



November 24, 2014

FILED

2014 NOV 24 P 3:47

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

PUBLIC UTILITIES
COMMISSION

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 2014 on (1) system frequency control performance during month; (2) significant system events during month; and (3) curtailment of non-dispatchable renewable resources.

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

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

Sincerely,

Daniel G. Brown
Manager
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".

SERVICE LIST
(Docket No. 2011-0206)

JEFFREY T. ONO EXECUTIVE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS DIVISION OF CONSUMER ADVOCACY P.O. Box 541 Honolulu, HI 96809	2 Copies Via Hand Delivery
GREGG J. KINKLEY, ESQ. DEPARTMENT OF THE ATTORNEY GENERAL 425 Queen Street Honolulu, Hawaii 96813 Counsel for DBEDT	1 Copy Electronically Transmitted
DANIEL W.S. LAWRENCE, ESQ. DEPARTMENT OF THE CORPORATION COUNSEL CITY AND COUNTY OF HONOLULU 530 S. King Street, Room 110 Honolulu, HI 96813 Counsel for the CITY AND COUNTY OF HONOLULU	1 Copy Electronically Transmitted
MOLLY A. STEBBINS, ESQ. WILLIAM V. BRILHANTE, JR., ESQ. DEPARTMENT OF THE CORPORATION COUNSEL COUNTY OF HAWAII 101 Aupuni Street, Suite 325 Hilo, HI 96720 Counsel for the COUNTY OF HAWAII	1 Copy Electronically Transmitted
HENRY Q CURTIS VICE PRESIDENT FOR CONSUMER ISSUES LIFE OF THE LAND P.O. Box 37158 Honolulu, HI 96837-0158	1 Copy Electronically Transmitted
WARREN S. BOLLMEIER II PRESIDENT HAWAII RENEWABLE ENERGY ALLIANCE 46-040 Konane Place, #3816 Kaneohe, HI 96744	1 Copy Electronically Transmitted

SERVICE LIST
(Docket No. 2011-0206)

DOUGLAS A. CODIGA, ESQ.
SCHLACK ITO LLLC
Topa Financial Center
745 Fort Street, Suite 1500
Honolulu, HI 96813
Counsel for BLUE PLANET FOUNDATION

1 Copy
Electronically Transmitted

ISAAC MORIWAKE, ESQ.
DAVID HENKIN, ESQ.
EARTHJUSTICE
850 Richards Street, Suite 400
Honolulu, HI 96813-4501
Counsel for HAWAII SOLAR ENERGY ASSOCIATION

1 Copy
Electronically Transmitted

KENT D. MORIHARA, ESQ.
KRIS N. NAKAGAWA, ESQ.
LAUREN M. IMADA-LEE, ESQ.
TANYA M. FERNANDES, ESQ.
Moriwara Lau & Fong LLP
841 Bishop Street, Suite 400
Honolulu, Hawaii 96813
Counsel for KAUAI ISLAND UTILITY COOPERATIVE

1 Copy
Electronically Transmitted

ERIK W. KVAM
CHIEF EXECUTIVE OFFICER
ZERO EMISSIONS LEASING LLC
1110 University Avenue, Suite 402
Honolulu, HI 96826

1 Copy
Electronically Transmitted

SANDRA-ANN Y.H. WONG, ESQ.
ATTORNEY AT LAW, A LAW CORPORATION
1050 Bishop Street, #514
Honolulu, HI 96813
Counsel for TAWHIRI POWER LLC

1 Copy
Electronically Transmitted

RILEY SAITO
73-1294 Awakea Street
Kailua-Kona, HI 96740
For SOLAR ENERGY INDUSTRIES ASSOCIATION

1 Copy
Electronically Transmitted

SERVICE LIST
(Docket No. 2011-0206)

DEAN T. YAMAMOTO, ESQ.
YAMAMOTO & SETTLE
700 Bishop Street, Suite 200
Honolulu, HI 96813
Counsel for CASTLE & COOKE HOMES HAWAII, INC.,
CASTLE & COOKE RESORTS, LLC and
LANAI SUSTAINABILITY RESEARCH, LLC

1 Copy
Electronically Transmitted

MICHAEL J. HOPPER, ESQ.
DEPUTY CORPORATION COUNSEL
DEPARTMENT OF THE CORPORATION COUNSEL
COUNTY OF MAUI
200 S. High Street
Wailuku, HI 96793
Counsel for the COUNTY OF MAUI

1 Copy
Electronically Transmitted

CURTIS SEYMOUR
SENIOR MANAGER, GOVERNMENT AFFAIRS
SUN EDISON LLC
600 Clipper Drive
Belmont, CA 94002

1 Copy
Electronically Transmitted

MONA W. CLARK, ESQ.
OFFICE OF THE COUNTY ATTORNEY
COUNTY OF KAUAI
4444 Rice Street, Suite 200
Lihue, HI 96766-1300

1 Copy
Electronically Transmitted

BRADLEY ALBERT
PRESIDENT
HAWAII PV COALITION
P.O. Box 81501
Haiku, HI 96708

1 Copy
Electronically Transmitted

HILTON H. UNEMORI
ECM, INC.
130 N. Market Street
Wailuku, HI 96793-1716
For SOUTH MAUI RENEWABLE RESOURCES, LLC

1 Copy
Electronically Transmitted

SKY STANFIELD
KEYES, FOX & WIEDMAN LLP
436 14th Street, Suite 1305
Oakland, CA 94612
For the INTERSTATE RENEWABLE ENERGY COUNCIL

1 Copy
Electronically Transmitted

SERVICE LIST
(Docket No. 2011-0206)

PETE COOPER
SOLARCITY CORPORATION
REGIONAL DIRECTOR, HAWAII
599 Kahelu Street
Mililani, HI 96789

1 Copy
Electronically Transmitted

STANLEY ALLEN GRAY, SENIOR DEVELOPER
Pier 1, Bay 3
San Francisco, CA 94111
For MOLOKAI RENEWABLES LLC

1 Copy
Electronically Transmitted

ALISON SILVERSTEIN
19213 Luedtke Lane
Pflugerville, TX 78660

1 Copy
Electronically Transmitted

BRENDAN KIRBY
12011 SW Pineapple Court
Palm City, FL 34990

1 Copy
Electronically Transmitted

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, 2014):

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

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

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

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

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

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

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

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

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

Maui Electric, and Hawai'i Electric Light's under frequency load shed events are provided in Attachment 4. Hawaiian Electric did not have any under frequency load shed events 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, 2014):

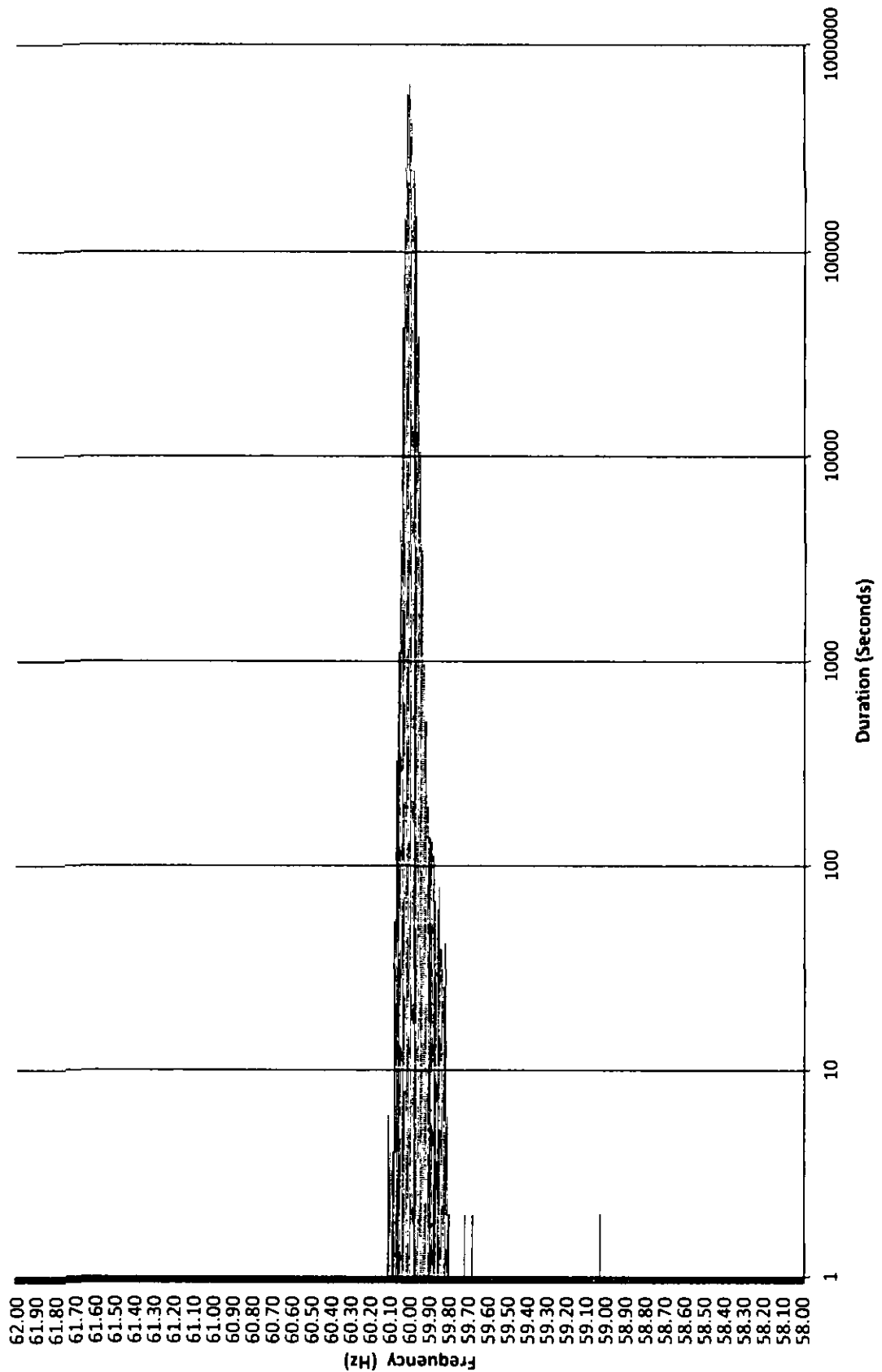
3a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment:

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

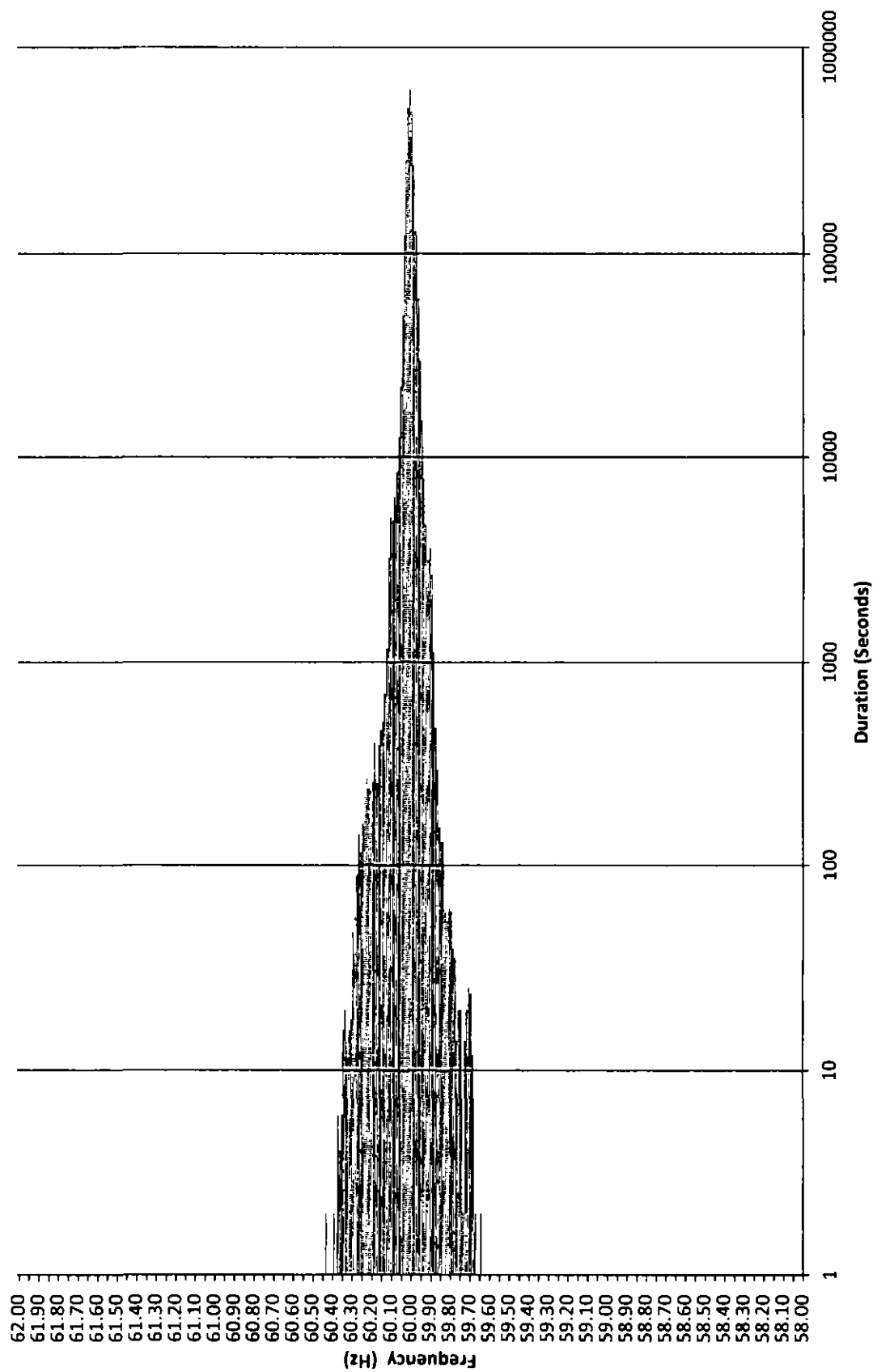
3b) Total MWh of non-dispatchable renewable resources curtailed for the month:

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

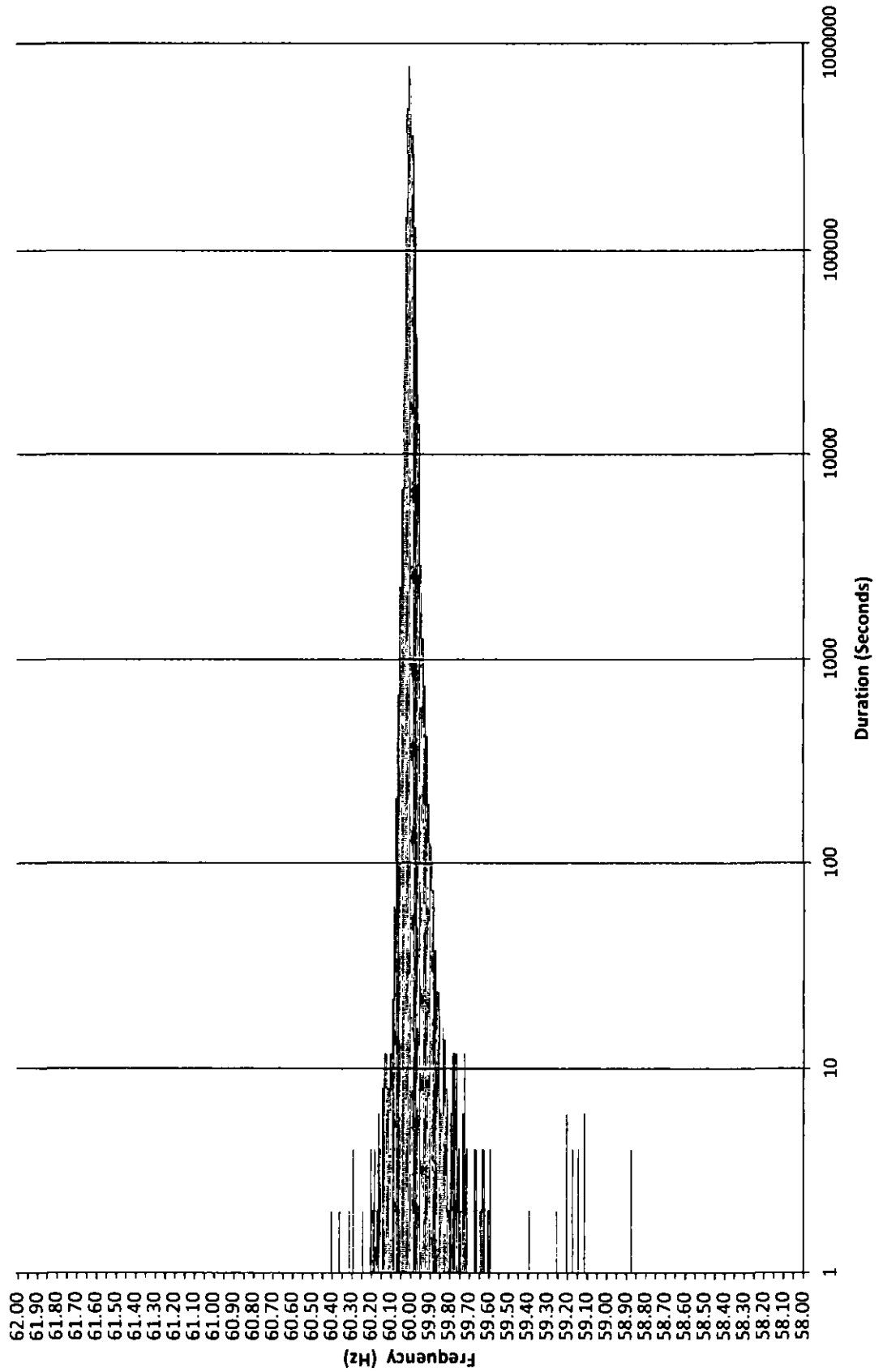
Frequency Distribution Plot - Hawaiian Electric October 2014



Maui Electric Frequency Distribution Plot - Maui October 2014



Frequency Distribution Plot - Hawai'i Electric Light October 2014



Hawaiian Electric Frequency Excursion Statistics October 2014		
Data Rounded to the nearest	<59.95 Hz	>60.05 Hz
Number of Excursions	765	239
Maximum Duration (sec)	508	440
Maximum Deviation (Hz)	59.027	60.114
Total Duration of Excursions (sec)	9200	2650

Maui Electric Frequency Excursion Statistics October 2014		
	<59.95 Hz	>60.05 Hz
Number of Excursions	5689	3579
Maximum Duration (sec)	1662	1232
Maximum Deviation (Hz)	59.6393	60.4331
Total Duration of Excursions (sec)	52544	55304

Hawai'i Electric Light Frequency Excursion Statistics October 2014		
	<59.95 Hz	>60.05 Hz
Number of Excursions	1913	417
Maximum Duration (sec)	172	60
Maximum Deviation (Hz)	58.866	60.399
Total Duration of Excursions (sec)	13180	1878

This page intentionally left blank.

Hawaiian Electric Curtailment Report October 2014

Start Date/Time	Curtailment Set Point	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released	Estimated MWh of curtailed energy during event (1)	IPP	Reason for Curtailment
07/17/14 14:29	48.0	41.10	Ongoing	---	---	Mauka	Flicker
10/07/14 06:49	0.0	0.20	10/07/14 08:12	0	*	KWF	Maintenance work
10/07/14 06:50	0.0	0.70	10/07/14 08:12	0	*	Makai	Maintenance work
10/07/14 15:16	0.0	0.00	10/07/14 15:38	0	*	KWF	Maintenance work
10/07/14 15:17	0.0	0.00	10/07/14 15:38	0	*	Makai	Maintenance work

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.

RSWG Maul Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailment	Estimated Curtains MWH	Peak MW Curtailment	Reasons for Curtailment
10/1/2014 10:27	0:01	KWPII	0:000	0:002	AGC MAVG - calculated
10/1/2014 12:56	0:01	KWPII	0:000	0:030	AGC MAVG - calculated
10/1/2014 22:13	0:01	AWE	0:003	0:700	AGC MAVG - calculated
10/2/2014 3:07	0:01	KWP	0:004	0:266	AGC MAVG - calculated
10/2/2014 8:24	0:01	KWP	0:001	0:032	AGC MAVG - calculated
10/2/2014 10:33	0:01	KWP	0:000	0:016	AGC MAVG - calculated
10/2/2014 14:53	0:01	KWP	0:002	0:112	AGC MAVG - calculated
10/2/2014 22:48	0:18	KWPII	0:368	20:532	AGC MAVG - calculated
10/2/2014 23:13	0:02	KWPII	0:012	20:421	AGC MAVG - calculated
10/3/2014 0:05	0:00	KWPII	34:187	20:848	AGC MAVG - calculated
10/3/2014 5:08	0:02	KWPII	0:014	19:147	AGC MAVG - calculated
10/3/2014 5:16	0:11	KWPII	0:536	19:581	AGC MAVG - calculated
10/3/2014 5:42	0:02	KWPII	0:007	18:377	AGC MAVG - calculated
10/3/2014 5:49	0:01	KWPII	0:018	16:951	AGC MAVG - calculated
10/3/2014 14:04	0:01	KWPII	0:000	0:017	AGC MAVG - calculated
10/3/2014 18:28	0:01	KWPII	0:002	15:624	AGC MAVG - calculated
10/3/2014 20:21	0:01	KWPII	0:006	18:298	AGC MAVG - calculated
10/3/2014 20:57	0:01	KWPII	0:005	16:199	AGC MAVG - calculated
10/3/2014 22:46	0:01	KWPII	0:016	13:625	AGC MAVG - calculated
10/3/2014 22:48	0:02	KWPII	0:091	17:447	AGC MAVG - calculated
10/3/2014 22:53	0:01	KWPII	0:051	18:523	AGC MAVG - calculated
10/4/2014 6:38	0:02	KWPII	0:010	0:750	AGC MAVG - calculated
10/4/2014 6:59	0:01	AWE	0:003	12:200	AGC MAVG - calculated
10/4/2014 8:41	0:02	KWPII	0:008	0:388	AGC MAVG - calculated
10/4/2014 8:45	0:02	KWPII	0:008	0:305	AGC MAVG - calculated
10/4/2014 8:45	0:02	AWE	0:070	14:900	AGC MAVG - calculated
10/4/2014 8:49	0:01	KWPII	0:008	0:855	AGC MAVG - calculated
10/5/2014 12:37	0:01	AWE	0:002	0:100	AGC MAVG - calculated
10/5/2014 17:01	0:01	KWP	0:001	0:080	AGC MAVG - calculated
10/5/2014 17:03	0:01	KWP	0:000	0:015	AGC MAVG - calculated
10/5/2014 17:05	0:01	KWP	0:000	0:016	AGC MAVG - calculated
10/5/2014 18:05	0:01	AWE	0:002	0:100	AGC MAVG - calculated
10/5/2014 22:20	0:30	AWE	0:822	21:000	AGC MAVG - calculated
10/5/2014 22:51	0:01	AWE	0:008	21:000	AGC MAVG - calculated
10/5/2014 22:53	0:01	AWE	0:022	21:000	AGC MAVG - calculated
10/5/2014 3:44	0:01	AWE	0:002	0:100	AGC MAVG - calculated
10/5/2014 4:04	0:01	AWE	0:003	0:200	AGC MAVG - calculated
10/5/2014 7:42	0:03	KWPII	0:147	10:028	AGC MAVG - calculated and Good Engineering and Operating Practices
10/5/2014 7:42	0:03	AWE	0:101	21:000	AGC MAVG - calculated and Good Engineering and Operating Practices
10/5/2014 7:55	0:04	AWE	1:400	21:000	AGC MAVG - calculated and Good Engineering and Operating Practices
10/5/2014 7:59	0:02	KWPII	0:112	12:311	AGC MAVG - calculated Good Engineering and Operating Practices and Testing
10/5/2014 11:46	0:10	KWPII	0:231	12:771	AGC MAVG - calculated and Testing
10/5/2014 12:08	0:01	KWPII	0:004	13:629	AGC MAVG - calculated and Testing
10/5/2014 18:30	0:01	KWPII	0:000	0:030	AGC MAVG - calculated
10/5/2014 18:30	0:01	KWPII	0:001	0:053	AGC MAVG - calculated
10/5/2014 20:29	0:01	KWPII	0:000	20:578	AGC MAVG - calculated
10/5/2014 20:37	0:01	KWPII	0:007	20:617	AGC MAVG - calculated
10/5/2014 0:19	0:01	KWPII	0:004	18:186	AGC MAVG - calculated
10/5/2014 0:48	0:01	KWPII	0:032	16:334	AGC MAVG - calculated
10/5/2014 1:31	0:06	KWPII	0:440	19:611	AGC MAVG - calculated
10/5/2014 1:38	0:02	KWPII	0:190	18:932	AGC MAVG - calculated
10/5/2014 1:42	0:01	KWPII	0:107	19:007	AGC MAVG - calculated
10/5/2014 1:44	0:01	KWPII	0:089	18:956	AGC MAVG - calculated
10/5/2014 1:46	0:04	KWPII	0:357	18:743	AGC MAVG - calculated
10/5/2014 1:55	0:03	KWPII	0:228	18:491	AGC MAVG - calculated
10/5/2014 1:59	0:01	KWPII	0:102	18:392	AGC MAVG - calculated
10/5/2014 2:01	0:01	KWPII	0:132	18:978	AGC MAVG - calculated
10/5/2014 2:03	0:01	KWPII	0:124	19:358	AGC MAVG - calculated
10/5/2014 2:05	0:02	KWPII	0:251	19:728	AGC MAVG - calculated
10/5/2014 2:09	0:02	KWPII	0:263	19:529	AGC MAVG - calculated
10/5/2014 2:14	0:04	KWPII	0:509	19:489	AGC MAVG - calculated
10/5/2014 2:19	0:01	KWPII	0:159	19:555	AGC MAVG - calculated
10/5/2014 2:23	0:02	KWPII	0:233	18:251	AGC MAVG - calculated
10/5/2014 2:27	0:03	KWPII	0:192	18:665	AGC MAVG - calculated
10/5/2014 2:33	0:04	KWPII	0:287	16:551	AGC MAVG - calculated
10/5/2014 2:41	0:02	KWPII	0:149	17:718	AGC MAVG - calculated
10/5/2014 2:45	0:04	KWPII	0:360	17:870	AGC MAVG - calculated
10/5/2014 2:53	0:03	KWPII	0:298	19:190	AGC MAVG - calculated
10/5/2014 2:58	0:03	KWPII	0:331	19:219	AGC MAVG - calculated
10/5/2014 3:06	0:04	KWPII	0:355	19:715	AGC MAVG - calculated
10/5/2014 3:12	0:01	KWPII	0:053	18:258	AGC MAVG - calculated
10/5/2014 3:26	0:03	KWPII	0:101	17:979	AGC MAVG - calculated
10/5/2014 3:30	0:08	KWPII	0:805	17:806	AGC MAVG - calculated
10/5/2014 3:40	0:04	KWPII	0:474	18:740	AGC MAVG - calculated
10/5/2014 3:45	0:02	KWPII	0:228	19:123	AGC MAVG - calculated
10/5/2014 3:48	0:06	KWPII	0:820	19:749	AGC MAVG - calculated
10/5/2014 3:58	0:03	KWPII	0:440	20:087	AGC MAVG - calculated
10/5/2014 4:00	0:06	KWPII	0:871	20:082	AGC MAVG - calculated
10/5/2014 4:08	0:03	KWPII	0:487	19:690	AGC MAVG - calculated
10/5/2014 4:14	0:01	KWPII	0:126	19:134	AGC MAVG - calculated
10/5/2014 4:19	0:02	KWPII	0:167	19:582	AGC MAVG - calculated
10/5/2014 4:25	0:02	KWPII	0:103	19:942	AGC MAVG - calculated
10/5/2014 4:30	0:08	KWPII	0:236	20:247	AGC MAVG - calculated
10/5/2014 5:58	0:18	KWPII	0:828	20:582	AGC MAVG - calculated
10/5/2014 6:06	0:03	KWPII	0:048	20:708	AGC MAVG - calculated
10/5/2014 6:16	0:02	KWPII	0:024	20:708	AGC MAVG - calculated
10/5/2014 10:06	0:02	KWPII	0:003	20:708	AGC MAVG - calculated
10/5/2014 10:13	0:01	KWPII	0:001	20:708	AGC MAVG - calculated
10/5/2014 19:28	0:01	KWPII	0:006	20:625	AGC MAVG - calculated
10/5/2014 20:23	0:27	KWPII	1:657	20:700	AGC MAVG - calculated
10/5/2014 20:51	0:19	KWPII	0:883	20:708	AGC MAVG - calculated
10/5/2014 21:11	0:02	KWPII	0:084	20:708	AGC MAVG - calculated
10/5/2014 21:14	0:03	KWPII	0:145	20:873	AGC MAVG - calculated
10/5/2014 23:00	0:04	KWPII	0:048	20:848	AGC MAVG - calculated
10/5/2014 23:06	0:02	KWPII	0:020	20:833	AGC MAVG - calculated
10/5/2014 23:50	0:02	KWPII	0:028	20:695	AGC MAVG - calculated
10/5/2014 23:53	0:15	KWPII	0:958	20:687	AGC MAVG - calculated
10/10/2014 0:09	0:03	KWPII	0:251	20:702	AGC MAVG - calculated
10/10/2014 0:13	0:06	KWPII	0:783	20:706	AGC MAVG - calculated
10/10/2014 0:20	0:04	KWPII	0:650	20:703	AGC MAVG - calculated
10/10/2014 0:26	0:03	KWPII	0:585	20:705	AGC MAVG - calculated
10/10/2014 0:30	0:14	KWPII	3:880	20:702	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
10/10/2014 0:45	0:38	KWPII	10:038	20:707	AGC MAVG - entered - Excess Energy, AGC MAVG - calculated, and AGC MAVG - entered
10/10/2014 1:03	0:03	AWE	0:033	20:800	AGC MAVG - calculated
10/10/2014 1:22	3:10	KWPII	59:878	20:708	AGC MAVG - calculated
10/10/2014 1:34	0:01	AWE	0:057	17:500	AGC MAVG - entered - Excess Energy
10/10/2014 1:36	0:04	AWE	0:186	17:200	AGC MAVG - entered - Excess Energy
10/10/2014 2:16	1:01	AWE	3:355	20:000	AGC MAVG - entered - Excess Energy, Operating Conditions on Company's System, and AGC MAVG - calculated
10/10/2014 3:28	0:01	AWE	0:009	9:000	AGC MAVG - calculated
10/10/2014 3:28	0:04	AWE	0:068	10:300	AGC MAVG - calculated
10/10/2014 3:42	0:39	AWE	2:514	18:498	AGC MAVG - calculated
10/10/2014 4:23	0:02	AWE	0:032	13:400	AGC MAVG - calculated
10/10/2014 4:26	0:01	AWE	0:016	13:200	AGC MAVG - calculated
10/10/2014 4:33	0:11	KWPII	2:902	20:425	AGC MAVG - calculated

RBWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Past MW Curtailed	Reasons for Curtailment
10/10/2014 4:40	1:40	KWPII	18 838	20 708	AGC MAVG - entered - Excess Energy and AGC MAVG - calculated
10/10/2014 6:33	0:01	KWPII	0 015	20 448	AGC MAVG - calculated
10/10/2014 6:35	0:05	KWPII	0 058	20 509	AGC MAVG - calculated
10/10/2014 6:41	0:17	KWPII	0 554	20 565	AGC MAVG - calculated
10/10/2014 8:58	0:08	KWPII	0 211	20 549	AGC MAVG - calculated
10/10/2014 7:18	0:01	KWPII	0 005	20 702	AGC MAVG - calculated
10/10/2014 7:18	0:04	KWPII	0 034	20 696	AGC MAVG - calculated
10/10/2014 7:28	0:01	KWPII	0 003	20 855	AGC MAVG - calculated
10/10/2014 7:34	0:02	KWPII	0 004	20 702	AGC MAVG - calculated
10/10/2014 7:37	0:01	KWPII	0 003	20 704	AGC MAVG - calculated
10/10/2014 10:34	0:01	KWPII	0 000	20 706	AGC MAVG - calculated
10/10/2014 10:41	0:03	KWPII	0 030	20 706	AGC MAVG - calculated
10/10/2014 10:45	0:03	KWPII	0 029	20 706	AGC MAVG - calculated
10/10/2014 10:49	2:03	KWPII	4 760	20 708	AGC MAVG - calculated
10/10/2014 12:55	0:04	KWPII	0 050	20 708	AGC MAVG - calculated
10/10/2014 23:00	14:02	KWPII	165 437	20 708	AGC MAVG - calculated
10/10/2014 23:50	0:01	AWE	0 011	20 400	AGC MAVG - calculated
10/11/2014 0:14	0:23	AWE	1 348	21 000	AGC MAVG - calculated
10/11/2014 0:39	5:08	AWE	61 592	21 000	AGC MAVG - calculated
10/11/2014 13:04	0:01	KWPII	0 013	20 208	AGC MAVG - calculated
10/11/2014 13:18	0:01	KWPII	0 000	19 530	AGC MAVG - calculated
10/11/2014 13:24	0:01	KWPII	0 007	20 574	AGC MAVG - calculated
10/11/2014 20:38	0:04	KWPII	0 057	20 708	AGC MAVG - calculated
10/11/2014 22:47	0:01	KWPII	0 001	20 708	AGC MAVG - calculated
10/11/2014 22:49	0:01	KWPII	0 004	20 708	AGC MAVG - calculated
10/11/2014 22:51	0:08	KWPII	0 308	20 708	AGC MAVG - calculated
10/11/2014 23:00	2:28	KWPII	31 292	20 708	AGC MAVG - calculated
10/12/2014 0:33	0:10	AWE	0 185	19 850	AGC MAVG - calculated
10/12/2014 0:58	0:18	AWE	0 578	18 800	AGC MAVG - calculated
10/12/2014 1:20	0:02	AWE	0 006	14 400	AGC MAVG - calculated
10/12/2014 1:28	3:25	KWPII	81 514	20 704	AGC MAVG - calculated
10/12/2014 1:41	0:01	AWE	0 010	17 400	AGC MAVG - calculated
10/12/2014 1:43	0:04	AWE	0 105	19 000	AGC MAVG - calculated
10/12/2014 1:49	0:01	AWE	0 002	15 400	AGC MAVG - calculated
10/12/2014 1:55	0:02	AWE	0 008	15 500	AGC MAVG - calculated
10/12/2014 1:58	0:05	AWE	0 078	16 700	AGC MAVG - calculated
10/12/2014 2:22	0:01	AWE	0 018	14 700	AGC MAVG - calculated
10/12/2014 2:24	0:00	AWE	0 182	15 300	AGC MAVG - calculated
10/12/2014 2:34	0:02	AWE	0 033	14 100	AGC MAVG - calculated
10/12/2014 2:58	0:01	AWE	0 002	11 300	AGC MAVG - calculated
10/12/2014 3:13	1:30	AWE	5 404	18 400	AGC MAVG - calculated
10/12/2014 4:56	1:50	KWPII	18 780	20 705	AGC MAVG - calculated
10/12/2014 6:48	0:03	KWPII	0 154	16 833	AGC MAVG - calculated
10/12/2014 6:57	0:03	KWPII	0 041	17 814	AGC MAVG - calculated
10/12/2014 7:58	0:20	KWPII	1 430	20 041	AGC MAVG - calculated
10/12/2014 8:22	0:23	KWPII	0 880	19 690	AGC MAVG - calculated and Good Engineering and Operating Practices
10/12/2014 11:40	0:01	KWPII	0 005	20 182	AGC MAVG - calculated
10/12/2014 11:58	0:44	KWPII	3 281	20 707	AGC MAVG - calculated
10/12/2014 12:45	0:13	KWPII	0 623	20 708	AGC MAVG - calculated
10/12/2014 12:59	0:01	KWPII	0 030	20 708	AGC MAVG - calculated
10/12/2014 13:06	0:05	KWPII	0 077	20 686	AGC MAVG - calculated
10/12/2014 13:13	0:50	KWPII	2 550	20 708	AGC MAVG - calculated
10/12/2014 14:23	0:01	KWPII	0 018	20 659	AGC MAVG - calculated
10/12/2014 22:52	0:02	KWPII	0 032	20 690	AGC MAVG - calculated
10/13/2014 0:37	0:21	KWPII	0 658	20 658	AGC MAVG - calculated
10/13/2014 0:56	0:01	KWPII	0 020	20 252	AGC MAVG - calculated
10/13/2014 1:01	0:02	KWPII	0 013	19 415	AGC MAVG - calculated
10/13/2014 1:08	0:01	KWPII	0 003	19 013	AGC MAVG - calculated
10/13/2014 1:10	0:01	KWPII	0 008	19 292	AGC MAVG - calculated
10/13/2014 1:12	0:01	KWPII	0 003	19 843	AGC MAVG - calculated
10/13/2014 1:18	0:01	KWPII	0 328	20 410	AGC MAVG - calculated
10/13/2014 1:33	0:01	KWPII	0 006	20 441	AGC MAVG - calculated
10/13/2014 1:43	3:18	KWPII	22 172	20 655	AGC MAVG - calculated
10/13/2014 5:03	0:01	KWPII	0 000	20 209	AGC MAVG - calculated
10/13/2014 8:29	0:01	KWPII	0 003	20 678	AGC MAVG - calculated
10/13/2014 13:16	0:03	KWPII	0 027	20 708	AGC MAVG - calculated
10/13/2014 19:24	0:04	KWPII	0 057	20 408	AGC MAVG - calculated
10/13/2014 19:34	0:01	KWPII	0 004	20 665	AGC MAVG - calculated
10/13/2014 19:55	0:01	KWPII	0 003	20 615	AGC MAVG - calculated
10/13/2014 20:35	0:01	KWPII	0 015	18 843	AGC MAVG - calculated
10/13/2014 20:40	0:02	KWPII	0 058	20 631	AGC MAVG - calculated
10/13/2014 20:48	0:03	KWPII	0 037	20 797	AGC MAVG - calculated
10/13/2014 20:50	0:01	KWPII	0 006	20 708	AGC MAVG - calculated
10/13/2014 22:07	0:41	KWPII	4 858	20 708	AGC MAVG - calculated
10/13/2014 22:48	0:02	KWPII	0 043	19 113	AGC MAVG - calculated
10/14/2014 1:09	1:42	KWPII	29 544	20 492	AGC MAVG - calculated AGC MAVG - entered - Excess Energy, Operating Conditions on Company's System, and AGC MAVG - calculated AGC MAVG - entered - Excess Energy, Operating Conditions on Company's System, and
10/14/2014 1:10	1:45	AWE	18 832	21 000	AGC MAVG - calculated
10/14/2014 2:38	0:01	KWPII	0 006	20 040	AGC MAVG - entered - Excess Energy and Operating Conditions on Company's System
10/14/2014 2:40	0:04	KWPII	0 087	27 408	AGC MAVG - entered - Excess Energy and Operating Conditions on Company's System
10/14/2014 2:54	0:01	KWPII	0 020	1 182	AGC MAVG - calculated and Operating Conditions on Company's System
10/14/2014 2:56	0:01	KWPII	0 004	1 022	AGC MAVG - calculated and Operating Conditions on Company's System
10/14/2014 3:28	2:19	AWE	19 934	21 000	AGC MAVG - calculated and Operating Conditions on Company's System
10/14/2014 5:28	2:25	KWPII	35 394	20 708	AGC MAVG - calculated and Operating Conditions on Company's System
10/14/2014 5:54	1:01	KWPII	7 468	20 708	AGC MAVG - calculated
10/14/2014 7:30	0:01	KWPII	0 010	20 358	AGC MAVG - calculated
10/14/2014 7:33	0:01	KWPII	0 008	20 387	AGC MAVG - calculated
10/14/2014 8:31	0:01	KWPII	0 002	17 480	AGC MAVG - calculated
10/14/2014 8:38	0:03	KWPII	0 076	18 201	AGC MAVG - calculated
10/14/2014 8:43	0:01	KWPII	0 008	18 363	AGC MAVG - calculated
10/14/2014 8:45	0:02	KWPII	0 046	19 055	AGC MAVG - calculated
10/14/2014 8:48	0:02	KWPII	0 015	11 398	AGC MAVG - calculated
10/14/2014 21:31	0:02	KWPII	0 037	17 043	AGC MAVG - calculated
10/14/2014 21:35	0:16	KWPII	0 721	15 400	AGC MAVG - calculated
10/14/2014 21:52	0:01	KWPII	0 010	15 198	AGC MAVG - calculated
10/14/2014 21:56	0:01	KWPII	0 013	15 770	AGC MAVG - calculated
10/14/2014 21:59	0:02	KWPII	0 048	14 728	AGC MAVG - calculated
10/14/2014 22:08	0:00	KWPII	0 421	16 538	AGC MAVG - calculated and Testing
10/14/2014 22:24	0:01	KWPII	0 018	14 511	AGC MAVG - calculated and Testing
10/14/2014 22:47	0:01	KWPII	0 007	17 588	AGC MAVG - calculated
10/14/2014 22:49	0:00	KWPII	0 123	17 302	AGC MAVG - calculated
10/14/2014 23:29	0:08	KWPII	0 202	15 806	AGC MAVG - calculated
10/14/2014 23:46	0:01	KWPII	0 012	11 515	AGC MAVG - calculated
10/14/2014 23:47	0:02	KWPII	0 026	10 936	AGC MAVG - calculated
10/14/2014 23:54	0:02	KWPII	0 043	9 396	AGC MAVG - calculated
10/15/2014 0:01	0:02	KWPII	0 064	10 642	AGC MAVG - calculated
10/15/2014 0:04	0:02	KWPII	0 049	11 308	AGC MAVG - calculated
10/15/2014 0:08	0:01	KWPII	0 008	9 013	AGC MAVG - calculated
10/15/2014 0:10	0:01	KWPII	0 005	10 318	AGC MAVG - calculated
10/15/2014 0:17	0:02	KWPII	0 042	11 035	AGC MAVG - calculated
10/15/2014 2:45	1:23	KWPII	7 578	18 054	AGC MAVG - calculated
10/15/2014 4:10	0:08	KWPII	0 293	18 972	AGC MAVG - calculated
10/15/2014 4:19	0:01	KWPII	0 002	14 850	AGC MAVG - calculated
10/15/2014 4:57	0:02	KWPII	0 005	16 319	AGC MAVG - calculated

RSWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWh	Peak MW Curtailed	Reasons for Curtailment
10/15/2014 5 03	0 01	KWPII	0 001	17 498	AGC MAVG - calculated
10/15/2014 7 07	0 01	KWPII	0 022	17 726	AGC MAVG - calculated
10/15/2014 13 47	0 02	AWE	0 083	10 800	Testing
10/15/2014 22 23	0 02	KWPII	0 020	9 882	AGC MAVG - calculated
10/15/2014 22 28	0 20	KWPII	1 182	16 989	AGC MAVG - calculated
10/15/2014 22 47	0 28	KWPII	1 584	18 577	AGC MAVG - calculated
10/15/2014 23 16	0 01	KWPII	0 037	17 283	AGC MAVG - calculated
10/16/2014 0 15	0 02	KWPII	0 024	7 064	AGC MAVG - calculated
10/16/2014 0 27	0 02	KWPII	0 010	10 837	AGC MAVG - calculated
10/16/2014 0 35	1 15	KWPII	3 504	13 081	AGC MAVG - calculated
10/16/2014 2 30	0 02	KWPII	0 005	11 974	AGC MAVG - calculated
10/16/2014 2 34	0 16	KWPII	0 533	15 822	AGC MAVG - calculated
10/16/2014 2 56	0 30	KWPII	1 898	16 808	AGC MAVG - calculated
10/16/2014 3 27	0 07	KWPII	0 153	17 239	AGC MAVG - calculated
10/16/2014 3 37	0 01	KWPII	0 001	17 378	AGC MAVG - calculated
10/16/2014 3 40	0 01	KWPII	0 015	16 050	AGC MAVG - calculated
10/16/2014 4 14	0 01	KWPII	0 030	14 497	AGC MAVG - calculated
10/16/2014 4 19	0 01	KWPII	0 000	15 245	AGC MAVG - calculated
10/16/2014 4 21	0 01	KWPII	0 001	15 671	AGC MAVG - calculated
10/16/2014 5 38	0 01	KWPII	0 028	12 813	AGC MAVG - calculated
10/16/2014 5 38	0 02	KWPII	0 100	14 183	AGC MAVG - calculated
10/16/2014 21 45	0 16	KWPII	0 768	18 182	AGC MAVG - calculated
10/16/2014 22 01	0 02	KWPII	0 035	16 543	AGC MAVG - calculated
10/16/2014 22 08	0 08	KWPII	0 197	15 427	AGC MAVG - calculated
10/16/2014 23 01	0 11	KWPII	0 327	15 720	AGC MAVG - calculated
10/16/2014 23 14	0 02	KWPII	0 015	8 419	AGC MAVG - calculated
10/16/2014 23 17	0 01	KWPII	0 017	7 288	AGC MAVG - calculated
10/16/2014 23 44	0 03	KWPII	0 135	12 838	AGC MAVG - calculated
10/16/2014 23 48	0 16	KWPII	1 037	17 080	AGC MAVG - calculated
10/17/2014 0 08	0 01	KWPII	0 017	17 148	AGC MAVG - calculated
10/17/2014 0 11	0 01	KWPII	0 011	16 878	AGC MAVG - calculated
10/17/2014 0 17	0 03	KWPII	0 064	16 411	AGC MAVG - calculated
10/17/2014 0 21	0 04	KWPII	0 111	16 018	AGC MAVG - calculated
10/17/2014 0 26	0 04	KWPII	0 090	15 485	AGC MAVG - calculated
10/17/2014 0 31	0 02	KWPII	0 045	15 358	AGC MAVG - calculated
10/17/2014 0 35	0 02	KWPII	0 030	14 028	AGC MAVG - calculated
10/17/2014 1 00	0 04	KWPII	0 105	16 954	AGC MAVG - calculated
10/17/2014 1 05	0 03	KWPII	0 063	20 378	AGC MAVG - calculated
10/17/2014 1 09	0 12	KWPII	0 482	20 580	AGC MAVG - calculated
10/17/2014 1 25	0 01	KWPII	0 001	20 535	AGC MAVG - calculated
10/17/2014 1 28	0 01	KWPII	0 003	20 487	AGC MAVG - calculated
10/17/2014 1 31	0 02	KWPII	0 025	20 262	AGC MAVG - calculated
10/17/2014 1 34	0 01	KWPII	0 007	20 002	AGC MAVG - calculated
10/17/2014 1 38	0 01	KWPII	0 006	19 954	AGC MAVG - calculated
10/17/2014 1 40	0 03	KWPII	0 089	19 874	AGC MAVG - calculated
10/17/2014 1 45	0 06	KWPII	0 495	18 682	AGC MAVG - calculated
10/17/2014 2 06	2 25	KWPII	30 835	18 845	AGC MAVG - calculated
10/17/2014 2 23	0 12	AWE	0 707	15 300	AGC MAVG - calculated
10/17/2014 2 37	0 05	AWE	0 119	12 700	AGC MAVG - calculated
10/17/2014 2 44	0 37	AWE	1 651	13 800	AGC MAVG - calculated
10/17/2014 3 20	0 01	AWE	0 010	12 300	AGC MAVG - calculated
10/17/2014 3 26	0 02	AWE	0 043	11 700	AGC MAVG - calculated
10/17/2014 3 32	0 08	AWE	0 174	12 200	AGC MAVG - calculated
10/17/2014 3 40	0 24	AWE	1 568	16 400	AGC MAVG - calculated
10/17/2014 4 05	0 21	AWE	1 094	20 400	AGC MAVG - calculated
10/17/2014 4 35	0 39	KWPII	6 900	18 728	AGC MAVG - calculated
10/17/2014 4 59	0 01	AWE	0 018	20 400	AGC MAVG - calculated
10/17/2014 5 02	0 01	AWE	0 006	21 000	AGC MAVG - calculated
10/17/2014 5 06	0 02	AWE	0 055	20 000	AGC MAVG - calculated
10/17/2014 5 15	0 03	KWPII	0 380	18 941	AGC MAVG - calculated
10/17/2014 5 23	0 02	KWPII	0 315	17 847	AGC MAVG - calculated
10/17/2014 5 28	0 08	KWPII	1 600	17 894	AGC MAVG - calculated
10/17/2014 5 34	0 05	KWPII	1 183	20 022	AGC MAVG - calculated
10/17/2014 5 41	0 02	KWPII	0 534	20 204	AGC MAVG - calculated
10/17/2014 5 45	0 01	KWPII	0 271	20 227	AGC MAVG - calculated
10/17/2014 5 49	0 03	KWPII	0 679	20 548	AGC MAVG - calculated
10/17/2014 5 54	0 02	KWPII	0 392	20 571	AGC MAVG - calculated
10/17/2014 6 00	0 03	KWPII	0 500	20 660	AGC MAVG - calculated
10/17/2014 6 05	0 01	KWPII	0 150	20 388	AGC MAVG - calculated
10/17/2014 6 08	0 02	KWPII	0 262	19 934	AGC MAVG - calculated
10/17/2014 6 12	0 01	KWPII	0 107	18 615	AGC MAVG - calculated
10/17/2014 6 14	0 04	KWPII	0 325	18 654	AGC MAVG - calculated
10/17/2014 6 20	0 03	KWPII	0 281	18 134	AGC MAVG - calculated
10/17/2014 6 25	0 02	KWPII	0 108	18 352	AGC MAVG - calculated
10/17/2014 6 29	0 01	KWPII	0 024	18 998	AGC MAVG - calculated
10/17/2014 6 49	0 01	KWPII	0 031	18 185	AGC MAVG - calculated
10/17/2014 6 54	0 01	KWPII	0 001	15 134	AGC MAVG - calculated
10/17/2014 17 00	0 12	KWPII	0 874	20 384	AGC MAVG - calculated
10/17/2014 17 14	0 03	KWPII	0 046	20 348	AGC MAVG - calculated
10/17/2014 20 08	0 01	KWPII	0 003	2 026	AGC MAVG - calculated
10/17/2014 20 11	0 03	KWPII	0 069	5 990	AGC MAVG - calculated
10/18/2014 11 21	0 01	KWPII	0 000	0 013	AGC MAVG - calculated, Operating Conditions on Company's System, and Testing
10/18/2014 14 30	0 01	KWPII	0 001	0 064	AGC MAVG - calculated and Testing
10/18/2014 14 43	0 01	KWPII	0 000	0 024	AGC MAVG - calculated and Testing
10/18/2014 15 24	0 01	KWPII	0 008	14 856	AGC MAVG - calculated and Testing
10/18/2014 15 36	0 01	KWPII	0 008	16 243	AGC MAVG - calculated
10/18/2014 15 38	0 14	KWPII	1 213	16 689	AGC MAVG - calculated
10/18/2014 20 23	0 01	KWPII	0 003	7 748	AGC MAVG - calculated
10/18/2014 2 22	0 01	KWPII	0 006	0 341	AGC MAVG - calculated
10/18/2014 2 25	0 05	KWPII	0 174	8 788	AGC MAVG - calculated
10/18/2014 3 08	0 01	KWPII	0 000	0 018	AGC MAVG - calculated
10/18/2014 4 12	0 03	KWPII	0 055	13 383	AGC MAVG - calculated
10/18/2014 4 30	0 02	KWPII	0 006	9 235	AGC MAVG - calculated
10/18/2014 4 37	0 02	KWPII	0 029	4 865	AGC MAVG - calculated
10/18/2014 6 04	0 06	KWPII	0 223	6 939	AGC MAVG - calculated
10/18/2014 6 18	0 05	AWE	0 478	6 520	AGC MAVG - calculated
10/18/2014 11 00	0 01	KWPII	0 003	0 180	AGC MAVG - calculated
10/18/2014 12 20	0 02	KWPII	0 034	8 099	AGC MAVG - calculated
10/18/2014 22 35	8 42	KWPII	119 230	20 708	AGC MAVG - calculated
10/18/2014 23 38	5 28	AWE	65 023	20 000	AGC MAVG - calculated
10/20/2014 5 07	0 10	AWE	0 281	20 000	AGC MAVG - calculated
10/20/2014 5 18	0 01	AWE	0 011	20 100	AGC MAVG - calculated
10/20/2014 5 18	0 13	KWPII	2 054	13 324	AGC MAVG - calculated
10/20/2014 6 20	0 01	AWE	0 012	20 000	AGC MAVG - calculated
10/20/2014 7 31	0 01	KWPII	0 000	0 016	AGC MAVG - calculated
10/21/2014 5 04	0 01	AWE	0 013	21 000	AGC MAVG - calculated
10/21/2014 23 15	0 01	AWE	0 004	19 800	AGC MAVG - calculated
10/22/2014 17 03	0 01	KWPII	0 000	0 021	AGC MAVG - calculated
10/22/2014 17 03	0 01	KWPII	0 000	0 021	AGC MAVG - calculated
10/23/2014 0 18	0 01	KWPII	0 000	1 818	AGC MAVG - calculated
10/23/2014 0 18	0 01	KWPII	0 000	1 818	AGC MAVG - calculated
10/23/2014 0 18	0 52	KWPII	2 835	8 745	AGC MAVG - calculated
10/23/2014 0 18	0 52	KWPII	2 835	8 745	AGC MAVG - calculated
10/23/2014 0 38	0 01	AWE	0 014	17 600	AGC MAVG - calculated
10/23/2014 0 40	0 01	AWE	0 019	17 600	AGC MAVG - calculated

RSWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	AGC MAVG - calculated	Reasons for Curtailment
10/23/2014 0:42	0:01	AWE	0:011	17:000	AGC MAVG - calculated	
10/23/2014 0:48	0:01	AWE	0:000	18:200	AGC MAVG - calculated	
10/23/2014 0:50	0:04	AWE	0:088	17:800	AGC MAVG - calculated	
10/23/2014 0:58	0:08	AWE	0:259	15:500	AGC MAVG - calculated	
10/23/2014 1:06	0:01	AWE	0:006	17:300	AGC MAVG - calculated	
10/23/2014 1:11	0:11	KWPII	0:223	1:881	AGC MAVG - calculated	
10/23/2014 1:11	0:11	AWE	0:254	21:000	AGC MAVG - calculated	
10/23/2014 1:11	0:11	KWPII	0:223	1:881	AGC MAVG - calculated	
10/23/2014 1:23	2:19	KWPII	21:351	14:057	AGC MAVG - calculated	
10/23/2014 1:23	2:19	KWPII	21:351	14:057	AGC MAVG - calculated	
10/23/2014 1:24	1:54	AWE	8:868	19:900	AGC MAVG - calculated	
10/23/2014 1:19	0:07	AWE	0:215	13:700	AGC MAVG - calculated	
10/23/2014 1:27	0:08	AWE	0:200	11:600	AGC MAVG - calculated	
10/23/2014 1:37	0:02	AWE	0:027	9:500	AGC MAVG - calculated	
10/23/2014 1:45	0:04	KWPII	0:242	11:335	AGC MAVG - calculated	
10/23/2014 1:45	0:04	KWPII	0:242	11:335	AGC MAVG - calculated	
10/23/2014 1:51	0:02	KWPII	0:047	10:149	AGC MAVG - calculated	
10/23/2014 1:51	0:02	KWPII	0:047	10:149	AGC MAVG - calculated	
10/23/2014 1:54	0:01	KWPII	0:002	9:743	AGC MAVG - calculated	
10/23/2014 1:54	0:01	KWPII	0:002	9:743	AGC MAVG - calculated	
10/23/2014 1:57	0:03	KWPII	0:018	10:405	AGC MAVG - calculated	
10/23/2014 1:57	0:03	KWPII	0:018	10:405	AGC MAVG - calculated	
10/23/2014 1:49	0:10	KWPII	0:208	11:041	AGC MAVG - calculated	
10/23/2014 1:49	0:10	KWPII	0:208	11:041	AGC MAVG - calculated	
10/23/2014 5:00	0:01	KWPII	0:023	11:315	AGC MAVG - calculated	
10/23/2014 5:00	0:01	KWPII	0:023	11:315	AGC MAVG - calculated	
10/23/2014 5:02	0:05	KWPII	0:041	11:835	AGC MAVG - calculated	
10/23/2014 5:02	0:05	KWPII	0:041	11:835	AGC MAVG - calculated	
10/23/2014 5:08	0:01	KWPII	0:013	11:710	AGC MAVG - calculated	
10/23/2014 5:08	0:01	KWPII	0:013	11:710	AGC MAVG - calculated	
10/23/2014 7:29	0:01	KWPII	0:012	10:810	AGC MAVG - calculated	
10/23/2014 7:29	0:01	KWPII	0:012	10:810	AGC MAVG - calculated	
10/23/2014 7:32	0:01	KWPII	0:003	12:642	AGC MAVG - calculated	
10/23/2014 7:32	0:01	KWPII	0:003	12:642	AGC MAVG - calculated	
10/23/2014 7:37	0:06	KWPII	0:276	15:075	AGC MAVG - calculated	
10/23/2014 7:37	0:06	KWPII	0:276	15:075	AGC MAVG - calculated	
10/23/2014 7:40	0:04	KWPII	0:075	12:413	AGC MAVG - calculated	
10/23/2014 7:40	0:04	KWPII	0:075	12:413	AGC MAVG - calculated	
10/23/2014 8:18	0:12	KWPII	0:400	15:745	AGC MAVG - calculated	
10/23/2014 8:18	0:12	KWPII	0:400	15:745	AGC MAVG - calculated	
10/23/2014 8:31	0:08	KWPII	0:470	15:873	AGC MAVG - calculated	
10/23/2014 8:31	0:08	KWPII	0:470	15:873	AGC MAVG - calculated	
10/23/2014 8:41	0:02	KWPII	0:018	14:139	AGC MAVG - calculated	
10/23/2014 8:41	0:02	KWPII	0:018	14:139	AGC MAVG - calculated	
10/23/2014 8:44	1:08	KWPII	7:087	18:022	AGC MAVG - calculated	
10/23/2014 8:44	1:08	KWPII	7:087	18:022	AGC MAVG - calculated	
10/23/2014 9:51	0:13	KWPII	0:507	16:924	AGC MAVG - calculated	
10/23/2014 9:51	0:13	KWPII	0:507	16:924	AGC MAVG - calculated	
10/23/2014 10:09	0:01	KWPII	0:003	14:918	AGC MAVG - calculated	
10/23/2014 10:09	0:01	KWPII	0:003	14:918	AGC MAVG - calculated	
10/23/2014 10:12	0:11	KWPII	0:391	16:284	AGC MAVG - calculated	
10/23/2014 10:12	0:11	KWPII	0:391	16:284	AGC MAVG - calculated	
10/23/2014 10:29	0:01	KWPII	0:035	15:736	AGC MAVG - calculated	
10/23/2014 10:29	0:01	KWPII	0:035	15:736	AGC MAVG - calculated	
10/23/2014 10:32	0:01	KWPII	0:000	15:820	AGC MAVG - calculated	
10/23/2014 10:32	0:01	KWPII	0:000	15:820	AGC MAVG - calculated	
10/23/2014 10:38	0:04	KWPII	0:108	15:447	AGC MAVG - calculated	
10/23/2014 10:38	0:04	KWPII	0:108	15:447	AGC MAVG - calculated	
10/23/2014 10:43	0:05	KWPII	0:106	16:061	AGC MAVG - calculated	
10/23/2014 10:43	0:05	KWPII	0:106	16:061	AGC MAVG - calculated	
10/23/2014 10:48	0:03	KWPII	0:108	16:953	AGC MAVG - calculated	
10/23/2014 10:48	0:03	KWPII	0:108	16:953	AGC MAVG - calculated	
10/23/2014 10:53	0:01	KWPII	0:001	16:800	AGC MAVG - calculated	
10/23/2014 10:53	0:01	KWPII	0:001	16:800	AGC MAVG - calculated	
10/23/2014 11:42	0:01	KWPII	0:001	12:616	AGC MAVG - calculated	
10/23/2014 11:42	0:01	KWPII	0:001	12:616	AGC MAVG - calculated	
10/23/2014 12:02	0:01	KWPII	0:025	14:864	AGC MAVG - calculated	
10/23/2014 12:02	0:01	KWPII	0:025	14:864	AGC MAVG - calculated	
10/23/2014 12:04	0:02	KWPII	0:018	15:247	AGC MAVG - calculated	
10/23/2014 12:04	0:02	KWPII	0:018	15:247	AGC MAVG - calculated	
10/23/2014 12:07	0:03	KWPII	0:037	16:149	AGC MAVG - calculated	
10/23/2014 12:07	0:03	KWPII	0:037	16:149	AGC MAVG - calculated	
10/23/2014 12:17	0:08	KWPII	0:183	17:212	AGC MAVG - calculated	
10/23/2014 12:17	0:08	KWPII	0:183	17:212	AGC MAVG - calculated	
10/23/2014 12:28	0:01	KWPII	0:010	15:979	AGC MAVG - calculated	
10/23/2014 12:28	0:01	KWPII	0:010	15:979	AGC MAVG - calculated	
10/23/2014 12:30	0:03	KWPII	0:081	16:542	AGC MAVG - calculated	
10/23/2014 12:30	0:03	KWPII	0:081	16:542	AGC MAVG - calculated	
10/23/2014 12:34	0:05	KWPII	0:181	18:142	AGC MAVG - calculated	
10/23/2014 12:34	0:05	KWPII	0:181	18:142	AGC MAVG - calculated	
10/23/2014 12:42	0:04	KWPII	0:074	18:369	AGC MAVG - calculated	
10/23/2014 12:42	0:04	KWPII	0:074	18:369	AGC MAVG - calculated	
10/23/2014 12:47	0:05	KWPII	0:150	18:730	AGC MAVG - calculated	
10/23/2014 12:47	0:05	KWPII	0:150	18:730	AGC MAVG - calculated	
10/23/2014 12:54	0:05	KWPII	0:185	18:450	AGC MAVG - calculated	
10/23/2014 12:54	0:05	KWPII	0:185	18:450	AGC MAVG - calculated	
10/23/2014 13:00	0:08	KWPII	0:272	18:220	AGC MAVG - calculated	
10/23/2014 13:00	0:08	KWPII	0:272	18:220	AGC MAVG - calculated	
10/23/2014 13:12	0:02	KWPII	0:058	18:508	AGC MAVG - calculated	
10/23/2014 13:12	0:02	KWPII	0:058	18:508	AGC MAVG - calculated	
10/23/2014 13:19	0:01	KWPII	0:031	17:817	AGC MAVG - calculated	
10/23/2014 13:19	0:01	KWPII	0:031	17:817	AGC MAVG - calculated	
10/23/2014 22:18	0:01	KWPII	0:003	20:694	AGC MAVG - calculated	
10/23/2014 22:18	0:01	KWPII	0:003	20:694	AGC MAVG - calculated	
10/23/2014 22:19	0:01	KWPII	0:006	20:693	AGC MAVG - calculated	
10/23/2014 22:19	0:01	KWPII	0:006	20:693	AGC MAVG - calculated	
10/23/2014 22:21	0:02	KWPII	0:055	20:686	AGC MAVG - calculated	
10/23/2014 22:21	0:02	KWPII	0:055	20:686	AGC MAVG - calculated	
10/23/2014 22:29	0:06	KWPII	0:085	20:703	AGC MAVG - calculated	
10/23/2014 22:29	0:06	KWPII	0:085	20:703	AGC MAVG - calculated	
10/23/2014 23:35	0:03	KWPII	0:042	20:702	AGC MAVG - calculated	
10/23/2014 23:35	0:03	KWPII	0:042	20:702	AGC MAVG - calculated	
10/23/2014 23:38	1:30	KWPII	7:374	20:702	AGC MAVG - calculated	
10/23/2014 23:38	1:30	KWPII	7:374	20:702	AGC MAVG - calculated	
10/24/2014 1:11	0:01	KWPII	0:008	19:485	AGC MAVG - calculated	
10/24/2014 1:11	0:01	KWPII	0:008	19:485	AGC MAVG - calculated	
10/24/2014 1:19	0:01	KWPII	0:001	19:774	AGC MAVG - calculated	
10/24/2014 1:19	0:01	KWPII	0:001	19:774	AGC MAVG - calculated	
10/24/2014 1:24	0:02	KWPII	0:013	19:783	AGC MAVG - calculated	
10/24/2014 1:24	0:02	KWPII	0:013	19:783	AGC MAVG - calculated	
10/24/2014 1:28	0:01	KWPII	0:018	19:118	AGC MAVG - calculated	
10/24/2014 1:28	0:01	KWPII	0:018	19:118	AGC MAVG - calculated	
10/24/2014 1:31	0:01	KWPII	0:006	18:426	AGC MAVG - calculated	
10/24/2014 1:31	0:01	KWPII	0:006	18:426	AGC MAVG - calculated	
10/24/2014 1:32	0:02	KWPII	0:016	17:717	AGC MAVG - calculated	

RSWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailment	Estimated Curtailment MWh	Peak MW Curtailment	Reasons for Curtailment
10/24/2014 1:33	0:02	KWP	0.016	17.717	AGC MAVG - calculated
10/24/2014 1:45	0:01	KWP	0.008	15.065	AGC MAVG - calculated
10/24/2014 1:45	0:01	KWP	0.008	15.065	AGC MAVG - calculated
10/24/2014 1:47	0:01	KWP	0.008	15.078	AGC MAVG - calculated
10/24/2014 1:47	0:01	KWP	0.008	15.078	AGC MAVG - calculated
10/24/2014 1:54	0:07	KWP	0.258	18.831	AGC MAVG - calculated
10/24/2014 1:54	0:07	KWP	0.258	18.831	AGC MAVG - calculated
10/24/2014 2:02	1:01	KWP	4.574	19.565	AGC MAVG - calculated
10/24/2014 2:02	1:01	KWP	4.574	19.565	AGC MAVG - calculated
10/24/2014 2:02	1:01	KWP	0.002	0.100	AGC MAVG - calculated
10/24/2014 2:11	0:01	AWE	0.012	15.000	AGC MAVG - calculated
10/24/2014 2:44	0:01	KWP	0.026	17.810	AGC MAVG - calculated
10/24/2014 2:56	0:01	KWP	0.026	17.810	AGC MAVG - calculated
10/24/2014 3:10	0:02	KWP	0.039	19.636	AGC MAVG - calculated
10/24/2014 3:10	0:02	KWP	0.039	19.636	AGC MAVG - calculated
10/24/2014 3:13	0:01	KWP	0.029	19.666	AGC MAVG - calculated
10/24/2014 3:13	0:01	KWP	0.029	19.666	AGC MAVG - calculated
10/24/2014 3:16	0:01	KWP	0.003	19.837	AGC MAVG - calculated
10/24/2014 3:16	0:01	KWP	0.003	19.837	AGC MAVG - calculated
10/24/2014 22:13	0:01	KWP	0.001	20.556	AGC MAVG - calculated
10/24/2014 22:13	0:01	KWP	0.001	20.556	AGC MAVG - calculated
10/24/2014 22:44	0:02	KWP	0.006	20.458	AGC MAVG - calculated
10/24/2014 22:44	0:02	KWP	0.006	20.458	AGC MAVG - calculated
10/24/2014 22:50	0:10	KWP	0.215	20.553	AGC MAVG - calculated
10/24/2014 22:50	0:10	KWP	0.215	20.553	AGC MAVG - calculated
10/24/2014 23:30	4:08	KWP	41.275	20.663	AGC MAVG - calculated
10/24/2014 23:30	4:08	KWP	41.275	20.663	AGC MAVG - calculated
10/25/2014 3:40	0:01	KWP	0.005	17.804	AGC MAVG - calculated
10/25/2014 3:40	0:01	KWP	0.005	17.804	AGC MAVG - calculated
10/25/2014 3:42	0:02	KWP	0.008	12.258	AGC MAVG - calculated
10/25/2014 3:42	0:02	KWP	0.008	12.258	AGC MAVG - calculated
10/25/2014 4:56	0:01	KWP	0.002	0.127	AGC MAVG - calculated
10/25/2014 4:56	0:01	KWP	0.002	0.127	AGC MAVG - calculated
10/25/2014 14:32	0:02	KWP	0.007	6.657	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 14:32	0:02	KWP	0.007	6.657	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 14:35	0:02	KWP	0.089	8.845	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 14:35	0:02	KWP	0.089	8.845	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 14:39	0:04	KWP	0.162	8.870	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 14:39	0:04	KWP	0.162	8.870	AGC MAVG - calculated and Good Engineering and Operating Practices
10/25/2014 15:42	0:03	KWP	0.091	15.421	AGC MAVG - calculated
10/25/2014 15:42	0:03	KWP	0.091	15.421	AGC MAVG - calculated
10/25/2014 15:49	0:03	KWP	0.141	17.480	AGC MAVG - calculated
10/25/2014 15:49	0:03	KWP	0.141	17.480	AGC MAVG - calculated
10/25/2014 15:53	0:01	KWP	0.071	18.017	AGC MAVG - calculated
10/25/2014 15:53	0:01	KWP	0.071	18.017	AGC MAVG - calculated
10/25/2014 15:56	0:02	KWP	0.134	18.484	AGC MAVG - calculated
10/25/2014 15:56	0:02	KWP	0.134	18.484	AGC MAVG - calculated
10/25/2014 15:58	0:01	KWP	0.080	18.110	AGC MAVG - calculated
10/25/2014 15:58	0:01	KWP	0.080	18.110	AGC MAVG - calculated
10/25/2014 16:03	0:02	KWP	0.103	18.612	AGC MAVG - calculated
10/25/2014 16:03	0:02	KWP	0.103	18.612	AGC MAVG - calculated
10/25/2014 16:10	0:03	KWP	0.062	19.231	AGC MAVG - calculated
10/25/2014 16:10	0:03	KWP	0.062	19.231	AGC MAVG - calculated
10/25/2014 16:16	0:07	KWP	0.218	18.933	AGC MAVG - calculated
10/25/2014 16:16	0:07	KWP	0.218	18.933	AGC MAVG - calculated
10/25/2014 16:24	0:01	KWP	0.079	19.128	AGC MAVG - calculated
10/25/2014 16:24	0:01	KWP	0.079	19.128	AGC MAVG - calculated
10/25/2014 16:27	0:02	KWP	0.161	19.483	AGC MAVG - calculated
10/25/2014 16:27	0:02	KWP	0.161	19.483	AGC MAVG - calculated
10/25/2014 16:34	0:02	KWP	0.096	20.071	AGC MAVG - calculated
10/25/2014 16:34	0:02	KWP	0.096	20.071	AGC MAVG - calculated
10/25/2014 16:38	0:01	KWP	0.021	20.018	AGC MAVG - calculated
10/25/2014 16:38	0:01	KWP	0.021	20.018	AGC MAVG - calculated
10/25/2014 16:42	0:01	KWP	0.037	19.918	AGC MAVG - calculated
10/25/2014 16:42	0:01	KWP	0.037	19.918	AGC MAVG - calculated
10/25/2014 17:36	0:03	KWP	0.029	20.206	AGC MAVG - calculated
10/25/2014 17:36	0:03	KWP	0.029	20.206	AGC MAVG - calculated
10/25/2014 17:41	0:03	KWP	0.094	20.382	AGC MAVG - calculated
10/25/2014 17:41	0:03	KWP	0.094	20.382	AGC MAVG - calculated
10/25/2014 21:32	0:02	KWP	0.031	18.918	AGC MAVG - calculated
10/25/2014 21:32	0:02	KWP	0.031	18.918	AGC MAVG - calculated
10/25/2014 21:35	0:03	KWP	0.045	18.101	AGC MAVG - calculated
10/25/2014 21:35	0:03	KWP	0.045	18.101	AGC MAVG - calculated
10/25/2014 21:39	0:02	KWP	0.064	18.250	AGC MAVG - calculated
10/25/2014 21:39	0:02	KWP	0.064	18.250	AGC MAVG - calculated
10/25/2014 21:51	2:58	KWP	28.432	20.581	AGC MAVG - calculated
10/25/2014 21:51	2:58	KWP	28.432	20.581	AGC MAVG - calculated
10/26/2014 0:15	0:01	AWE	0.021	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 0:28	0:01	AWE	0.010	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 0:35	0:02	KWP	0.076	16.535	AGC MAVG - calculated
10/26/2014 0:49	0:22	KWP	2.126	16.535	AGC MAVG - calculated
10/26/2014 1:19	0:01	KWP	0.005	7.404	AGC MAVG - calculated
10/26/2014 1:19	0:01	KWP	0.005	7.404	AGC MAVG - calculated
10/26/2014 1:19	0:49	KWP	6.354	13.225	AGC MAVG - calculated
10/26/2014 1:19	0:49	KWP	6.354	13.225	AGC MAVG - calculated
10/26/2014 1:41	0:06	AWE	0.184	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 1:41	0:06	AWE	0.125	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 1:57	0:11	AWE	0.449	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 2:06	0:03	KWP	0.540	11.601	AGC MAVG - calculated
10/26/2014 2:06	0:03	AWE	0.113	18.900	AGC MAVG - calculated
10/26/2014 2:06	0:03	KWP	0.540	11.601	AGC MAVG - calculated
10/26/2014 2:14	0:08	KWP	1.898	15.026	AGC MAVG - calculated
10/26/2014 2:14	0:08	KWP	1.898	15.026	AGC MAVG - calculated
10/26/2014 2:15	2:22	AWE	10.484	21.000	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 2:24	2:44	KWP	49.046	20.672	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 2:24	2:44	KWP	49.046	20.672	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 2:39	0:22	AWE	1.399	14.800	AGC MAVG - entered - Maintaining Regulating Reserves
10/26/2014 5:09	2:14	KWP	18.430	20.668	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
10/26/2014 5:09	2:14	KWP	18.430	20.668	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
10/26/2014 7:24	0:01	KWP	0.017	20.418	AGC MAVG - calculated
10/26/2014 7:24	0:01	KWP	0.017	20.418	AGC MAVG - calculated
10/26/2014 7:43	0:03	KWP	0.057	20.501	AGC MAVG - calculated
10/26/2014 7:43	0:03	KWP	0.057	20.501	AGC MAVG - calculated
10/26/2014 7:47	0:01	KWP	0.002	20.138	AGC MAVG - calculated
10/26/2014 7:47	0:01	KWP	0.002	20.138	AGC MAVG - calculated
10/26/2014 8:12	0:07	KWP	0.237	18.658	AGC MAVG - calculated
10/26/2014 8:12	0:07	KWP	0.237	18.658	AGC MAVG - calculated
10/26/2014 8:20	1:00	KWP	4.789	20.700	AGC MAVG - calculated
10/26/2014 8:20	1:00	KWP	4.789	20.700	AGC MAVG - calculated
10/26/2014 9:21	0:04	KWP	0.125	20.648	AGC MAVG - calculated
10/26/2014 9:21	0:04	KWP	0.125	20.648	AGC MAVG - calculated

RSWG Maui Curtailment Report October 2014

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	AGC MAVG - calculated	Reasons for Curtailment
10/26/2014 9:35	0:03	KWPII	0.124	20.417	AGC MAVG - calculated	
10/26/2014 9:35	0:03	KWP	0.124	20.417	AGC MAVG - calculated	
10/26/2014 9:38	0:01	KWPII	0.032	20.018	AGC MAVG - calculated	
10/26/2014 9:38	0:01	KWP	0.032	20.018	AGC MAVG - calculated	
10/26/2014 9:45	1:35	KWPII	11.311	20.705	AGC MAVG - calculated	
10/26/2014 9:45	1:35	KWP	11.311	20.705	AGC MAVG - calculated	
10/26/2014 11:22	0:01	KWPII	0.030	19.249	AGC MAVG - calculated	
10/26/2014 11:22	0:01	KWP	0.030	19.249	AGC MAVG - calculated	
10/26/2014 21:18	0:02	KWPII	0.035	20.707	AGC MAVG - calculated	
10/26/2014 21:18	0:02	KWP	0.035	20.707	AGC MAVG - calculated	
10/26/2014 22:11	0:04	KWPII	0.063	19.225	AGC MAVG - calculated	
10/26/2014 22:11	0:04	KWP	0.063	19.225	AGC MAVG - calculated	
10/26/2014 22:19	0:01	KWPII	0.009	19.303	AGC MAVG - calculated	
10/26/2014 22:19	0:01	KWP	0.009	19.303	AGC MAVG - calculated	
10/26/2014 22:23	0:01	KWPII	0.003	19.212	AGC MAVG - calculated	
10/26/2014 22:23	0:01	KWP	0.003	19.212	AGC MAVG - calculated	
10/26/2014 22:28	0:01	KWPII	0.002	18.128	AGC MAVG - calculated	
10/26/2014 22:28	0:01	KWP	0.002	18.128	AGC MAVG - calculated	
10/26/2014 22:30	0:02	KWPII	0.009	19.887	AGC MAVG - calculated	
10/26/2014 22:30	0:02	KWP	0.009	19.887	AGC MAVG - calculated	
10/26/2014 22:33	0:26	KWPII	1.126	20.201	AGC MAVG - calculated	
10/26/2014 22:33	0:26	KWP	1.126	20.201	AGC MAVG - calculated	
10/26/2014 23:23	0:33	KWPII	2.150	18.087	AGC MAVG - calculated	
10/26/2014 23:23	0:33	KWP	2.150	18.087	AGC MAVG - calculated	
10/27/2014 0:00	0:51	KWPII	4.502	15.084	AGC MAVG - calculated	
10/27/2014 0:00	0:51	KWP	4.502	15.084	AGC MAVG - calculated	
10/27/2014 0:12	0:06	AWE	0.115	18.400	AGC MAVG - calculated	
10/27/2014 0:44	0:01	AWE	0.022	21.000	AGC MAVG - calculated	
10/27/2014 0:52	0:28	KWPII	1.687	8.807	AGC MAVG - calculated	
10/27/2014 0:52	0:28	KWP	1.687	8.807	AGC MAVG - calculated	
10/27/2014 1:19	0:17	KWPII	0.760	7.843	AGC MAVG - calculated	
10/27/2014 1:19	0:17	KWP	0.760	7.843	AGC MAVG - calculated	
10/27/2014 1:31	0:01	AWE	0.045	20.200	AGC MAVG - calculated	
10/27/2014 1:48	0:02	KWPII	0.030	6.707	AGC MAVG - calculated	
10/27/2014 1:48	0:02	KWP	0.030	6.707	AGC MAVG - calculated	
10/27/2014 1:48	0:06	KWPII	0.078	6.873	AGC MAVG - calculated	
10/27/2014 1:48	0:06	KWP	0.078	6.873	AGC MAVG - calculated	
10/27/2014 1:57	0:01	KWPII	0.012	5.472	AGC MAVG - calculated	
10/27/2014 1:57	0:01	KWP	0.012	5.472	AGC MAVG - calculated	
10/27/2014 2:03	0:04	KWPII	0.047	4.968	AGC MAVG - calculated	
10/27/2014 2:03	0:04	KWP	0.047	4.968	AGC MAVG - calculated	
10/27/2014 2:18	0:01	KWPII	0.003	4.774	AGC MAVG - calculated	
10/27/2014 2:18	0:01	KWP	0.003	4.774	AGC MAVG - calculated	
10/27/2014 2:21	0:02	KWPII	0.015	5.681	AGC MAVG - calculated	
10/27/2014 2:21	0:02	KWP	0.015	5.681	AGC MAVG - calculated	
10/27/2014 2:28	0:01	KWPII	0.001	5.879	AGC MAVG - calculated	
10/27/2014 2:28	0:01	KWP	0.001	5.879	AGC MAVG - calculated	
10/27/2014 2:28	0:04	KWPII	0.080	6.050	AGC MAVG - calculated	
10/27/2014 2:28	0:04	KWP	0.080	6.050	AGC MAVG - calculated	
10/27/2014 2:34	0:01	KWPII	0.005	3.221	AGC MAVG - calculated	
10/27/2014 2:34	0:01	KWP	0.005	3.221	AGC MAVG - calculated	
10/27/2014 2:36	0:01	KWPII	0.013	3.826	AGC MAVG - calculated	
10/27/2014 2:36	0:01	KWP	0.013	3.826	AGC MAVG - calculated	
10/27/2014 2:38	0:07	KWPII	0.095	4.836	AGC MAVG - calculated	
10/27/2014 2:38	0:07	KWP	0.095	4.836	AGC MAVG - calculated	
10/27/2014 2:47	0:39	KWPII	3.880	10.748	AGC MAVG - calculated	
10/27/2014 2:47	0:39	KWP	3.880	10.748	AGC MAVG - calculated	
10/27/2014 2:51	0:01	AWE	0.008	20.300	AGC MAVG - calculated	
10/27/2014 2:53	0:14	AWE	0.149	20.000	AGC MAVG - calculated	
10/27/2014 3:08	0:04	AWE	0.149	19.300	AGC MAVG - calculated	
10/27/2014 3:13	0:01	AWE	0.004	17.200	AGC MAVG - calculated	
10/27/2014 3:19	0:01	AWE	0.017	16.800	AGC MAVG - calculated	
10/27/2014 3:28	0:03	AWE	0.058	15.800	AGC MAVG - calculated	
10/27/2014 3:28	0:28	KWPII	3.836	11.882	AGC MAVG - calculated	
10/27/2014 3:28	0:28	KWP	3.836	11.882	AGC MAVG - calculated	
10/27/2014 3:37	0:03	AWE	0.057	12.200	AGC MAVG - calculated	
10/27/2014 3:42	0:02	AWE	0.039	11.400	AGC MAVG - calculated	
10/27/2014 3:45	0:07	AWE	0.170	12.200	AGC MAVG - calculated	
10/27/2014 3:58	0:53	KWPII	5.260	15.880	AGC MAVG - calculated	
10/27/2014 3:58	0:53	KWP	5.260	15.880	AGC MAVG - calculated	
10/27/2014 4:54	0:01	KWPII	0.018	7.734	AGC MAVG - calculated	
10/27/2014 4:54	0:01	KWP	0.018	7.734	AGC MAVG - calculated	
10/27/2014 5:30	0:01	KWPII	0.006	12.198	AGC MAVG - calculated	
10/27/2014 5:34	0:01	KWPII	0.008	12.198	AGC MAVG - calculated	
10/27/2014 5:38	0:01	KWPII	0.025	11.811	AGC MAVG - calculated	
10/27/2014 5:38	0:01	KWP	0.025	11.811	AGC MAVG - calculated	
10/27/2014 5:39	0:04	KWPII	0.085	12.193	AGC MAVG - calculated	
10/27/2014 5:39	0:04	KWP	0.085	12.193	AGC MAVG - calculated	
10/27/2014 5:45	0:01	KWPII	0.010	11.837	AGC MAVG - calculated	
10/27/2014 5:45	0:01	KWP	0.010	11.837	AGC MAVG - calculated	
10/27/2014 5:52	0:03	KWPII	0.060	10.358	AGC MAVG - calculated	
10/27/2014 5:52	0:03	KWP	0.060	10.358	AGC MAVG - calculated	
10/27/2014 5:58	0:01	KWPII	0.007	10.810	AGC MAVG - calculated	
10/27/2014 5:58	0:01	KWP	0.007	10.810	AGC MAVG - calculated	
10/27/2014 8:40	0:03	KWPII	0.040	15.845	AGC MAVG - calculated	
10/27/2014 8:40	0:03	KWP	0.040	15.845	AGC MAVG - calculated	
10/27/2014 8:53	3:07	KWPII	22.800	20.827	AGC MAVG - calculated	
10/27/2014 8:53	3:07	KWP	22.800	20.827	AGC MAVG - calculated	
10/27/2014 10:01	1:14	KWPII	4.207	19.201	AGC MAVG - calculated	
10/27/2014 10:01	1:14	KWP	4.207	19.201	AGC MAVG - calculated	
10/27/2014 11:18	0:04	KWPII	0.067	18.840	AGC MAVG - calculated	
10/27/2014 11:18	0:04	KWP	0.067	18.840	AGC MAVG - calculated	
10/27/2014 11:21	0:01	KWPII	0.003	17.632	AGC MAVG - calculated	
10/27/2014 11:21	0:01	KWP	0.003	17.632	AGC MAVG - calculated	
10/27/2014 11:28	0:11	KWPII	0.227	18.884	AGC MAVG - calculated	
10/27/2014 11:28	0:11	KWP	0.227	18.884	AGC MAVG - calculated	
10/27/2014 11:38	0:02	KWPII	0.049	20.278	AGC MAVG - calculated	
10/27/2014 11:38	0:02	KWP	0.049	20.278	AGC MAVG - calculated	
10/27/2014 14:27	0:01	KWPII	0.018	18.808	AGC MAVG - calculated	
10/27/2014 14:27	0:01	KWP	0.018	18.808	AGC MAVG - calculated	
10/27/2014 18:11	0:01	KWPII	0.004	18.888	AGC MAVG - calculated	
10/27/2014 18:11	0:01	KWP	0.004	18.888	AGC MAVG - calculated	
10/27/2014 18:58	0:02	KWPII	0.028	20.581	AGC MAVG - calculated	
10/27/2014 18:58	0:02	KWP	0.028	20.581	AGC MAVG - calculated	
10/27/2014 17:08	0:01	KWPII	0.013	20.847	AGC MAVG - calculated	
10/27/2014 17:08	0:01	KWP	0.013	20.847	AGC MAVG - calculated	
10/27/2014 17:08	0:01	KWPII	0.017	20.838	AGC MAVG - calculated	
10/27/2014 17:08	0:01	KWP	0.017	20.838	AGC MAVG - calculated	
10/27/2014 21:13	0:01	KWPII	0.008	20.387	AGC MAVG - calculated	
10/27/2014 21:13	0:01	KWP	0.008	20.387	AGC MAVG - calculated	
10/27/2014 22:07	0:01	KWPII	0.002	15.380	AGC MAVG - calculated	
10/27/2014 22:07	0:01	KWP	0.002	15.380	AGC MAVG - calculated	
10/27/2014 22:08	0:01	KWPII	0.007	15.858	AGC MAVG - calculated	
10/27/2014 22:08	0:01	KWP	0.007	15.858	AGC MAVG - calculated	
10/27/2014 22:11	0:04	KWPII	0.068	15.775	AGC MAVG - calculated	

RSWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtained MWh	Peak MW Curtained	Reasons for Curtailment
10/27/2014 22 11	0 04	KWP	0 088	15 775	AGC MAVG - calculated
10/27/2014 22 16	0 01	KWP	0 006	12 267	AGC MAVG - calculated
10/27/2014 22 18	0 01	KWP	0 006	12 297	AGC MAVG - calculated
10/27/2014 22 19	0 03	KWP	0 059	15 118	AGC MAVG - calculated
10/27/2014 22 19	0 03	KWP	0 059	15 118	AGC MAVG - calculated
10/27/2014 22 31	0 10	KWP	0 462	18 203	AGC MAVG - calculated
10/27/2014 22 31	0 10	KWP	0 462	18 203	AGC MAVG - calculated
10/27/2014 22 39	0 05	KWP	0 265	15 936	AGC MAVG - calculated
10/27/2014 22 58	0 05	KWP	0 265	15 936	AGC MAVG - calculated
10/27/2014 23 03	0 05	KWP	0 112	14 019	AGC MAVG - calculated
10/27/2014 23 03	0 05	KWP	0 112	14 019	AGC MAVG - calculated
10/27/2014 23 21	0 07	KWP	0 435	11 794	AGC MAVG - calculated
10/27/2014 23 21	0 07	KWP	0 435	11 794	AGC MAVG - calculated
10/27/2014 23 32	0 01	KWP	0 021	11 278	AGC MAVG - calculated
10/27/2014 23 32	0 01	KWP	0 021	11 278	AGC MAVG - calculated
10/27/2014 23 34	0 01	KWP	0 000	12 353	AGC MAVG - calculated
10/27/2014 23 34	0 01	KWP	0 000	12 353	AGC MAVG - calculated
10/27/2014 23 36	0 03	KWP	0 103	14 760	AGC MAVG - calculated
10/27/2014 23 36	0 03	KWP	0 103	14 760	AGC MAVG - calculated
10/27/2014 23 40	0 50	KWP	4 861	13 739	AGC MAVG - calculated
10/27/2014 23 40	0 50	KWP	4 861	13 739	AGC MAVG - calculated
10/28/2014 0 12	0 01	AWE	0 017	14 500	AGC MAVG - calculated
10/28/2014 0 14	0 06	AWE	0 087	15 900	AGC MAVG - calculated
10/28/2014 0 22	0 01	AWE	0 022	15 500	AGC MAVG - calculated
10/28/2014 0 32	0 01	KWP	0 033	8 833	AGC MAVG - calculated
10/28/2014 0 32	0 01	KWP	0 033	8 833	AGC MAVG - calculated
10/28/2014 0 34	0 01	KWP	0 030	8 904	AGC MAVG - calculated
10/28/2014 0 34	0 01	KWP	0 030	8 904	AGC MAVG - calculated
10/28/2014 1 01	3 38	KWP	43 755	20 217	AGC MAVG - calculated
10/28/2014 1 01	3 38	KWP	43 755	20 217	AGC MAVG - calculated
10/28/2014 1 07	0 02	AWE	0 006	14 900	AGC MAVG - calculated
10/28/2014 1 14	0 01	AWE	0 001	14 300	AGC MAVG - calculated
10/28/2014 1 17	0 03	AWE	0 078	15 700	AGC MAVG - calculated
10/28/2014 1 21	0 02	AWE	0 033	16 000	AGC MAVG - calculated
10/28/2014 1 24	0 02	AWE	0 060	16 700	AGC MAVG - calculated
10/28/2014 1 26	0 04	AWE	0 036	16 500	AGC MAVG - calculated
10/28/2014 1 33	0 05	AWE	0 100	15 700	AGC MAVG - calculated
10/28/2014 1 40	0 02	AWE	0 072	16 700	AGC MAVG - calculated
10/28/2014 1 43	0 01	AWE	0 030	16 700	AGC MAVG - calculated
10/28/2014 1 45	0 01	AWE	0 004	17 000	AGC MAVG - calculated
10/28/2014 1 47	0 01	AWE	0 021	17 800	AGC MAVG - calculated
10/28/2014 1 56	0 02	AWE	0 039	14 700	AGC MAVG - calculated
10/28/2014 1 59	0 01	AWE	0 018	13 300	AGC MAVG - calculated
10/28/2014 2 01	1 02	AWE	2 727	15 000	AGC MAVG - calculated AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
10/28/2014 3 07	0 01	AWE	0 023	12 800	AGC MAVG - calculated
10/28/2014 3 09	0 46	AWE	2 458	18 000	AGC MAVG - calculated AGC MAVG - entered - Maintaining Regulating Reserves, and AGC MAVG - calculated
10/28/2014 3 56	0 30	AWE	2 836	19 500	AGC MAVG - entered - Maintaining Regulating Reserves and AGC MAVG - calculated
10/28/2014 4 26	0 03	AWE	0 024	13 400	AGC MAVG - calculated
10/28/2014 4 42	0 06	KWP	0 257	11 334	AGC MAVG - calculated
10/28/2014 4 42	0 06	KWP	0 257	11 334	AGC MAVG - calculated
10/28/2014 4 49	0 03	KWP	0 028	8 347	AGC MAVG - calculated
10/28/2014 4 49	0 03	KWP	0 028	8 347	AGC MAVG - calculated
10/28/2014 4 53	0 42	KWP	5 582	16 302	AGC MAVG - calculated
10/28/2014 4 53	0 42	KWP	5 582	16 302	AGC MAVG - calculated
10/28/2014 5 17	0 05	AWE	0 078	20 500	AGC MAVG - calculated
10/28/2014 5 23	0 02	AWE	0 053	20 900	AGC MAVG - calculated
10/28/2014 5 29	0 01	AWE	0 003	18 900	AGC MAVG - calculated
10/28/2014 5 38	0 20	KWP	1 860	14 803	AGC MAVG - calculated
10/28/2014 5 38	0 20	KWP	1 860	14 803	AGC MAVG - calculated
10/28/2014 5 59	0 28	KWP	1 730	17 709	AGC MAVG - calculated
10/28/2014 5 59	0 28	KWP	1 730	17 709	AGC MAVG - calculated
10/28/2014 6 36	0 18	KWP	0 479	20 576	AGC MAVG - calculated
10/28/2014 6 36	0 18	KWP	0 479	20 576	AGC MAVG - calculated
10/28/2014 6 56	0 01	KWP	0 013	19 737	AGC MAVG - calculated
10/28/2014 6 56	0 01	KWP	0 013	19 737	AGC MAVG - calculated
10/28/2014 6 58	0 02	KWP	0 014	19 773	AGC MAVG - calculated
10/28/2014 6 58	0 02	KWP	0 014	19 773	AGC MAVG - calculated
10/28/2014 7 11	0 06	KWP	0 089	20 435	AGC MAVG - calculated
10/28/2014 7 11	0 06	KWP	0 089	20 435	AGC MAVG - calculated
10/28/2014 7 18	0 04	KWP	0 047	20 488	AGC MAVG - calculated
10/28/2014 7 18	0 04	KWP	0 047	20 488	AGC MAVG - calculated
10/28/2014 7 25	0 01	KWP	0 000	18 816	AGC MAVG - calculated
10/28/2014 7 25	0 01	KWP	0 000	18 816	AGC MAVG - calculated
10/28/2014 7 28	0 03	KWP	0 025	20 111	AGC MAVG - calculated
10/28/2014 7 28	0 03	KWP	0 025	20 111	AGC MAVG - calculated
10/28/2014 7 34	0 01	KWP	0 002	20 280	AGC MAVG - calculated
10/28/2014 7 34	0 01	KWP	0 002	20 280	AGC MAVG - calculated
10/28/2014 7 36	0 02	KWP	0 009	20 186	AGC MAVG - calculated
10/28/2014 7 36	0 02	KWP	0 009	20 186	AGC MAVG - calculated
10/28/2014 7 40	0 01	KWP	0 003	20 352	AGC MAVG - calculated
10/28/2014 7 40	0 01	KWP	0 003	20 352	AGC MAVG - calculated
10/28/2014 8 51	0 09	KWP	0 138	20 269	AGC MAVG - calculated and Good Engineering and Operating Practices
10/28/2014 8 51	0 09	KWP	0 138	20 269	AGC MAVG - calculated and Good Engineering and Operating Practices
10/28/2014 8 45	0 01	KWP	0 012	18 738	AGC MAVG - calculated
10/28/2014 8 45	0 01	KWP	0 012	18 738	AGC MAVG - calculated
10/28/2014 8 54	0 01	KWP	0 002	20 247	AGC MAVG - calculated
10/28/2014 8 54	0 01	KWP	0 002	20 247	AGC MAVG - calculated
10/28/2014 12 24	0 03	KWP	0 069	20 508	AGC MAVG - calculated
10/28/2014 12 24	0 03	KWP	0 069	20 508	AGC MAVG - calculated
10/28/2014 12 43	0 01	KWP	0 000	20 445	AGC MAVG - calculated
10/28/2014 12 43	0 01	KWP	0 000	20 445	AGC MAVG - calculated
10/28/2014 13 47	0 01	KWP	0 011	20 531	AGC MAVG - calculated
10/28/2014 13 47	0 01	KWP	0 011	20 531	AGC MAVG - calculated
10/28/2014 21 42	0 10	KWP	0 211	20 708	AGC MAVG - calculated
10/28/2014 21 42	0 10	KWP	0 211	20 708	AGC MAVG - calculated
10/28/2014 21 53	1 25	KWP	13 842	20 708	AGC MAVG - calculated
10/28/2014 21 53	1 25	KWP	13 842	20 708	AGC MAVG - calculated
10/28/2014 22 54	0 03	AWE	0 081	16 900	AGC MAVG - calculated
10/28/2014 23 01	0 03	AWE	0 073	20 800	AGC MAVG - calculated
10/28/2014 23 10	0 03	AWE	0 042	17 400	AGC MAVG - calculated
10/28/2014 23 20	6 18	KWP	58 386	20 708	AGC MAVG - calculated
10/28/2014 23 20	6 18	KWP	58 386	20 708	AGC MAVG - calculated
10/29/2014 0 32	0 01	AWE	0 002	20 896	AGC MAVG - calculated
10/29/2014 1 56	0 06	AWE	0 212	21 000	AGC MAVG - calculated AGC MAVG - entered and Operating Conditions on Company's System
10/29/2014 8 09	0 01	KWP	0 001	18 973	AGC MAVG - calculated
10/29/2014 8 12	2 28	KWP	21 084	20 708	AGC MAVG - calculated
10/29/2014 10 43	0 01	KWP	0 005	20 700	AGC MAVG - calculated
10/29/2014 10 47	0 05	KWP	0 088	20 704	AGC MAVG - calculated
10/29/2014 10 55	0 07	KWP	0 090	20 708	AGC MAVG - calculated
10/29/2014 11 03	0 03	KWP	0 002	20 607	AGC MAVG - calculated
10/29/2014 11 06	0 02	KWP	0 007	20 698	AGC MAVG - calculated
10/29/2014 11 13	0 01	KWP	0 003	20 790	AGC MAVG - calculated
10/29/2014 11 17	0 01	KWP	0 017	20 874	AGC MAVG - calculated
10/29/2014 12 19	0 01	KWP	0 004	20 815	AGC MAVG - calculated

RSWG Maui Curtailment Report October 2014



Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
10/28/2014 12 28	0 13	KWPII	0 278	20 866	AGC MAVG - calculated
10/28/2014 13 28	0 10	AWE	0 476	20 000	AGC MAVG - calculated and Testing
10/28/2014 22 12	0 01	KWPII	0 002	20 708	AGC MAVG - calculated
10/28/2014 23 18	0 03	KWPII	0 012	20 708	AGC MAVG - calculated
10/28/2014 23 27	2 31	KWPII	20 180	20 708	Maintaining Regulating Reserves, AGC MAVG - calculated, AGC MAVG - entered - Maintaining Regulating Reserves
10/30/2014 2 29	0 01	AWE	0 002	0 100	AGC MAVG - calculated
10/30/2014 4 00	0 03	KWPII	0 021	19 211	AGC MAVG - calculated
10/30/2014 4 30	0 01	KWPII	0 007	19 211	AGC MAVG - calculated
10/30/2014 4 34	0 06	KWPII	0 098	19 211	AGC MAVG - calculated
10/30/2014 5 24	0 01	KWPII	0 009	19 211	AGC MAVG - calculated
10/30/2014 5 30	0 02	KWPII	0 023	19 211	AGC MAVG - calculated
10/30/2014 8 06	0 01	AWE	0 002	0 100	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 9 05	0 01	KWPII	0 010	19 211	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 9 08	1 41	KWPII	5 497	19 211	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 10 57	0 01	KWPII	0 012	19 211	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 11 09	0 04	KWPII	0 127	19 211	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 11 21	0 33	KWPII	2 009	19 211	AGC MAVG - calculated and Good Engineering and Operating Practices
10/30/2014 11 58	0 06	KWPII	0 302	20 708	AGC MAVG - calculated
10/30/2014 12 41	0 01	KWPII	0 001	19 211	AGC MAVG - calculated
10/30/2014 12 43	0 01	KWPII	0 010	20 708	AGC MAVG - calculated
10/30/2014 21 27	0 32	KWPII	1 218	20 708	AGC MAVG - calculated
10/30/2014 22 14	0 03	KWPII	0 088	20 708	AGC MAVG - calculated
10/30/2014 22 33	0 23	KWPII	1 313	20 708	AGC MAVG - calculated
10/30/2014 22 57	0 03	KWPII	0 055	20 708	AGC MAVG - calculated
10/30/2014 23 01	0 10	KWPII	0 180	20 708	AGC MAVG - calculated
10/30/2014 23 17	5 12	KWPII	78 280	20 708	MAVG - entered, AGC MAVG - entered, and AGC MAVG - entered - Maintaining Regulating Reserves
10/31/2014 2 27	1 16	AWE	5 108	21 000	AGC MAVG - calculated
10/31/2014 3 48	0 08	AWE	0 142	19 800	AGC MAVG - calculated
10/31/2014 4 14	0 01	AWE	0 008	20 200	AGC MAVG - calculated
10/31/2014 4 17	0 03	AWE	0 050	21 000	AGC MAVG - entered - Maintaining Regulating Reserves
10/31/2014 4 22	0 01	AWE	0 007	20 400	AGC MAVG - entered - Maintaining Regulating Reserves
10/31/2014 4 31	0 29	KWPII	4 348	18 547	AGC MAVG - calculated
10/31/2014 5 02	0 07	KWPII	0 201	18 129	AGC MAVG - calculated
10/31/2014 5 10	0 48	KWPII	1 288	20 589	AGC MAVG - calculated
10/31/2014 7 21	0 25	KWPII	2 223	20 707	AGC MAVG - calculated
10/31/2014 7 48	0 07	KWPII	0 403	20 708	AGC MAVG - calculated
10/31/2014 7 56	0 01	KWPII	0 033	20 708	AGC MAVG - calculated
10/31/2014 11 22	0 03	KWPII	0 128	18 803	AGC MAVG - calculated
10/31/2014 11 28	0 13	KWPII	1 214	20 580	AGC MAVG - calculated
10/31/2014 11 45	0 01	KWPII	0 011	20 427	AGC MAVG - calculated
10/31/2014 11 52	0 01	KWPII	0 003	20 598	AGC MAVG - calculated
10/31/2014 12 04	0 02	KWPII	0 013	20 400	AGC MAVG - calculated
10/31/2014 12 17	0 01	KWPII	0 011	19 180	AGC MAVG - calculated
10/31/2014 12 35	0 02	KWPII	0 028	19 677	AGC MAVG - calculated
10/31/2014 13 00	0 06	AWE	0 071	20 700	AGC MAVG - calculated
10/31/2014 13 31	0 01	KWPII	0 018	18 844	AGC MAVG - calculated
10/31/2014 13 44	0 18	KWPII	0 378	19 463	AGC MAVG - calculated
10/31/2014 19 42	0 01	KWPII	0 000	20 708	AGC MAVG - calculated
10/31/2014 20 37	1 02	KWPII	6 044	20 708	AGC MAVG - calculated, AGC MAVG - entered, Testing and AGC MAVG - calculated
10/31/2014 21 24	0 02	AWE	0 014	20 500	Testing
10/31/2014 21 41	0 02	KWPII	0 248	20 708	AGC MAVG - calculated
10/31/2014 21 55	0 01	KWPII	0 002	20 708	AGC MAVG - calculated
10/31/2014 22 28	0 02	KWPII	0 022	20 708	AGC MAVG - calculated
10/31/2014 22 28	1 31	KWPII	10 318	20 708	AGC MAVG - calculated

Notes

- Curtailment for Kaneohe Wind Power ("KWPF"), Makua Hydroelectric ("MHT"), AAAAA Rem-A-Spice Maui LTD ("SA"), Boraal Solar, LLC ("BSL"), Auwahi Wind Energy ("AWE"), and Kaneohe Wind Power II ("KWPII") 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, KWPF, and KWPII. Maui Electric does not make any representation as to its accuracy.
- The data to calculate the Estimated Curtailed MWH and Peak MW Curtailed is not provided by SA, BS, or MH.
- Curtailment signals sent to SA or BS during nighttime hours are not recorded as curtailment events because no energy penetration is possible during that time.



Lanai Curtailment Report October 2014

Start Date/Time	Stop Date/Time	Duration (h:mm)	IPP Curtailed	Estimated MWh Curtailed	Peak MW Curtailed	Reasons for Curtailment
10/26/2014 13:17	10/26/2014 13:18	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:22	10/26/2014 13:22	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:41	10/26/2014 13:41	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:46	10/26/2014 13:46	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:48	10/26/2014 13:48	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:52	10/26/2014 13:52	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 13:55	10/26/2014 13:55	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:02	10/26/2014 14:11	0:10	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:23	10/26/2014 14:23	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:26	10/26/2014 14:27	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:31	10/26/2014 14:31	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:48	10/26/2014 14:49	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:52	10/26/2014 14:55	0:04	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 14:57	10/26/2014 14:57	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 15:01	10/26/2014 15:01	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 15:09	10/26/2014 15:09	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 15:14	10/26/2014 15:19	0:06	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 15:21	10/26/2014 15:22	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/26/2014 17:03	10/26/2014 17:12	0:10	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:25	10/27/2014 16:27	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:30	10/27/2014 16:31	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:33	10/27/2014 16:36	0:04	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:39	10/27/2014 16:43	0:05	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:45	10/27/2014 16:51	0:07	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/27/2014 16:53	10/27/2014 16:54	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/28/2014 16:14	10/28/2014 17:11	0:58	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/29/2014 7:14	10/29/2014 7:15	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/29/2014 7:30	10/29/2014 7:30	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/29/2014 8:09	10/29/2014 8:09	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 9:57	10/30/2014 9:57	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 9:59	10/30/2014 10:10	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 10:19	10/30/2014 10:22	0:04	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 10:26	10/30/2014 12:02	1:34	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 12:11	10/30/2014 12:28	0:18	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 12:36	10/30/2014 12:47	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 12:49	10/30/2014 13:14	0:26	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 13:27	10/30/2014 13:31	0:05	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 13:33	10/30/2014 13:33	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 14:33	10/30/2014 14:34	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 14:42	10/30/2014 14:49	0:08	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 15:23	10/30/2014 15:27	0:05	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 16:04	10/30/2014 16:04	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 16:07	10/30/2014 16:07	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 16:09	10/30/2014 16:11	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 16:38	10/30/2014 16:40	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 16:53	10/30/2014 17:04	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 17:07	10/30/2014 17:07	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 17:09	10/30/2014 17:11	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/30/2014 17:21	10/30/2014 17:23	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 7:20	10/31/2014 7:40	0:21	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 8:04	10/31/2014 8:29	0:26	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 8:31	10/31/2014 8:34	0:04	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 8:37	10/31/2014 8:49	0:13	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 8:53	10/31/2014 8:53	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 8:57	10/31/2014 9:08	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 9:12	10/31/2014 9:13	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 9:16	10/31/2014 9:17	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 9:19	10/31/2014 8:21	0:03	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 9:25	10/31/2014 10:01	0:37	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 10:03	10/31/2014 10:18	0:16	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 10:22	10/31/2014 10:40	0:19	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 10:42	10/31/2014 10:53	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 10:55	10/31/2014 11:09	0:15	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 12:32	10/31/2014 12:40	0:09	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 12:45	10/31/2014 12:45	0:01	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 12:48	10/31/2014 12:49	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 12:51	10/31/2014 12:56	0:06	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 13:01	10/31/2014 14:16	1:16	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 15:02	10/31/2014 15:12	0:11	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 15:14	10/31/2014 15:32	0:19	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 15:39	10/31/2014 15:50	0:12	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 16:10	10/31/2014 16:19	0:10	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 16:21	10/31/2014 16:38	0:18	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 16:51	10/31/2014 16:52	0:02	LSR	Data is not available	Data is not available	Good engineering and operating practices
10/31/2014 16:54	10/31/2014 17:03	0:10	LSR	Data is not available	Data is not available	Good engineering and operating practices

Notes:
 On June 27, 2012, Maui Electric notified LSR that although LSR has not operated in compliance with the revised ramp rate of 350 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.

Hawai'i Electric Light Company Curtailment Report October 2014

Start Date/Time	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released	Reason for Curtailment
10/01/14 11:51	15.2 MW	10/03/14 12:02	19.5 MW	Tawhiri request self-curtail to various levels while it completed repairs to fiber optic line.
10/10/14 09:24	8.4 MW	10/10/14 12:43	9.2 MW	HRD curtailed - scheduled outage to replace PT at Waimea Switching Station.
10/13/14 16:22	17.1 MW	10/13/14 19:06	16.6 MW	High wind curtailment at Tawhiri's request.
10/14/14 02:20	19.8 MW	10/14/14 03:22	19.0 MW	Tawhiri Group B curtailed for excess energy.
10/16/14 01:48	19.6 MW	10/16/14 01:51	19.6 MW	Tawhiri Group B curtailed for excess energy.
10/17/14 09:50	18.7 MW	10/17/14 17:13	17.8 MW	High wind curtailment at Tawhiri's request.
10/23/14 00:34	19.3 MW	10/23/14 01:12	15.8 MW	Tawhiri curtailed - generation unit maintenance at Keahole.
10/26/14 02:37	18.6 MW	10/26/14 04:05	13.8 MW	Tawhiri Group B curtailed for excess energy.
10/27/14 01:27	19.7 MW	10/27/14 04:28	11.2 MW	Tawhiri Group B curtailed for excess energy.

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.