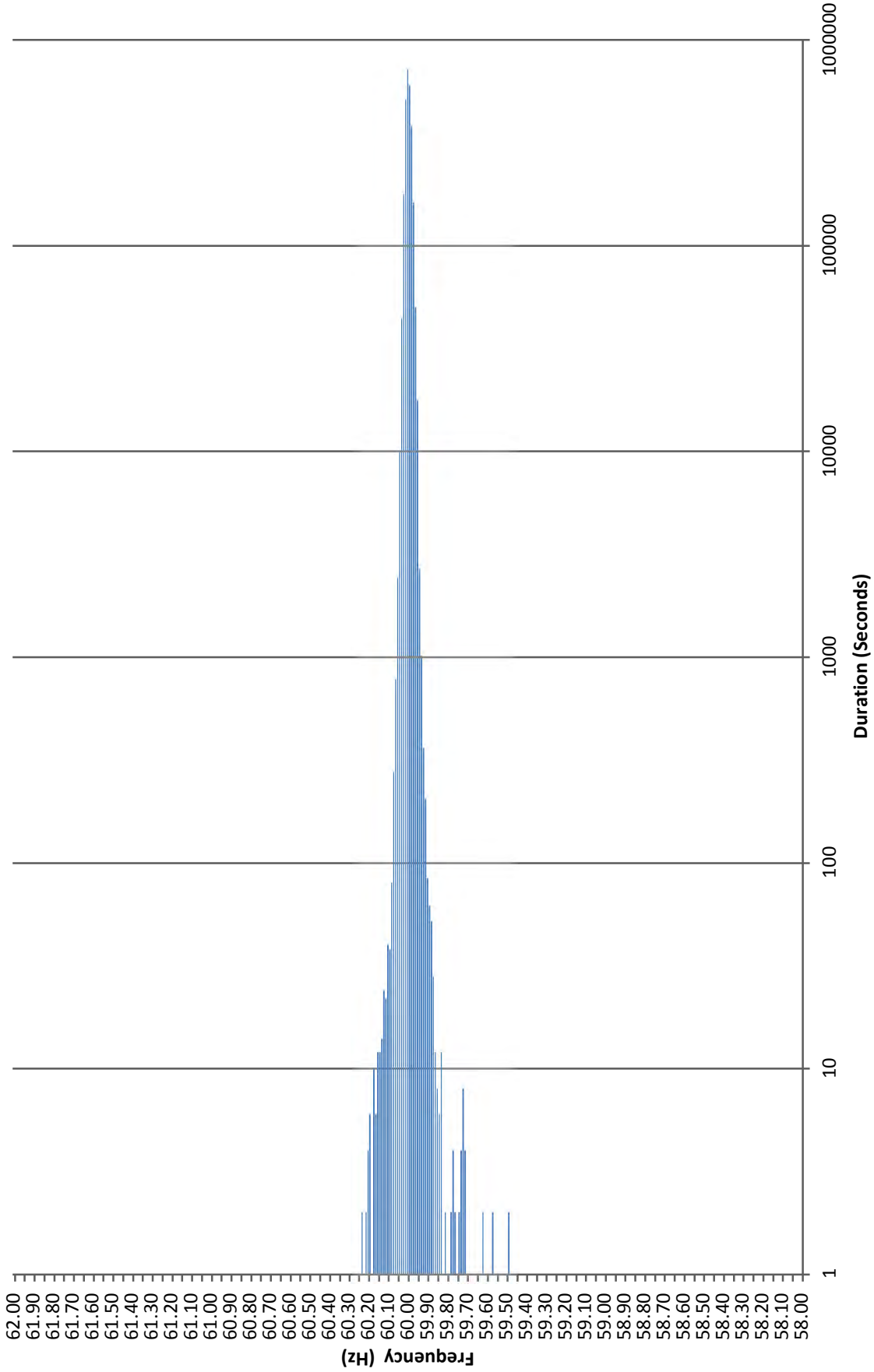
Frequency Distribution Plot - Hawaiian Electric October 2015



Maui Electric Frequency Distribution Plot - Maui October 2015



**Frequency Distribution Plot - Hawai'i Electric Light
October 2015**



Hawaiian Electric Frequency Excursion Statistics October 2015		
Data Rounded to the nearest	<59.95 Hz	>60.05 Hz
Number of Excursions	622	212
Maximum Duration (sec)	1660	848
Maximum Deviation (Hz)	59.593	60.164
Total Duration of Excursions (sec)	14720	4226

Maui Electric Frequency Excursion Statistics October 2015		
	<59.95 Hz	>60.05 Hz
Number of Excursions	3455	2399
Maximum Duration (sec)	274	402
Maximum Deviation (Hz)	59.6429	60.2493
Total Duration of Excursions (sec)	17088	15724

Hawai'i Electric Light Frequency Excursion Statistics October 2015		
	<59.95 Hz	>60.05 Hz
Number of Excursions	2277	480
Maximum Duration (sec)	158	68
Maximum Deviation (Hz)	59.491	60.228
Total Duration of Excursions (sec)	12718	2178

Hawaiian Electric Curtailment Report October 2015

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
10/05/15 06:19	0.0	7.90	10/05/15 08:28	0	*	KWF	System Constraints
10/05/15 06:20	0.0	3.10	10/05/15 08:29	0	*	Makai	System Constraints
10/05/15 15:28	0.0	2.40	10/05/15 16:28	0	*	KWF	System Constraints
10/05/15 15:29	0.0	2.50	10/05/15 16:28	0	*	Makai	System Constraints
10/06/15 06:28	0.0	5.00	10/06/15 07:02	0	*	KWF	System Constraints
10/06/15 06:29	0.0	0.00	10/06/15 07:03	0	*	Makai	System Constraints
10/06/15 14:48	0.0	8.50	10/06/15 15:14	0	*	KWF	System Constraints
10/06/15 14:48	0.0	10.00	10/06/15 15:14	0	*	Makai	System Constraints
10/20/15 07:40	0.0	2.00	10/20/15 16:09	0	*	Mauka	System Constraints
10/20/15 07:40	0.0	12.00	10/20/15 09:18	0	*	Makai	System Constraints
10/20/15 07:40	0.0	18.00	10/20/15 09:18	0	*	KWF	System Constraints
10/20/15 14:40	0.0	13.00	10/20/15 16:10	0	*	KWF	System Constraints
10/20/15 14:40	0.0	6.00	10/20/15 16:09	0	*	Makai	System Constraints

KLS2 = Kalaeloa Solar 2 PV Farm

KREP = Kalaeloa Renewable Energy Park

KWF = Kahuku Wind Farm

Makai = Kawaioloa Makai Wind Farm

Mauka = Kawaioloa Mauka Wind Farm

(1) The estimated MWh of energy curtailed during the event is supplied by Kahuku Wind Farm and/or Kawaioloa Wind Farm, and HECO does not make any representations as to its accuracy.

* Data has not been provided by IPP.

DOCKET NO. 2011-0206
ORDER NO. 30371 I.C.(3)(a)&(b)
ATTACHMENT 6
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Maui Curtailment Report October 2015

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/1/2015 0:00	0:30	KWPll	9.716	20,708	Oversupply
10/1/2015 0:04	0:07	AWE	0.155	14.890	Oversupply
10/1/2015 0:20	0:05	AWE	0.096	13.003	Oversupply
10/1/2015 0:32	3:38	KWPll	72.625	20,708	Oversupply
10/1/2015 0:37	0:01	AWE	0.016	15.253	Oversupply
10/1/2015 0:40	0:12	AWE	0.469	17.280	Oversupply
10/1/2015 1:10	0:20	AWE	1.180	16.183	Oversupply
10/1/2015 1:32	0:45	AWE	2.200	10,273	Oversupply
10/1/2015 2:18	0:05	AWE	0.186	7.990	Oversupply
10/1/2015 2:28	1:06	AWE	4.688	10,240	Oversupply
10/1/2015 3:35	0:07	AWE	0.137	6.220	Oversupply
10/1/2015 3:44	0:08	AWE	0.351	6.950	Oversupply
10/1/2015 4:12	0:18	KWPll	5.829	20,658	Oversupply
10/1/2015 4:17	0:07	AWE	0.208	8.853	Oversupply
10/1/2015 4:32	1:08	KWPll	13.303	20,658	Oversupply
10/1/2015 5:59	0:02	KWPll	0.004	20,649	Oversupply and system constraint
10/1/2015 6:07	0:04	KWPll	0.024	20,345	Oversupply and system constraint
10/1/2015 6:13	0:06	KWPll	0.140	20,299	Oversupply and system constraint
10/1/2015 6:17	11:59	BS 250	Data is not available	Data is not available	Oversupply, system constraint, and facility requested
10/1/2015 6:55	2:32	KWPll	27.813	20,667	Oversupply and system constraint
10/1/2015 8:40	0:02	AWE	0.043	14.670	Oversupply and system constraint
10/1/2015 8:50	0:01	AWE	0.018	14.280	Oversupply and system constraint
10/1/2015 8:54	0:04	AWE	0.122	15.330	Oversupply and system constraint
10/1/2015 9:00	0:18	AWE	0.895	19,717	Oversupply and system constraint
10/1/2015 9:29	1:33	KWPll	13.349	20,655	Oversupply and system constraint
10/1/2015 11:03	0:02	KWPll	0.028	19,644	Oversupply and system constraint
10/1/2015 11:21	1:49	KWPll	26.259	20,641	Oversupply and system constraint
10/1/2015 12:30	0:01	AWE	0.007	15.280	Oversupply and system constraint
10/1/2015 12:50	0:02	AWE	0.046	18.260	Oversupply and system constraint
10/1/2015 12:59	0:02	AWE	0.018	16.003	Oversupply and system constraint
10/1/2015 13:12	1:22	KWPll	18.020	20,626	Oversupply and system constraint
10/1/2015 14:35	0:25	KWPll	1.787	19,306	Oversupply and system constraint
10/1/2015 15:02	0:06	KWPll	0.163	19,654	Oversupply and system constraint
10/1/2015 15:19	0:03	KWPll	0.027	20,304	Oversupply and system constraint
10/1/2015 16:38	0:01	KWPll	0.001	20,700	Oversupply and system constraint
10/1/2015 22:19	0:01	KWPll	0.001	20,512	Oversupply
10/1/2015 22:21	0:01	KWPll	0.001	20,513	Oversupply
10/1/2015 22:50	0:01	KWPll	0.005	20,518	Oversupply
10/1/2015 22:33	0:01	KWPll	0.007	19,738	Oversupply
10/1/2015 22:39	0:05	KWPll	0.052	19,752	Oversupply
10/1/2015 22:57	0:01	KWPll	0.001	20,389	Oversupply
10/1/2015 23:03	0:13	KWPll	0.343	20,150	Oversupply
10/1/2015 23:18	0:21	KWPll	1.554	19,950	Oversupply
10/1/2015 23:43	0:01	KWPll	0.009	19,866	Oversupply
10/1/2015 23:46	0:01	KWPll	0.002	19,905	Oversupply
10/1/2015 23:54	0:01	KWPll	0.001	19,754	Oversupply
10/2/2015 0:05	0:24	KWPll	1.839	20,116	Oversupply
10/2/2015 0:32	2:19	KWPll	17.051	20,519	Oversupply
10/2/2015 2:52	0:19	KWPll	0.840	18,770	Oversupply
10/2/2015 3:17	0:01	KWPll	0.014	19,591	Oversupply
10/2/2015 3:23	0:07	KWPll	0.125	19,868	Oversupply
10/2/2015 3:31	0:03	KWPll	0.044	19,157	Oversupply
10/2/2015 3:37	0:35	KWPll	2.373	19,421	Oversupply
10/2/2015 4:16	0:22	KWPll	1.683	20,211	Oversupply
10/2/2015 5:28	0:01	KWPll	0.004	17,855	Oversupply
10/2/2015 5:30	0:03	KWPll	0.063	18,200	Oversupply
10/2/2015 5:48	0:02	KWPll	0.021	16,424	Oversupply
10/2/2015 6:17	11:59	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/2/2015 8:51	0:03	KWPll	0.085	17,530	Oversupply
10/2/2015 8:58	0:03	KWPll	0.084	16,904	Oversupply
10/2/2015 9:02	1:03	KWPll	7.891	17,941	Oversupply
10/2/2015 9:54	0:01	SA	Data is not available	Data is not available	Oversupply
10/2/2015 9:54	0:01	BS	Data is not available	Data is not available	Oversupply
10/2/2015 9:58	0:02	SA	Data is not available	Data is not available	Oversupply
10/2/2015 9:58	0:02	BS	Data is not available	Data is not available	Oversupply
10/2/2015 9:58	0:01	KWP	0.037	13,070	Oversupply
10/2/2015 10:06	2:07	KWPll	22.945	18,630	Oversupply
10/2/2015 12:14	0:04	KWPll	0.192	18,818	Oversupply
10/2/2015 12:19	0:01	KWPll	0.006	18,945	Oversupply
10/2/2015 12:29	0:19	KWPll	0.823	20,285	Oversupply
10/2/2015 13:05	0:05	KWPll	0.141	19,050	Oversupply
10/2/2015 13:12	0:06	KWPll	0.231	19,824	Oversupply
10/2/2015 13:19	0:19	KWPll	1.585	19,903	Oversupply
10/2/2015 13:40	0:06	KWPll	0.176	19,954	Oversupply
10/2/2015 13:48	0:01	KWPll	0.013	18,502	Oversupply
10/2/2015 13:50	0:04	KWPll	0.044	20,092	Oversupply
10/2/2015 14:00	0:01	KWPll	0.006	20,121	Oversupply
10/2/2015 14:04	0:04	KWPll	0.025	20,510	Oversupply
10/2/2015 14:11	0:01	KWPll	0.005	20,352	Oversupply
10/2/2015 15:51	0:01	KWPll	0.006	20,473	Oversupply
10/2/2015 15:54	0:38	KWPll	2.348	20,687	Oversupply
10/2/2015 16:46	0:01	KWPll	0.001	20,383	Oversupply
10/2/2015 22:30	0:02	KWPll	0.052	16,810	Oversupply
10/2/2015 22:35	0:15	KWPll	0.800	18,912	Oversupply
10/2/2015 23:23	0:01	KWPll	0.027	17,522	Oversupply
10/2/2015 23:26	0:01	KWPll	0.022	16,804	Oversupply
10/2/2015 23:53	0:05	KWPll	0.415	18,262	Oversupply
10/3/2015 0:29	0:01	KWPll	0.023	18,185	Oversupply
10/3/2015 0:28	1:52	KWPll	11.530	19,721	Oversupply
10/3/2015 2:27	0:01	KWPll	0.017	18,374	Oversupply
10/3/2015 2:52	4:48	KWPll	41.863	20,698	Oversupply
10/3/2015 6:17	8:54	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/3/2015 7:41	0:02	KWPll	0.009	20,625	Oversupply
10/3/2015 7:54	0:01	KWPll	0.002	20,619	Oversupply
10/3/2015 8:15	0:05	KWPll	0.072	20,633	Oversupply
10/3/2015 8:21	0:01	KWPll	0.002	20,485	Oversupply
10/3/2015 8:26	0:01	KWPll	0.001	20,617	Oversupply
10/3/2015 8:31	2:19	KWPll	10.323	20,669	Oversupply
10/3/2015 11:10	0:01	KWPll	0.001	18,847	Oversupply
10/3/2015 11:13	0:06	KWPll	0.185	20,315	Oversupply
10/3/2015 11:21	0:07	KWPll	0.124	20,426	Oversupply
10/3/2015 11:29	0:01	KWPll	0.004	20,376	Oversupply
10/3/2015 12:27	0:01	AWE	0.000	0.003	Oversupply
10/3/2015 12:33	0:01	AWE	0.000	0.003	Oversupply
10/3/2015 12:42	0:01	AWE	0.000	0.007	Oversupply
10/3/2015 13:04	0:04	KWPll	0.040	20,653	Oversupply
10/3/2015 13:15	0:01	KWPll	0.007	20,568	Oversupply
10/3/2015 13:17	0:04	KWPll	0.027	20,696	Oversupply
10/3/2015 22:03	0:12	KWPll	0.286	20,674	Oversupply
10/3/2015 22:44	0:01	KWPll	0.002	20,658	Oversupply
10/3/2015 22:46	0:11	KWPll	0.346	20,704	Oversupply
10/3/2015 23:00	0:02	KWPll	0.005	20,702	Oversupply
10/3/2015 23:06	6:59	KWPll	62.446	20,706	Oversupply
10/4/2015 6:17	3:16	BS 250	Data is not available	Data is not available	Oversupply



Maui Curtailment Report October 2015

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/4/2015 7:14	0:01	KWP/II	0.000	20.708	Oversupply
10/4/2015 8:01	0:01	AWE	0.000	0.007	Oversupply
10/4/2015 8:23	0:01	AWE	0.000	0.003	Oversupply
10/4/2015 8:35	0:01	AWE	0.000	0.003	Oversupply
10/4/2015 10:30	1:02	KWP/II	4.920	20.708	Oversupply
10/4/2015 10:51	7:25	BS 250	Data is not available	Data is not available	Oversupply
10/4/2015 18:06	0:02	KWP/II	0.036	8.107	Oversupply
10/4/2015 22:26	0:22	KWP/II	2.492	18.994	Oversupply
10/4/2015 22:50	0:05	KWP/II	0.273	16.175	Oversupply
10/4/2015 23:24	0:02	KWP/II	0.074	12.936	Oversupply
10/4/2015 23:28	0:02	KWP/II	0.088	14.211	Oversupply
10/5/2015 5:19	0:32	KWP/II	2.249	17.497	Oversupply
10/5/2015 5:52	0:12	KWP/II	0.314	19.077	Oversupply
10/5/2015 6:17	1:23	BS 250	Data is not available	Data is not available	Oversupply
10/5/2015 8:55	0:02	KWP/II	0.043	16.680	Oversupply
10/5/2015 9:00	0:56	KWP/II	5.755	15.258	Oversupply
10/5/2015 9:18	0:01	AWE	0.028	11.857	Oversupply
10/5/2015 9:20	0:02	AWE	0.039	11.240	Oversupply
10/5/2015 9:30	2:24	BS 250	Data is not available	Data is not available	Oversupply
10/5/2015 21:37	0:02	KWP/II	0.010	20.562	Oversupply
10/5/2015 21:59	0:05	KWP/II	0.094	20.671	Oversupply
10/5/2015 22:34	0:27	KWP/II	2.849	20.290	Oversupply
10/5/2015 23:38	0:01	KWP/II	0.023	8.547	Oversupply
10/6/2015 0:56	0:06	KWP/II	0.265	16.289	Oversupply
10/6/2015 1:07	0:04	KWP/II	0.077	17.770	Oversupply
10/6/2015 5:39	0:01	KWP/II	0.004	18.141	Oversupply
10/6/2015 6:17	11:59	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/6/2015 6:24	0:04	KWP/II	0.017	20.310	Oversupply
10/6/2015 6:42	0:12	KWP/II	0.407	20.603	Oversupply
10/6/2015 7:00	0:01	KWP/II	0.001	20.248	Oversupply
10/6/2015 7:42	0:29	KWP/II	2.050	20.694	Oversupply
10/6/2015 8:13	0:08	KWP/II	0.134	19.150	Oversupply
10/6/2015 8:23	0:03	KWP/II	0.044	19.199	Oversupply
10/6/2015 8:31	0:36	KWP/II	3.084	19.191	Oversupply
10/6/2015 9:08	0:02	KWP/II	0.037	18.955	Oversupply
10/6/2015 9:12	0:05	KWP/II	0.114	19.039	Oversupply
10/6/2015 9:19	0:05	KWP/II	0.105	19.062	Oversupply
10/6/2015 9:24	0:18	KWP/II	0.537	19.198	Oversupply
10/6/2015 9:42	0:04	KWP/II	0.078	19.198	Oversupply
10/6/2015 9:48	0:20	KWP/II	1.072	19.129	Oversupply
10/6/2015 10:09	0:03	KWP/II	0.033	18.883	Oversupply
10/6/2015 10:54	1:22	KWP/II	7.068	19.211	Oversupply
10/6/2015 12:19	0:01	KWP/II	0.005	19.108	Oversupply
10/6/2015 12:21	0:02	KWP/II	0.037	19.193	Oversupply
10/6/2015 12:32	1:02	MH	Data is not available	Data is not available	Oversupply and system constraint
10/6/2015 12:48	0:28	KWP/II	1.265	19.211	Oversupply
10/6/2015 13:26	2:19	KWP/II	10.166	20.706	Oversupply
10/6/2015 15:18	0:01	AWE	0.000	0.007	Oversupply
10/6/2015 15:46	0:14	KWP/II	0.240	20.700	Oversupply
10/6/2015 15:55	0:01	AWE	0.000	0.003	Oversupply
10/6/2015 16:03	0:02	KWP/II	0.011	20.708	Oversupply
10/6/2015 16:06	0:04	KWP/II	0.016	20.708	Oversupply
10/6/2015 21:58	0:02	KWP/II	0.018	20.590	Oversupply
10/6/2015 22:19	0:34	KWP/II	3.871	20.204	Oversupply
10/6/2015 23:18	0:01	KWP/II	0.003	15.644	Oversupply
10/7/2015 1:09	0:07	KWP/II	0.228	14.374	Oversupply
10/7/2015 1:17	0:10	KWP/II	0.367	15.910	Oversupply
10/7/2015 2:19	0:24	KWP/II	1.020	9.717	Oversupply
10/7/2015 3:07	1:04	KWP/II	17.964	20.664	Oversupply
10/7/2015 3:17	0:35	KWP/II	3.057	29.662	Oversupply
10/7/2015 3:59	0:06	KWP/II	0.205	27.726	Oversupply
10/7/2015 4:17	0:09	KWP/II	0.352	15.083	Oversupply
10/7/2015 4:30	0:01	KWP/II	0.013	12.191	Oversupply
10/7/2015 4:58	0:01	KWP/II	0.013	9.801	Oversupply
10/7/2015 5:00	0:03	KWP/II	0.110	10.017	Oversupply
10/7/2015 5:04	0:06	KWP/II	0.334	11.545	Oversupply
10/7/2015 5:12	0:24	KWP/II	2.909	16.864	Oversupply
10/7/2015 6:17	2:22	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/7/2015 10:24	0:01	KWP/II	0.016	15.017	Oversupply
10/7/2015 10:26	0:02	KWP/II	0.017	14.612	Oversupply
10/7/2015 10:34	0:01	KWP/II	0.008	14.536	Oversupply
10/7/2015 10:36	0:01	KWP/II	0.009	14.895	Oversupply
10/7/2015 12:19	0:01	AWE	0.000	0.003	Oversupply
10/7/2015 12:21	0:01	AWE	0.000	0.003	Oversupply
10/7/2015 12:31	0:16	KWP/II	0.875	17.747	Oversupply
10/7/2015 12:51	5:25	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/8/2015 6:17	1:12	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/8/2015 10:25	0:01	KWP/II	0.013	6.785	Oversupply
10/8/2015 10:52	0:03	KWP/II	0.033	9.561	Oversupply
10/9/2015 6:17	0:51	BS 250	Data is not available	Data is not available	Oversupply
10/10/2015 3:45	0:40	KWP/II	4.788	16.444	Oversupply
10/10/2015 4:42	0:03	KWP/II	0.052	15.220	Oversupply
10/10/2015 6:17	6:55	BS 250	Data is not available	Data is not available	Oversupply
10/10/2015 7:31	0:02	KWP/II	0.036	10.414	Oversupply
10/10/2015 8:25	0:03	KWP/II	0.045	17.961	Oversupply
10/10/2015 8:40	0:25	KWP/II	1.001	17.654	Oversupply
10/10/2015 10:23	0:17	KWP/II	0.774	19.241	Oversupply
10/10/2015 10:43	0:56	KWP/II	4.913	20.540	Oversupply
10/10/2015 11:20	0:03	KWP/II	0.078	20.260	Oversupply
10/10/2015 11:53	0:02	KWP/II	0.005	19.707	Oversupply
10/10/2015 11:59	0:01	KWP/II	0.001	19.487	Oversupply
10/10/2015 12:06	0:15	KWP/II	0.690	19.757	Oversupply
10/10/2015 12:22	0:07	KWP/II	0.181	17.633	Oversupply
10/10/2015 14:01	0:05	KWP/II	0.113	16.361	Oversupply
10/10/2015 14:08	0:03	KWP/II	0.064	15.593	Oversupply
10/10/2015 23:44	0:16	AWE	1.161	20.953	Oversupply
10/10/2015 23:44	0:21	KWP/II	2.999	15.344	Oversupply
10/11/2015 0:07	0:06	KWP/II	0.320	12.623	Oversupply
10/11/2015 0:48	0:06	AWE	0.059	21.000	Oversupply
10/11/2015 0:57	0:03	AWE	0.016	21.000	Oversupply
10/11/2015 1:01	0:01	AWE	0.006	20.620	Oversupply
10/11/2015 5:06	0:01	KWP/II	0.000	0.006	Oversupply
10/13/2015 4:28	0:01	AWE	0.000	0.003	Oversupply
10/13/2015 6:17	0:57	BS 250	Data is not available	Data is not available	Oversupply
10/13/2015 18:02	0:14	BS 250	Data is not available	Data is not available	Oversupply
10/14/2015 0:10	4:42	KWP/II	44.030	20.601	Oversupply
10/14/2015 5:39	0:02	KWP/II	0.052	19.831	Oversupply
10/14/2015 6:17	0:51	BS 250	Data is not available	Data is not available	Oversupply
10/14/2015 9:58	6:07	BS 250	Data is not available	Data is not available	Oversupply
10/14/2015 10:42	0:01	KWP/II	0.013	18.789	Oversupply
10/14/2015 12:43	0:01	KWP/II	0.005	16.032	Oversupply
10/14/2015 22:25	0:01	KWP/II	0.007	18.853	Oversupply
10/14/2015 22:38	2:02	KWP/II	13.949	19.349	Oversupply
10/15/2015 0:42	0:06	KWP/II	0.123	17.488	Oversupply



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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/15/2015 1:13	0:04	KWP/II	0.143	14.515	Oversupply
10/15/2015 1:21	0:34	KWP/II	2.175	16.800	Oversupply
10/15/2015 6:17	1:07	BS 250	Data is not available	Data is not available	Oversupply
10/15/2015 22:47	0:01	KWP/II	0.001	20.568	Oversupply
10/15/2015 23:07	2:31	KWP/II	19.959	20.685	Oversupply
10/16/2015 1:27	0:05	KWP	0.356	20.969	Oversupply
10/16/2015 1:40	1:40	KWP/II	24.080	19.332	Oversupply
10/16/2015 1:42	0:04	KWP	0.168	24.441	Oversupply
10/16/2015 1:48	0:01	KWP	0.053	23.319	Oversupply
10/16/2015 1:50	0:08	KWP	0.297	23.069	Oversupply
10/16/2015 2:00	0:05	KWP	0.189	22.947	Oversupply
10/16/2015 2:07	0:01	KWP	0.007	20.283	Oversupply
10/16/2015 2:14	1:01	KWP	5.648	26.018	Oversupply
10/16/2015 3:22	1:45	KWP/II	19.066	20.352	Oversupply
10/16/2015 6:17	1:53	BS 250	Data is not available	Data is not available	Oversupply
10/16/2015 10:51	0:02	KWP/II	0.074	14.184	Oversupply
10/16/2015 11:00	0:02	KWP/II	0.082	17.401	Oversupply
10/16/2015 11:10	0:28	KWP/II	2.595	18.726	Oversupply
10/16/2015 11:16	1:26	BS 250	Data is not available	Data is not available	Oversupply
10/16/2015 11:44	0:04	KWP/II	0.348	15.412	Oversupply
10/16/2015 11:49	0:02	KWP/II	0.068	12.583	Oversupply
10/16/2015 12:15	0:07	KWP/II	0.831	17.029	Oversupply
10/16/2015 12:23	0:11	KWP/II	1.217	18.049	Oversupply
10/16/2015 14:10	0:58	BS 250	Data is not available	Data is not available	Oversupply
10/16/2015 14:11	0:34	KWP/II	0.950	20.097	Oversupply
10/16/2015 14:46	0:01	KWP/II	0.008	18.020	Oversupply
10/16/2015 14:49	0:03	KWP/II	0.113	19.633	Oversupply
10/16/2015 14:53	0:02	KWP/II	0.020	19.087	Oversupply
10/16/2015 20:09	0:06	KWP/II	0.123	20.632	Oversupply
10/16/2015 22:33	0:01	KWP/II	0.013	20.665	Oversupply
10/16/2015 22:36	0:52	KWP/II	5.784	20.688	Oversupply
10/17/2015 0:39	0:01	KWP/II	0.010	2.958	Oversupply
10/17/2015 0:47	0:01	KWP/II	0.010	1.674	Oversupply
10/17/2015 1:15	2:28	KWP/II	29.449	18.463	Oversupply
10/17/2015 1:23	0:03	AWE	0.066	7.883	Oversupply
10/17/2015 1:31	0:39	AWE	3.463	14.367	Oversupply
10/17/2015 2:14	0:10	AWE	0.369	15.830	Oversupply
10/17/2015 2:25	0:07	AWE	0.336	16.810	Oversupply
10/17/2015 2:34	0:01	AWE	0.030	16.513	Oversupply
10/17/2015 2:37	0:04	AWE	0.031	15.990	Oversupply
10/17/2015 2:43	0:01	AWE	0.022	15.207	Oversupply
10/17/2015 2:49	0:03	AWE	0.021	15.647	Oversupply
10/17/2015 2:59	0:01	AWE	0.001	16.640	Oversupply
10/17/2015 3:02	0:02	AWE	0.014	16.560	Oversupply
10/17/2015 3:09	0:07	AWE	0.192	17.407	Oversupply
10/17/2015 3:19	0:05	AWE	0.087	16.230	Oversupply
10/17/2015 3:29	0:03	AWE	0.029	14.760	Oversupply
10/17/2015 3:33	0:02	AWE	0.012	14.167	Oversupply
10/17/2015 3:36	0:01	AWE	0.006	13.713	Oversupply
10/17/2015 3:48	0:16	KWP/II	1.343	8.125	Oversupply
10/17/2015 4:06	0:15	KWP/II	0.979	10.190	Oversupply
10/17/2015 4:23	0:11	KWP/II	0.584	14.216	Oversupply
10/17/2015 4:37	0:03	KWP/II	0.077	12.023	Oversupply
10/17/2015 4:42	2:09	KWP/II	19.664	19.198	Oversupply
10/17/2015 6:17	1:39	BS 250	Data is not available	Data is not available	Oversupply
10/17/2015 6:52	0:01	KWP/II	0.005	15.585	Oversupply
10/17/2015 17:18	0:02	KWP/II	0.034	17.164	Oversupply
10/17/2015 18:04	0:12	BS 250	Data is not available	Data is not available	Oversupply
10/17/2015 20:30	0:05	KWP/II	0.132	13.066	Oversupply
10/17/2015 20:40	0:03	KWP/II	0.021	16.570	Oversupply
10/17/2015 20:45	0:13	KWP/II	0.334	18.350	Oversupply
10/17/2015 20:59	0:01	KWP/II	0.017	17.986	Oversupply
10/17/2015 21:07	0:06	KWP/II	0.055	15.892	Oversupply
10/17/2015 21:31	0:03	KWP/II	0.021	19.211	Oversupply
10/17/2015 21:38	0:06	KWP/II	0.048	19.198	Oversupply
10/17/2015 21:53	0:03	KWP/II	0.053	19.130	Oversupply
10/17/2015 22:01	0:34	KWP/II	2.395	19.102	Oversupply
10/17/2015 22:41	0:01	KWP/II	0.011	17.935	Oversupply
10/17/2015 22:44	0:13	KWP/II	0.525	18.199	Oversupply
10/17/2015 23:42	0:07	KWP/II	0.266	10.340	Oversupply
10/17/2015 23:57	0:41	KWP/II	3.730	15.572	Oversupply
10/18/2015 0:40	1:29	KWP/II	10.979	14.929	Oversupply
10/18/2015 1:14	0:11	AWE	0.063	21.000	Oversupply
10/18/2015 1:26	0:07	AWE	0.163	21.000	Oversupply
10/18/2015 1:36	0:01	AWE	0.015	18.847	Oversupply
10/18/2015 1:43	0:01	AWE	0.029	20.390	Oversupply
10/18/2015 1:45	0:01	AWE	0.014	19.250	Oversupply
10/18/2015 1:47	0:01	AWE	0.029	19.870	Oversupply
10/18/2015 1:52	0:01	AWE	0.010	18.720	Oversupply
10/18/2015 2:04	0:01	AWE	0.000	21.000	Oversupply
10/18/2015 2:12	0:57	KWP/II	7.639	13.531	Oversupply
10/18/2015 2:13	0:01	AWE	0.000	21.000	Oversupply
10/18/2015 2:17	0:03	AWE	0.005	20.917	Oversupply
10/18/2015 2:30	0:10	AWE	0.061	21.000	Oversupply
10/18/2015 2:42	0:06	AWE	0.065	21.000	Oversupply
10/18/2015 2:49	0:01	AWE	0.000	20.907	Oversupply
10/18/2015 2:53	0:13	AWE	0.175	21.000	Oversupply
10/18/2015 3:12	0:23	KWP/II	1.205	6.889	Oversupply
10/18/2015 3:13	0:20	AWE	0.582	21.000	Oversupply
10/18/2015 3:49	0:02	KWP/II	0.033	3.475	Oversupply
10/18/2015 3:47	0:02	KWP/II	0.046	3.357	Oversupply
10/18/2015 3:48	0:01	AWE	0.001	21.000	Oversupply
10/18/2015 3:52	0:01	AWE	0.000	21.000	Oversupply
10/18/2015 4:37	0:01	AWE	0.001	21.000	Oversupply
10/18/2015 4:40	0:03	AWE	0.014	21.000	Oversupply
10/18/2015 4:46	0:01	AWE	0.002	21.000	Oversupply
10/18/2015 4:48	0:05	AWE	0.018	21.000	Oversupply
10/18/2015 4:50	0:24	KWP/II	2.716	12.221	Oversupply
10/18/2015 4:58	0:01	AWE	0.004	19.827	Oversupply
10/18/2015 5:07	0:03	AWE	0.026	19.617	Oversupply
10/18/2015 5:19	0:05	KWP/II	0.194	11.714	Oversupply
10/18/2015 5:25	0:01	KWP/II	0.020	11.962	Oversupply
10/18/2015 5:46	0:18	KWP/II	0.649	9.167	Oversupply
10/18/2015 6:11	0:04	KWP/II	0.052	5.822	Oversupply
10/18/2015 6:17	0:55	BS 250	Data is not available	Data is not available	Oversupply
10/18/2015 6:26	0:03	KWP/II	0.021	4.555	Oversupply
10/18/2015 6:53	0:01	AWE	0.008	19.270	Oversupply
10/18/2015 6:54	0:05	KWP/II	0.002	0.117	Oversupply
10/18/2015 6:55	0:05	AWE	0.277	20.823	Oversupply
10/18/2015 7:46	0:21	BS 250	Data is not available	Data is not available	Oversupply
10/18/2015 7:46	0:07	KWP/II	0.259	8.747	Oversupply
10/18/2015 7:57	0:01	KWP/II	0.020	7.906	Oversupply
10/18/2015 8:23	0:03	KWP/II	0.064	5.336	Oversupply
10/18/2015 8:27	0:32	KWP/II	3.580	14.077	Oversupply



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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/18/2015 8:28	0:02	AWE	0.006	21.000	Oversupply
10/18/2015 8:40	0:03	AWE	0.046	20.980	Oversupply
10/18/2015 9:06	0:01	KWP	0.023	11.983	Oversupply
10/18/2015 15:03	0:01	KWP	0.000	0.002	Oversupply
10/18/2015 17:50	0:26	BS 250	Data is not available	Data is not available	Oversupply
10/18/2015 21:35	0:09	KWP	0.349	20.360	Oversupply
10/18/2015 21:45	0:14	KWP	0.128	20.313	Oversupply
10/18/2015 22:00	0:04	KWP	0.026	20.372	Oversupply
10/18/2015 22:31	0:03	KWP	0.014	20.490	Oversupply
10/18/2015 22:36	0:17	KWP	0.189	20.466	Oversupply
10/18/2015 22:59	0:01	KWP	0.002	20.581	Oversupply
10/18/2015 23:03	0:13	KWP	0.256	20.393	Oversupply
10/18/2015 23:26	0:19	KWP	0.943	20.302	Oversupply
10/18/2015 23:49	3:11	KWP	38.846	20.684	Oversupply
10/19/2015 1:35	0:19	AWE	1.662	17.067	Oversupply
10/19/2015 1:55	0:01	AWE	0.027	13.307	Oversupply
10/19/2015 1:57	0:03	AWE	0.075	14.567	Oversupply
10/19/2015 2:08	0:02	AWE	0.051	15.033	Oversupply
10/19/2015 2:13	0:01	AWE	0.001	12.833	Oversupply
10/19/2015 2:15	0:13	AWE	0.860	16.243	Oversupply
10/19/2015 2:29	0:13	AWE	0.764	14.353	Oversupply
10/19/2015 3:01	1:48	KWP	32.113	19.928	Oversupply
10/19/2015 3:07	0:01	AWE	0.100	6.347	Oversupply
10/19/2015 3:10	0:27	AWE	1.337	10.113	Oversupply
10/19/2015 3:39	0:02	AWE	0.056	8.033	Oversupply
10/19/2015 3:42	0:01	AWE	0.025	7.560	Oversupply
10/19/2015 3:45	0:01	AWE	0.008	7.470	Oversupply
10/19/2015 3:48	0:13	AWE	0.403	8.800	Oversupply
10/19/2015 4:02	0:04	AWE	0.118	8.840	Oversupply
10/19/2015 4:14	0:05	AWE	0.192	11.367	Oversupply
10/19/2015 4:20	0:14	AWE	0.466	13.167	Oversupply
10/19/2015 4:35	0:05	AWE	0.218	16.677	Oversupply
10/19/2015 4:41	0:01	AWE	0.026	13.553	Oversupply
10/19/2015 4:51	1:04	KWP	5.576	18.988	Oversupply
10/19/2015 6:17	2:32	BS 250	Data is not available	Data is not available	Oversupply
10/19/2015 6:17	0:04	KWP	0.132	17.733	Oversupply
10/19/2015 6:22	0:01	KWP	0.039	18.000	Oversupply
10/19/2015 6:25	2:23	KWP	30.888	20.285	Oversupply
10/19/2015 7:49	0:02	AWE	0.049	16.570	Oversupply
10/19/2015 8:20	0:03	AWE	0.065	16.553	Oversupply
10/19/2015 8:25	0:02	AWE	0.048	15.787	Oversupply
10/19/2015 8:31	0:02	AWE	0.079	18.223	Oversupply
10/19/2015 10:21	0:01	KWP	0.041	11.152	Oversupply
10/19/2015 11:08	0:02	BS 250	Data is not available	Data is not available	Facility requested
10/19/2015 11:34	0:04	BS 250	Data is not available	Data is not available	Facility requested
10/19/2015 11:35	0:03	KWP	0.027	3.001	Oversupply
10/19/2015 21:44	0:02	KWP	0.026	18.888	Oversupply
10/19/2015 21:48	0:08	KWP	0.167	19.739	Oversupply
10/19/2015 22:01	0:01	KWP	0.003	18.289	Oversupply
10/19/2015 22:26	0:46	KWP	6.303	18.269	Oversupply
10/19/2015 23:05	0:03	AWE	0.126	18.937	Oversupply
10/19/2015 23:13	0:12	KWP	0.933	12.345	Oversupply
10/20/2015 3:22	0:01	AWE	0.000	20.970	Oversupply
10/20/2015 3:47	0:12	AWE	0.238	20.770	Oversupply
10/20/2015 4:00	0:04	AWE	0.084	19.277	Oversupply
10/20/2015 4:03	0:01	KWP	0.003	0.182	Oversupply
10/20/2015 4:05	0:08	AWE	0.369	20.383	Oversupply
10/20/2015 4:06	0:01	KWP	0.000	0.020	Oversupply
10/20/2015 4:14	0:01	AWE	0.039	15.487	Oversupply
10/20/2015 4:16	0:08	AWE	0.427	17.060	Oversupply
10/20/2015 4:28	0:06	AWE	0.256	18.207	Oversupply
10/20/2015 4:40	0:01	AWE	0.009	19.283	Oversupply
10/20/2015 4:44	0:02	KWP	0.042	3.095	Oversupply
10/20/2015 4:47	0:02	KWP	0.059	3.720	Oversupply
10/20/2015 4:51	0:50	KWP	7.753	16.143	Oversupply
10/20/2015 4:57	0:38	AWE	2.632	21.000	Oversupply
10/20/2015 5:43	0:20	KWP	5.299	19.074	Oversupply
10/20/2015 5:51	0:06	AWE	0.031	21.000	Oversupply
10/20/2015 6:05	0:51	KWP	5.130	20.544	Oversupply
10/20/2015 7:24	0:05	KWP	0.027	20.655	Oversupply
10/20/2015 7:32	0:14	KWP	0.273	20.708	Oversupply
10/20/2015 8:23	0:12	KWP	0.609	20.708	Oversupply
10/20/2015 8:36	0:03	KWP	0.027	20.707	Oversupply
10/20/2015 8:46	0:03	KWP	0.001	20.708	Oversupply
10/20/2015 8:50	0:02	KWP	0.022	20.708	Oversupply
10/20/2015 8:56	0:09	KWP	0.286	20.706	Oversupply
10/20/2015 9:18	4:11	KWP	41.307	20.708	Oversupply
10/20/2015 13:33	0:49	KWP	2.506	20.708	Oversupply
10/20/2015 14:23	0:11	KWP	0.417	20.708	Oversupply
10/20/2015 14:40	0:02	KWP	0.005	20.708	Oversupply
10/20/2015 22:20	0:22	KWP	2.218	20.708	Oversupply
10/20/2015 22:43	6:36	KWP	108.324	20.708	Oversupply
10/21/2015 0:21	0:36	AWE	1.947	19.807	Oversupply
10/21/2015 1:00	0:15	AWE	0.606	15.487	Oversupply
10/21/2015 1:16	0:01	AWE	0.033	14.713	Oversupply
10/21/2015 1:31	0:02	AWE	0.023	11.997	Oversupply
10/21/2015 1:36	0:01	AWE	0.008	8.233	Oversupply
10/21/2015 1:43	0:01	AWE	0.012	6.647	Oversupply
10/21/2015 1:51	0:12	AWE	0.342	6.877	Oversupply
10/21/2015 2:06	0:05	AWE	0.095	5.287	Oversupply
10/21/2015 2:16	0:03	AWE	0.055	4.690	Oversupply
10/21/2015 2:23	0:05	AWE	0.116	4.737	Oversupply
10/21/2015 2:29	0:04	AWE	0.044	4.260	Oversupply
10/21/2015 2:35	1:02	AWE	8.092	18.763	Oversupply
10/21/2015 3:38	0:05	AWE	0.174	6.800	Oversupply
10/21/2015 3:44	0:02	AWE	0.023	5.727	Oversupply
10/21/2015 3:48	0:01	AWE	0.028	5.887	Oversupply
10/21/2015 3:51	0:56	AWE	5.796	16.660	Oversupply
10/21/2015 4:48	0:11	AWE	0.607	15.847	Oversupply
10/21/2015 5:00	0:11	AWE	0.336	15.420	Oversupply
10/21/2015 5:21	1:12	KWP	9.126	20.539	Oversupply
10/21/2015 6:38	0:03	KWP	0.031	20.540	Oversupply
10/21/2015 6:42	0:04	KWP	0.033	20.624	Oversupply
10/21/2015 7:06	0:01	KWP	0.014	19.883	Oversupply
10/21/2015 7:12	0:03	KWP	0.029	19.261	Oversupply
10/21/2015 7:34	0:01	KWP	0.014	18.214	Oversupply
10/21/2015 8:22	0:43	KWP	4.403	18.337	Oversupply
10/21/2015 9:14	0:01	KWP	0.005	6.145	Oversupply
10/21/2015 9:16	0:02	KWP	0.029	5.876	Oversupply
10/21/2015 9:19	0:01	KWP	0.023	6.045	Oversupply
10/21/2015 9:21	0:03	KWP	0.095	6.966	Oversupply
10/21/2015 9:26	0:02	KWP	0.041	7.115	Oversupply
10/21/2015 9:35	0:03	KWP	0.056	10.194	Oversupply
10/21/2015 9:38	0:01	KWP	0.023	9.778	Oversupply



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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/21/2015 9:41	0:02	KWP/II	0.026	9.232	Oversupply
10/21/2015 9:47	0:06	KWP/II	0.219	10.386	Oversupply
10/21/2015 9:56	0:01	KWP/II	0.022	9.770	Oversupply
10/21/2015 10:07	0:02	KWP/II	0.044	8.068	Oversupply
10/21/2015 10:10	0:01	KWP/II	0.027	9.011	Oversupply
10/21/2015 10:17	0:01	KWP/II	0.005	9.456	Oversupply
10/21/2015 10:19	0:02	KWP/II	0.036	7.674	Oversupply
10/21/2015 11:19	0:03	KWP/II	0.021	7.130	Oversupply
10/21/2015 11:52	0:01	KWP/II	0.030	10.283	Oversupply
10/21/2015 12:18	0:19	KWP/II	1.661	13.123	Oversupply
10/21/2015 12:38	0:11	KWP/II	0.651	16.917	Oversupply
10/21/2015 12:50	0:02	KWP/II	0.048	9.427	Oversupply
10/21/2015 22:10	5:37	KWP/II	83.411	20.677	Oversupply
10/21/2015 22:35	0:02	AWE	0.031	17.907	Oversupply
10/22/2015 0:10	0:01	AWE	0.020	11.290	Oversupply
10/22/2015 0:42	0:49	AWE	3.681	19.587	Oversupply
10/22/2015 1:32	0:10	AWE	0.269	10.587	Oversupply
10/22/2015 1:44	1:17	AWE	5.784	15.960	Oversupply
10/22/2015 3:02	0:02	AWE	0.049	7.123	Oversupply
10/22/2015 3:13	0:04	AWE	0.056	9.247	Oversupply
10/22/2015 3:18	0:04	AWE	0.151	8.910	Oversupply
10/22/2015 3:23	0:04	AWE	0.091	7.513	Oversupply
10/22/2015 3:28	0:05	AWE	0.156	8.700	Oversupply
10/22/2015 3:37	0:01	AWE	0.007	7.003	Oversupply
10/22/2015 3:50	1:24	KWP/II	10.214	18.789	Oversupply
10/22/2015 4:22	0:01	AWE	0.000	0.013	Oversupply
10/22/2015 7:39	0:01	KWP/II	0.020	15.417	Oversupply
10/22/2015 8:03	0:35	KWP/II	2.462	17.587	Oversupply
10/22/2015 8:40	0:19	KWP/II	0.638	17.842	Oversupply
10/22/2015 9:00	0:02	KWP/II	0.039	16.764	Oversupply
10/22/2015 9:05	1:45	KWP/II	15.035	20.028	Oversupply
10/22/2015 10:55	0:01	KWP/II	0.011	11.114	Oversupply
10/22/2015 10:57	0:01	KWP/II	0.024	9.990	Oversupply
10/22/2015 12:23	0:01	KWP/II	0.024	14.674	Oversupply
10/22/2015 12:26	0:04	KWP/II	0.151	16.777	Oversupply
10/22/2015 12:34	0:04	KWP/II	0.121	15.822	Oversupply
10/22/2015 12:55	0:05	KWP/II	0.128	18.880	Oversupply
10/22/2015 13:01	0:28	KWP/II	2.274	19.319	Oversupply
10/22/2015 13:33	0:12	KWP/II	0.488	18.030	Oversupply
10/22/2015 13:46	0:12	KWP/II	0.783	19.587	Oversupply
10/22/2015 14:07	0:02	KWP/II	0.024	19.040	Oversupply
10/22/2015 14:10	0:02	KWP/II	0.038	18.966	Oversupply
10/22/2015 17:44	0:06	KWP/II	0.051	20.692	Oversupply
10/22/2015 17:54	0:01	KWP/II	0.002	20.693	Oversupply
10/22/2015 22:01	0:17	KWP/II	0.164	20.528	Oversupply
10/22/2015 22:21	0:13	KWP/II	0.149	20.287	Oversupply
10/22/2015 22:35	0:33	KWP/II	1.700	20.236	Oversupply
10/22/2015 23:09	1:46	KWP/II	8.427	20.362	Oversupply
10/23/2015 1:16	0:01	KWP/II	0.001	13.232	Oversupply
10/23/2015 1:18	0:05	KWP/II	0.136	13.508	Oversupply
10/23/2015 1:43	0:01	KWP/II	0.019	9.850	Oversupply
10/23/2015 1:47	0:20	KWP/II	1.024	8.867	Oversupply
10/23/2015 2:09	0:03	KWP/II	0.054	7.850	Oversupply
10/23/2015 2:19	0:03	KWP/II	0.050	10.518	Oversupply
10/23/2015 2:25	0:01	KWP/II	0.016	10.185	Oversupply
10/23/2015 2:41	0:08	KWP/II	0.146	15.946	Oversupply
10/23/2015 2:52	0:29	KWP/II	1.994	15.577	Oversupply
10/23/2015 7:21	0:04	KWP/II	0.121	15.203	Oversupply
10/23/2015 11:08	0:01	AWE	0.000	0.007	Oversupply
10/23/2015 11:25	0:01	AWE	0.000	0.003	Oversupply
10/23/2015 11:44	0:01	AWE	0.000	0.003	Oversupply
10/23/2015 23:24	0:18	KWP/II	0.317	20.708	Oversupply
10/23/2015 0:00	0:32	KWP/II	0.853	20.708	Oversupply
10/23/2015 1:15	0:01	KWP/II	0.013	17.411	Oversupply
10/23/2015 1:30	0:28	KWP/II	1.308	19.135	Oversupply
10/23/2015 2:00	0:01	KWP/II	0.007	17.246	Oversupply
10/23/2015 2:03	0:02	KWP/II	0.014	17.127	Oversupply
10/23/2015 2:35	0:01	KWP/II	0.009	16.295	Oversupply
10/23/2015 2:40	0:02	KWP/II	0.042	17.585	Oversupply
10/23/2015 2:46	0:01	KWP/II	0.015	17.668	Oversupply
10/24/2015 12:06	0:04	KWP/II	0.109	11.450	Oversupply
10/25/2015 9:30	0:01	KWP	0.000	0.003	Oversupply
10/26/2015 22:11	0:03	KWP/II	0.031	19.993	Oversupply
10/26/2015 22:59	0:03	KWP/II	0.033	18.799	Oversupply
10/26/2015 23:11	0:01	KWP/II	0.001	19.860	Oversupply
10/26/2015 23:14	0:01	KWP/II	0.002	20.289	Oversupply
10/26/2015 23:25	0:01	KWP/II	0.001	20.671	Oversupply
10/26/2015 23:43	0:54	KWP/II	4.217	20.682	Oversupply
10/27/2015 0:39	0:01	KWP/II	0.018	17.952	Oversupply
10/27/2015 1:06	0:02	KWP/II	0.004	19.281	Oversupply
10/27/2015 1:57	0:01	KWP/II	0.030	18.063	Oversupply
10/27/2015 2:01	0:33	KWP/II	1.296	19.744	Oversupply
10/27/2015 2:35	0:01	KWP/II	0.030	17.881	Oversupply
10/27/2015 2:38	0:08	KWP/II	0.240	19.605	Oversupply
10/27/2015 3:10	0:46	KWP/II	5.195	20.525	Oversupply
10/27/2015 4:00	1:07	KWP/II	4.543	20.707	Oversupply
10/27/2015 6:17	1:59	BS 250	Data is not available	Data is not available	Oversupply
10/27/2015 9:45	4:52	KWP/II	56.343	20.708	Oversupply
10/27/2015 14:38	0:36	KWP/II	0.998	20.708	Oversupply
10/27/2015 15:47	0:02	KWP/II	0.013	20.708	Oversupply
10/27/2015 15:54	0:14	KWP/II	0.565	20.708	Oversupply
10/27/2015 16:15	0:05	KWP/II	0.159	20.708	Oversupply
10/27/2015 17:16	0:22	KWP/II	0.859	20.708	Oversupply
10/27/2015 17:39	0:01	KWP/II	0.001	20.708	Oversupply
10/27/2015 17:41	0:09	KWP/II	0.177	20.708	Oversupply
10/27/2015 17:51	0:01	KWP/II	0.001	20.708	Oversupply
10/27/2015 17:53	0:05	KWP/II	0.088	20.708	Oversupply
10/27/2015 22:26	0:04	KWP/II	0.076	20.708	Oversupply
10/27/2015 22:39	0:15	KWP/II	0.596	20.708	Oversupply
10/27/2015 23:20	1:52	KWP/II	26.376	20.708	Oversupply
10/28/2015 0:36	0:01	AWE	0.007	13.600	Oversupply
10/28/2015 0:41	0:27	AWE	2.093	19.837	Oversupply
10/28/2015 1:14	3:46	KWP/II	73.919	20.708	Oversupply
10/28/2015 1:25	0:48	AWE	4.559	21.000	Oversupply
10/28/2015 2:30	2:00	AWE	14.745	21.000	Oversupply
10/28/2015 4:37	0:06	AWE	0.248	17.877	Oversupply
10/28/2015 4:44	0:04	AWE	0.080	16.253	Oversupply
10/28/2015 4:51	0:03	AWE	0.067	17.270	Oversupply
10/28/2015 4:55	0:01	AWE	0.014	15.547	Oversupply
10/28/2015 5:02	0:16	KWP/II	1.719	20.690	Oversupply
10/28/2015 5:19	0:09	KWP/II	0.196	20.390	Oversupply
10/28/2015 7:20	0:01	KWP/II	0.000	20.708	Oversupply
10/28/2015 7:24	0:23	KWP/II	0.680	20.708	Oversupply
10/28/2015 7:50	0:01	KWP/II	0.002	20.702	Oversupply



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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/28/2015 7:52	0:03	KWPIL	0.017	20.701	Oversupply
10/28/2015 8:01	1:32	KWPIL	23.337	20.702	Oversupply
10/28/2015 8:28	0:04	AWE	0.129	20.730	Oversupply
10/28/2015 8:33	0:05	AWE	0.110	20.930	Oversupply
10/28/2015 8:46	0:01	AWE	0.000	20.930	Oversupply
10/28/2015 9:01	0:02	AWE	0.015	18.907	Oversupply
10/28/2015 9:05	0:03	AWE	0.097	20.413	Oversupply
10/28/2015 9:11	0:05	AWE	0.211	21.000	Oversupply
10/28/2015 9:17	0:04	AWE	0.163	20.797	Oversupply
10/28/2015 9:24	0:04	AWE	0.076	21.000	Oversupply
10/28/2015 9:35	1:18	KWPIL	23.262	20.694	Oversupply
10/28/2015 9:40	6:09	BS 250	Data is not available	Data is not available	Oversupply and facility requested
10/28/2015 10:24	0:18	AWE	0.427	21.000	Oversupply
10/28/2015 10:43	0:05	AWE	0.043	21.000	Oversupply
10/28/2015 10:55	2:18	KWPIL	21.390	20.623	Oversupply
10/28/2015 13:18	0:04	KWPIL	0.122	20.287	Oversupply
10/28/2015 13:23	0:08	KWPIL	0.153	20.119	Oversupply
10/28/2015 13:32	0:01	KWPIL	0.001	17.602	Oversupply
10/28/2015 13:38	0:08	KWPIL	0.371	19.239	Oversupply
10/28/2015 13:48	0:02	KWPIL	0.011	19.741	Oversupply
10/28/2015 13:54	0:07	KWPIL	0.095	19.476	Oversupply
10/28/2015 14:02	0:08	KWPIL	0.236	19.651	Oversupply
10/28/2015 14:19	0:04	KWPIL	0.123	19.337	Oversupply
10/28/2015 14:25	0:06	KWPIL	0.165	18.752	Oversupply
10/28/2015 14:39	0:03	KWPIL	0.082	17.675	Oversupply
10/28/2015 14:49	0:04	KWPIL	0.089	18.314	Oversupply
10/28/2015 14:55	0:06	KWPIL	0.260	19.215	Oversupply
10/28/2015 15:02	0:01	KWPIL	0.009	17.959	Oversupply

Notes:

- Curtailment for Kaheawa Wind Power ("KWP"), Makila Hydroelectric ("MH"), AAAAA Rent-A-Space Maui LTD ("5A"), Bioreal Solar, LLC ("BS"), Auwahi Wind Energy ("AWE"), Kaheawa Wind Power II ("KWPIL") Bioreal Solar 250, LLC ("BS250") may now be controlled by Maui Electric's Automatic Generation Control System ("AGC") or a Maui Electric operator-entered curtailment limit. The AGC curtailment control automatically calculates the amount of Maximum Allowable Variable Generation ("MAVG") that Maui Electric can accept into the Maui system, based on the system current available variable generation ("CAVG"), regulating reserve down requirement ("RRDR"), and available regulating reserve down ("ARRD"). Thus, the AGC MAVG - calculated is equal to CAVG less (RRDR less ARRD). Additionally, the AGC curtailment control allows the Maui Electric operator to enter an AGC MAVG value. The AGC curtailment control will employ the lesser of the AGC MAVG - calculated and AGC MAVG - entered values in the control logic.
- The Estimated Curtailed MWH and Peak MW Curtailed are calculated with information provided by AWE, KWP, and KWPIL. Maui Electric does not make any representation as to its accuracy.
- The data to calculate the Estimated Curtailed MWH and Peak MW Curtailed is not provided by 5A, BS, BS 250 or MH.
- Curtailment signals sent to 5A, BS, or BS250 during nighttime hours are not recorded as curtailment events because no energy generation is possible during that time.
- The curtailment reasons have been modified to oversupply, system constraints, and facility requested, to provide continuity with HPUC Docket No. 2013-0141 Decoupling for HECO companies metrics.



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Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
10/1/2015 6:19	0:15	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 7:03	0:12	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 7:18	0:06	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 7:47	0:18	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 8:07	0:01	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 8:09	0:26	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 8:36	0:29	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 9:17	0:04	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 9:41	0:04	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 10:34	0:02	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 10:39	0:02	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 10:46	0:43	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 11:30	0:01	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 11:33	0:27	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 12:02	1:33	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 13:41	0:27	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 14:16	0:23	LSR	Data is not available	Data is not available	Oversupply
10/1/2015 14:47	2:40	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 7:17	1:03	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 8:21	2:30	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 10:52	0:57	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 11:52	0:01	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 11:57	0:09	LSR	Data is not available	Data is not available	Oversupply
10/2/2015 12:11	5:08	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 6:56	0:01	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 7:03	0:02	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 7:09	2:19	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 9:30	2:59	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 12:36	0:08	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 12:49	0:03	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 12:54	0:20	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 13:15	0:11	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 13:30	0:23	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 13:55	1:01	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 14:57	2:04	LSR	Data is not available	Data is not available	Oversupply
10/3/2015 17:09	0:13	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 6:56	0:08	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 7:12	0:06	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 7:30	0:23	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 8:43	0:02	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 8:49	1:03	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 9:54	0:06	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 10:01	0:01	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 10:03	0:45	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 10:49	0:01	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 10:53	0:09	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:07	0:01	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:16	0:02	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:23	0:02	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:28	0:03	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:39	0:02	LSR	Data is not available	Data is not available	Oversupply
10/4/2015 11:42	0:06	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 6:42	0:16	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 6:59	0:19	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 7:19	0:19	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 7:39	0:30	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 8:10	0:52	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 9:04	0:09	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 9:14	0:38	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 9:58	0:51	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 10:52	1:31	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 12:25	0:03	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 12:32	0:01	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 12:34	0:29	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 13:04	0:57	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 14:03	1:17	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 15:22	0:25	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 15:50	0:46	LSR	Data is not available	Data is not available	Oversupply
10/5/2015 16:50	0:01	LSR	Data is not available	Data is not available	Oversupply
10/6/2015 6:49	0:44	LSR	Data is not available	Data is not available	Oversupply
10/6/2015 7:35	1:57	LSR	Data is not available	Data is not available	Oversupply
10/6/2015 9:33	1:45	LSR	Data is not available	Data is not available	Oversupply
10/6/2015 11:19	6:18	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 7:04	0:03	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 7:17	0:02	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 7:32	0:10	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 7:44	1:26	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 9:12	1:09	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 10:40	1:51	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 12:32	0:51	LSR	Data is not available	Data is not available	Oversupply
10/7/2015 13:24	4:11	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 7:05	0:06	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 7:22	0:09	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 7:33	0:01	LSR	Data is not available	Data is not available	Oversupply



Lanai Curtailment Report October 2015

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
10/8/2015 7:40	0:03	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 7:50	0:10	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 8:06	0:10	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 8:19	0:03	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 8:48	0:01	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 8:51	0:01	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 8:53	0:32	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 9:59	0:19	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 12:20	0:59	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 13:30	0:37	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 14:56	0:21	LSR	Data is not available	Data is not available	Oversupply
10/8/2015 15:23	2:15	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 6:39	0:10	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 7:14	0:02	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 7:18	2:51	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 10:12	0:25	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 10:38	0:01	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 10:41	0:16	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 10:58	1:05	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 12:04	0:02	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 12:08	0:33	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 12:46	0:59	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 13:46	0:02	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 14:29	0:03	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 14:41	0:01	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 14:45	0:04	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 14:53	0:03	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 14:57	0:05	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:13	0:01	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:20	0:02	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:32	0:02	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:35	0:14	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:51	0:01	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:53	0:03	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 15:58	0:04	LSR	Data is not available	Data is not available	Oversupply
10/9/2015 16:03	1:09	LSR	Data is not available	Data is not available	Oversupply
10/10/2015 7:30	0:39	LSR	Data is not available	Data is not available	Oversupply
10/10/2015 8:10	0:02	LSR	Data is not available	Data is not available	Oversupply
10/10/2015 8:14	0:28	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 9:53	0:20	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 10:15	0:09	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 10:25	0:05	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 10:31	0:09	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 10:44	0:08	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 10:54	0:26	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 11:28	0:03	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 11:37	0:04	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 11:52	0:08	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:01	0:04	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:08	0:01	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:23	0:05	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:34	0:04	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:39	0:03	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 12:44	0:02	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 13:01	0:01	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 13:13	0:04	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 13:23	0:07	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 13:31	0:02	LSR	Data is not available	Data is not available	Oversupply
10/11/2015 16:18	0:01	LSR	Data is not available	Data is not available	Oversupply
10/12/2015 8:55	0:07	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 10:45	0:02	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 10:48	0:04	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 10:55	0:01	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 12:36	0:12	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 12:50	0:41	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 13:36	0:05	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 13:44	0:02	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 13:58	0:03	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 14:07	0:01	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 14:51	0:02	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:05	0:01	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:10	0:01	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:14	0:05	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:26	0:05	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:33	0:03	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:37	0:02	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:40	0:05	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:49	0:06	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 15:58	0:02	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 16:01	0:01	LSR	Data is not available	Data is not available	Oversupply
10/13/2015 16:05	0:01	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 8:08	0:05	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 8:36	0:01	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 9:07	0:01	LSR	Data is not available	Data is not available	Oversupply



Lanai Curtailment Report October 2015

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
10/14/2015 9:14	0:03	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 9:18	0:03	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 12:08	0:04	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 12:14	0:14	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 13:06	0:01	LSR	Data is not available	Data is not available	Oversupply
10/14/2015 15:12	0:10	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 13:12	0:08	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 13:21	0:13	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 13:41	0:04	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 13:47	0:06	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 13:59	0:03	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 14:08	0:03	LSR	Data is not available	Data is not available	Oversupply
10/15/2015 14:20	0:15	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 9:24	0:03	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 10:05	0:05	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 11:02	0:01	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 11:04	0:02	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 11:09	0:02	LSR	Data is not available	Data is not available	Oversupply
10/16/2015 11:12	0:11	LSR	Data is not available	Data is not available	Oversupply
10/17/2015 8:05	0:20	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 15:36	0:01	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 15:40	0:01	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:02	0:03	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:13	0:01	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:19	0:09	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:30	0:05	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:38	0:03	LSR	Data is not available	Data is not available	Oversupply
10/21/2015 16:43	0:02	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 6:58	0:09	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 7:30	1:36	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 9:11	0:04	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 9:16	0:34	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 9:53	0:02	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 10:14	0:06	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 10:21	0:01	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 10:24	0:01	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 10:52	0:06	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 11:08	0:08	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 11:52	0:01	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 12:04	0:01	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 12:51	0:07	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 13:49	0:30	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 14:22	0:07	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 14:31	0:24	LSR	Data is not available	Data is not available	Oversupply
10/22/2015 16:15	1:11	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 7:13	2:49	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 10:03	0:38	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 10:43	1:07	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 11:51	0:01	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 11:53	0:09	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 12:04	0:12	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 12:18	0:08	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 12:30	0:06	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 12:38	0:08	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 12:58	0:01	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 13:06	0:03	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 13:32	0:02	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 13:35	0:02	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 13:51	0:19	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 14:11	0:23	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 14:35	0:09	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 14:55	0:13	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 15:16	0:48	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 16:11	0:09	LSR	Data is not available	Data is not available	Oversupply
10/23/2015 16:24	0:56	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 8:17	0:42	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 9:01	0:17	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 11:58	0:01	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 12:31	0:01	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 12:33	0:01	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 14:05	0:01	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 14:13	0:04	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 14:26	0:08	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 15:20	0:01	LSR	Data is not available	Data is not available	Oversupply
10/24/2015 15:28	0:01	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 9:15	0:06	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 9:24	0:01	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 9:47	0:01	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 9:51	0:01	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 10:06	0:02	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 10:13	0:02	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 10:30	0:05	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 10:36	0:48	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 11:33	0:11	LSR	Data is not available	Data is not available	Oversupply



Lanai Curtailment Report October 2015

Start Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
10/28/2015 11:46	0:37	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 12:29	0:02	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 13:57	0:18	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 14:16	1:37	LSR	Data is not available	Data is not available	Oversupply
10/28/2015 15:55	0:14	LSR	Data is not available	Data is not available	Oversupply
10/29/2015 6:13	0:05	LSR	Data is not available	Data is not available	Oversupply
10/29/2015 16:33	0:19	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 7:08	0:04	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 7:36	0:13	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 7:50	0:04	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 13:20	0:03	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 14:04	0:05	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 14:15	0:26	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 14:42	0:15	LSR	Data is not available	Data is not available	Oversupply
10/30/2015 15:04	0:10	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 7:27	0:42	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 8:10	0:41	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 8:52	0:06	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 9:31	0:02	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 9:35	0:07	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 9:43	0:02	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 9:56	0:09	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:07	0:04	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:12	0:08	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:21	0:11	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:36	0:01	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:43	0:13	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 10:57	0:07	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 11:12	0:01	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 11:25	0:06	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 11:48	0:03	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 11:53	0:06	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 12:02	0:07	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 12:14	0:28	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 12:43	0:13	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 13:08	0:03	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 13:12	0:07	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 13:26	0:01	LSR	Data is not available	Data is not available	Oversupply
10/31/2015 13:28	0:03	LSR	Data is not available	Data is not available	Oversupply

Notes:

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

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

The curtailment reasons have been modified to oversupply, system constraints, and facility requested, to provide continuity with HPUC Docket No. 2013-0141 Decoupling for HECO companies metrics.

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Start Date/Time	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released ¹	IPP	Reason for Curtailment
10/24/15 08:35	0.3 MW	10/24/15 15:47	0.1 MW	HRD	System constraint
10/25/15 07:41	0.0 MW	10/25/15 17:11	0.2 MW	HRD	System constraint
10/26/15 06:44	0.0 MW	10/26/15 15:34	0.0 MW	HRD	System constraint

¹ The MW output values are taken soon after curtailment is released by Hawai'i Electric Light and may not reflect their full output depending on ramp rate for the facility. The wind farms generally return immediately to full available levels, whereas PGV and Wailuku may take longer to return to scheduled or full available output levels.