January 22, 2016

FILED

2016 JAN 22 P 3:55

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 December 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".

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

RICK REED
DIRECTOR
HAWAII SOLAR ENERGY ASSOCIATION
761 Ahua Street
Honolulu, HI 96819

1 Copy
Electronically Transmitted

KENT D. MORIHARA, ESQ.
KRIS N. NAKAGAWA, ESQ.
LAUREN M. IMADA-LEE, ESQ.
TANYA M. FERNANDES, ESQ.
Morihara 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
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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

SERVICE LIST
(Docket No. 2011-0206)

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

1 Copy
Electronically Transmitted

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 December 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 December 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 December.

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

Hawaiian Electric did not have any demand response activations for system events for the month of December. 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. Therefore, Attachment 5 is not being provided for this reporting period.

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

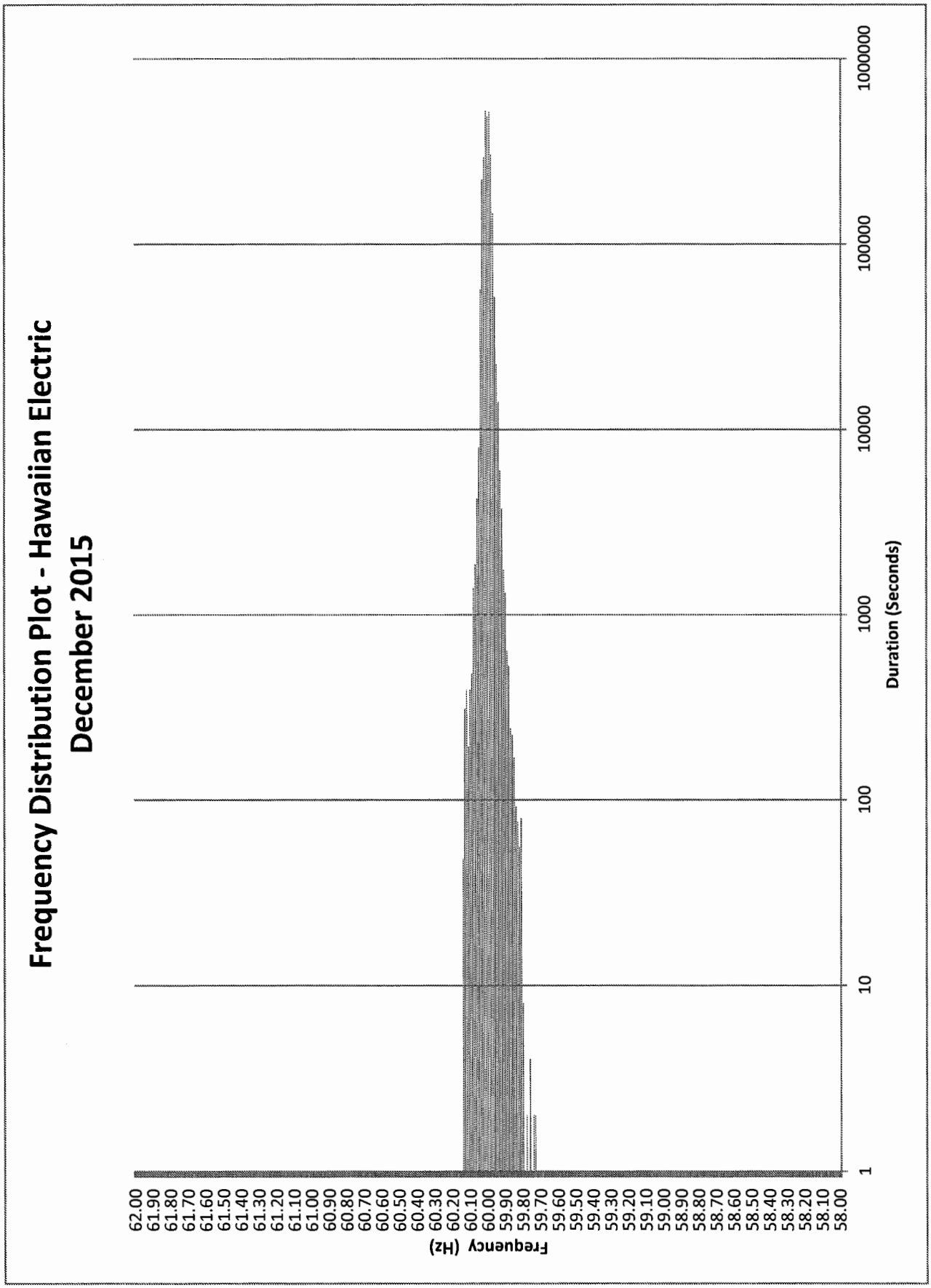
The following provides information with respect to items 3a) through 3b) – (all statements are current as of the month ending December 31, 2015):

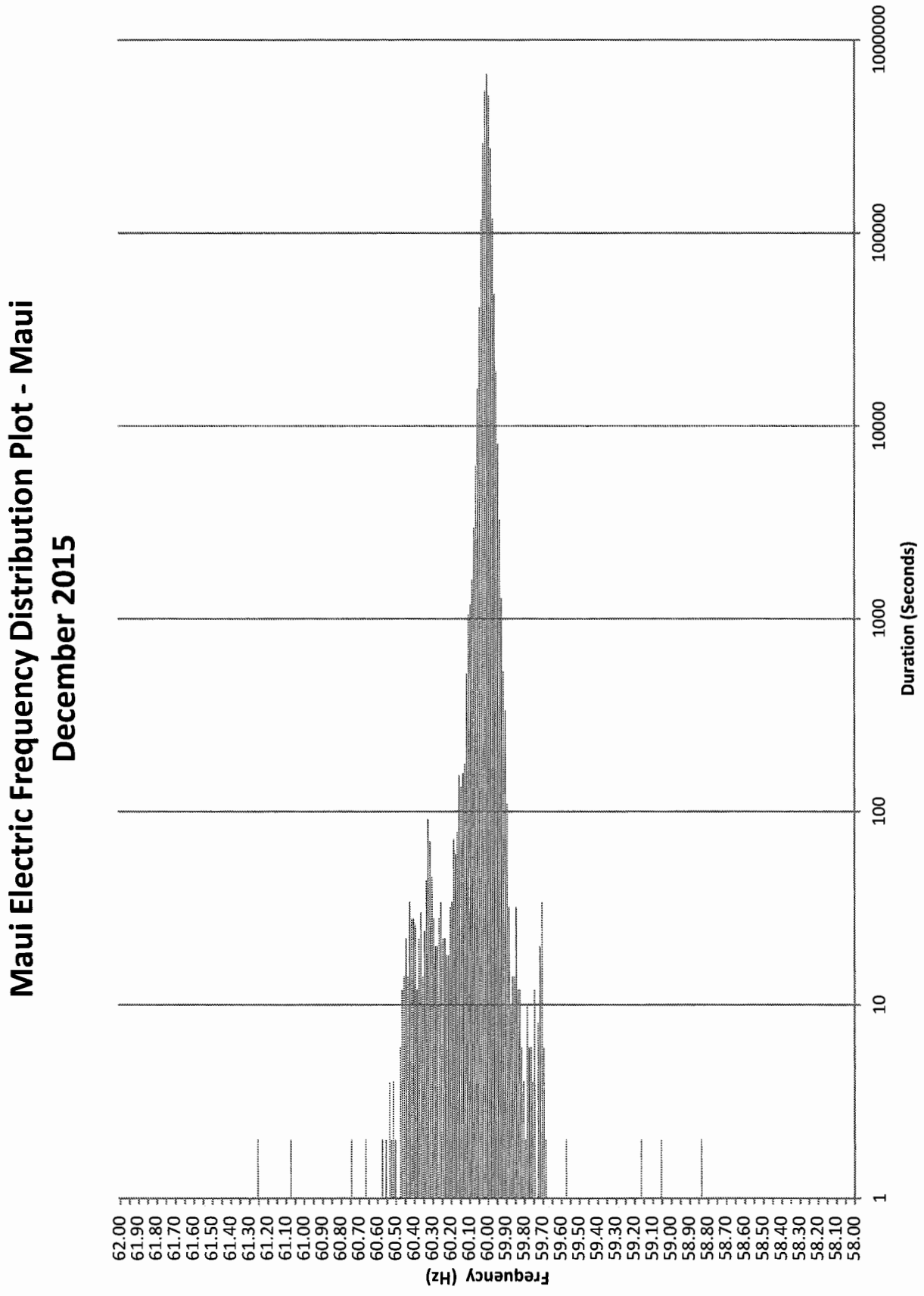
3a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment:

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
December 2015
Frequency (Hz)
62.00
61.90
61.80
61.70
61.60
61.50
61.40
61.30
61.20
61.10
61.00
60.90
60.80
60.70
60.60
60.50
60.40
60.30
60.20
60.10
60.00
59.90
59.80
59.70
59.60
59.50
59.40
59.30
59.20
59.10
59.00
58.90
58.80
58.70
58.60
58.50
58.40
58.30
58.20
58.10
58.00
Duration (Seconds)
1
10
100
1000
10000
100000
1000000


Maui Electric Frequency Distribution Plot - Maui
December 2015
Frequency (Hz)
62.00
61.90
61.80
61.70
61.60
61.50
61.40
61.30
61.20
61.10
61.00
60.90
60.80
60.70
60.60
60.50
60.40
60.30
60.20
60.10
60.00
59.90
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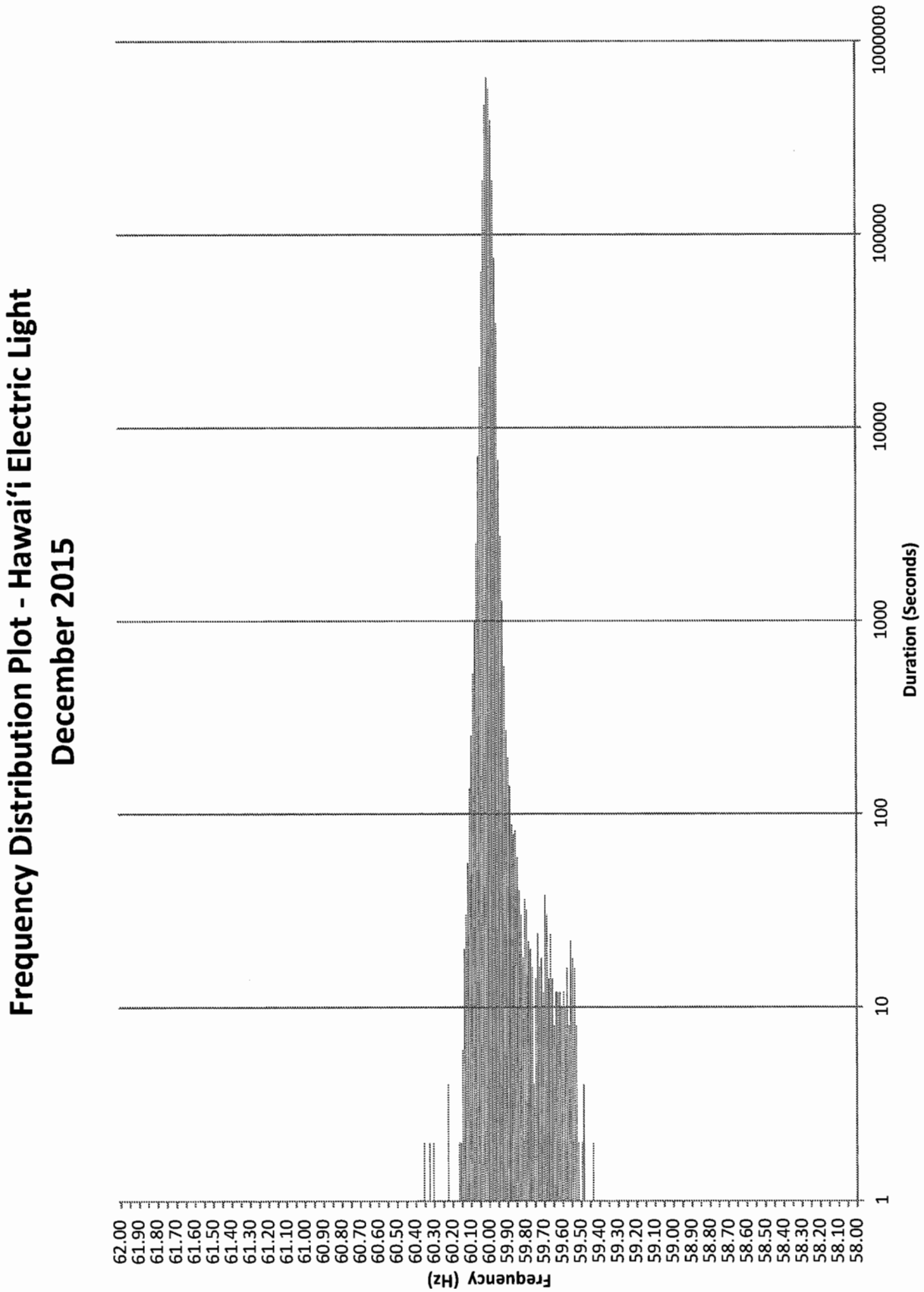
59.30
59.20
59.10
59.00
58.90
58.80
58.70
58.60
58.50
58.40
58.30
58.20
58.10
58.00
Duration (Seconds)
1
10
100
1000
10000
100000
1000000


Frequency Distribution Plot - Hawai'i Electric Light
December 2015
Frequency (Hz)
62.00
61.90
61.80
61.70
61.60
61.50
61.40
61.30
61.20
61.10
61.00
60.90
60.80
60.70
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59.00
58.90
58.80
58.70
58.60
58.50
58.40
58.30
58.20
58.10
58.00
Duration (Seconds)
1
10
100
1000
10000
100000
1000000

Hawaiian Electric Frequency Excursion Statistics December 2015		
Data Rounded to the nearest	<59.95 Hz	>60.05 Hz
Number of Excursions	1748	500
Maximum Duration (sec)	1188	1656
Maximum Deviation (Hz)	59.729	60.143
Total Duration of Excursions (sec)	37336	12160

Maui Electric Frequency Excursion Statistics December 2015		
	<59.95 Hz	>60.05 Hz
Number of Excursions	4522	3128
Maximum Duration (sec)	182	698
Maximum Deviation (Hz)	58.8265	61.2542
Total Duration of Excursions (sec)	21198	21130

Hawai'i Electric Light Frequency Excursion Statistics December 2015		
	<59.95 Hz	>60.05 Hz
Number of Excursions	4802	1231
Maximum Duration (sec)	458	120
Maximum Deviation (Hz)	59.432	60.350
Total Duration of Excursions (sec)	30294	7284

HAWAIIAN ELECTRIC COMPANY, INC.
CONTINGENCY RESERVE ACTIVATION EVENTS
DECEMBER 2015

Event #	Date & Time	Frequency (Hz)			Spinning Reserve Shortfall (MW)	Duration (HH:MM)	Description
		Prior to Event	Nadir	Trigger			
1	12/22/15 06:18	59.909	59.729	NA	-24.00	0:05	KPLP CT1 tripped offline while generating ~25 MW. W9 called online for spinning reserve.

MAUI ELECTRIC COMPANY, LIMITED
UNDERFREQUENCY LOADSHEDDING EVENTS
December 2015

				Frequency (Hz)					
Event #	IR #	Island	Date & Time	Prior to Event	Nadir	Levels UFLS Occurred	Load Shed (MW)	Duration (HH:MM)	Description
1	1070	Moloka'i	12/2/2015 4:10 PM	60.00	56.99	57.50	0.79	0:57	A system frequency depression of 56.99 Hz occurred when Generator #7 at Palaau Power Plant lost govenor control causing system frequency to oscillate. The frequency oscillation tripped approx. 450kW of legacy PV off line.
2	1085	Lāna'i	12/9/2015 8:38 AM	60.00	57.73	58.65, 58.5	0.39	0:36	A system frequency depression of 57.73 Hz occurred when Generator #7 at Miki Basin Power Plant tripped off line due to a technician working on controls for the generator
3	1128	Maui	12/18/2015 3:22 PM	60.04	57.68	59.2, 58.9, 58.7, 58.5, 58.0	33.94	1:28	A system frequency depression of 57.68 Hz occurred during a system distrubance when multiple transmission breakers opened due to an unknown cause at this time.
4	175	Lāna'i	12/25/2015 9:53 PM	60.03	55.31	58.65, 58.5, 57.7, 57.0	1.08	1:03	A system frequency depression of 55.31 Hz occurred when primary conductors became entangled at pole E-6.

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Hawaiian Electric Curtailment Report December 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
12/01/15 07:16	0.0	0.10	12/01/15 07:33	0	*	KREP	System constraints
12/01/15 07:16	0.0	0.10	12/01/15 07:33	0	*	KLS2	System constraints
12/01/15 14:06	0.0	3.90	12/01/15 14:34	0	*	KLS2	System constraints
12/01/15 14:08	0.0	3.30	12/01/15 14:35	0	*	KREP	System constraints
12/05/15 17:36	0.0	0.00	12/05/15 18:25	0	*	KREP	System constraints
12/09/15 06:44	0.0	9.70	12/09/15 15:43	0	*	KWF	System constraints
12/09/15 06:44	0.0	0.30	12/09/15 15:45	0	*	Makai	System constraints
12/09/15 06:44	0.0	2.60	12/09/15 09:00	0	*	Mauka	System constraints
12/09/15 14:22	0.0	13.10	12/09/15 15:44	0	*	Mauka	System constraints
12/15/15 07:11	0.0	3.80	12/15/15 13:18	0	*	KWF	System constraints
12/18/15 09:46	0.0	21.60	12/18/15 11:53	0	*	KWF	System constraints
12/20/15 11:57	0.0	2.20	12/20/15 12:20	0	*	KREP	Oversupply
12/20/15 11:59	0.0	3.30	12/20/15 12:19	0	*	KLS2	Oversupply
12/20/15 12:02	0.0	12.80	12/20/15 12:08	0	*	Makai	Oversupply
12/22/15 06:55	0.0	0.00	12/22/15 08:17	0	*	KREP	System constraints
12/22/15 16:01	0.0	1.00	12/22/15 16:57	0	*	KREP	System constraints

KLS2 = Kalaeloa Solar 2 PV Farm
KREP = Kalaeloa Renewable Energy Park
KWF = Kahuku Wind Farm
Makai = Kawailoa Makai Wind Farm
Mauka = Kawailoa Mauka Wind Farm
(1) The estimated MWh of energy curtailed during the event is supplied by Kahuku Wind Farm and/or Kawailoa Wind Farm, and HECO does not make any representations as to its accuracy.
* Data has not been provided by IPP.

Maui Electric

Maui Curtailment Report December 2015

Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/1/2015 0:00	4:53	KWPII	85.871	20.708	Oversupply
12/1/2015 1:19	0:06	AWE	0.172	13.243	Oversupply
12/1/2015 1:35	0:02	AWE	0.029	9.167	Oversupply
12/1/2015 1:41	0:02	AWE	0.021	8.810	Oversupply
12/1/2015 2:07	2:08	AWE	8.166	18.033	Oversupply
12/1/2015 4:17	0:23	AWE	1.252	16.837	Oversupply
12/1/2015 4:41	0:02	AWE	0.042	11.880	Oversupply
12/1/2015 4:44	0:01	AWE	0.028	12.730	Oversupply
12/1/2015 4:47	0:02	AWE	0.026	12.200	Oversupply
12/1/2015 4:56	1:13	KWPII	12.223	20.684	Oversupply
12/1/2015 6:17	0:02	KWPII	0.005	20.640	Oversupply
12/1/2015 6:42	0:02	KWPII	0.007	20.592	Oversupply
12/1/2015 6:55	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 6:57	0:07	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 6:57	0:07	KWPII	0.081	20.700	Oversupply
12/1/2015 7:13	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 7:14	0:02	KWPII	0.028	20.672	Oversupply
12/1/2015 8:40	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 8:40	0:01	KWPII	0.002	20.688	Oversupply
12/1/2015 8:42	0:02	KWPII	0.012	20.676	Oversupply
12/1/2015 8:46	2:28	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 8:46	0:01	KWPII	0.000	20.695	Oversupply
12/1/2015 8:49	2:25	KWPII	22.226	20.708	Oversupply
12/1/2015 11:31	0:13	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 11:32	0:12	KWPII	0.445	16.024	Oversupply
12/1/2015 11:45	0:14	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 11:45	0:13	KWPII	0.609	16.909	Oversupply
12/1/2015 16:09	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 16:36	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 16:52	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/1/2015 19:51	0:07	KWPII	0.133	20.708	Oversupply
12/1/2015 21:07	0:01	KWPII	0.004	19.211	Oversupply
12/1/2015 21:09	0:03	KWPII	0.041	19.211	Oversupply
12/1/2015 21:27	0:02	KWPII	0.004	20.708	Oversupply
12/1/2015 21:32	0:40	KWPII	3.063	20.708	Oversupply
12/1/2015 22:16	0:17	KWPII	1.030	20.708	Oversupply
12/1/2015 22:37	0:09	KWPII	0.072	20.708	Oversupply
12/1/2015 22:57	5:51	KWPII	89.421	20.708	Oversupply
12/2/2015 2:10	1:49	MH	Data is not available	Data is not available	Oversupply
12/2/2015 2:19	1:25	KWP	1.739	26.700	Oversupply
12/2/2015 2:44	0:30	AWE	1.017	4.203	Oversupply
12/2/2015 3:16	0:03	AWE	0.004	0.177	Oversupply
12/2/2015 3:46	0:02	KWP	0.008	26.527	Oversupply
12/2/2015 4:29	0:13	AWE	0.286	6.077	Oversupply
12/2/2015 4:50	1:08	KWPII	7.840	20.708	Oversupply
12/2/2015 8:21	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 8:21	0:03	KWPII	0.053	20.708	Oversupply
12/2/2015 8:40	0:21	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 8:41	0:18	KWPII	0.646	20.708	Oversupply
12/2/2015 9:31	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 9:32	0:08	KWPII	0.194	20.708	Oversupply
12/2/2015 9:40	1:15	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 9:41	1:14	KWPII	9.730	20.708	Oversupply
12/2/2015 10:39	0:02	AWE	0.067	17.747	Oversupply
12/2/2015 10:44	0:06	AWE	0.211	20.970	Oversupply
12/2/2015 10:57	2:55	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 10:57	0:39	KWPII	12.349	20.708	Oversupply
12/2/2015 10:59	0:18	AWE	0.385	21.000	Oversupply
12/2/2015 11:18	0:04	AWE	0.083	21.000	Oversupply
12/2/2015 11:23	0:01	AWE	0.000	20.877	Oversupply
12/2/2015 11:37	2:14	KWPII	44.795	20.708	Oversupply
12/2/2015 11:38	0:01	AWE	0.001	21.000	Oversupply
12/2/2015 11:43	0:02	AWE	0.011	21.000	Oversupply
12/2/2015 11:49	0:02	AWE	0.003	21.000	Oversupply
12/2/2015 11:52	0:13	AWE	0.582	21.000	Oversupply
12/2/2015 12:06	0:33	AWE	1.955	21.000	Oversupply
12/2/2015 12:40	0:10	AWE	0.116	21.000	Oversupply
12/2/2015 12:51	0:19	AWE	0.162	21.000	Oversupply
12/2/2015 13:11	0:35	AWE	0.225	21.000	Oversupply
12/2/2015 13:53	1:28	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 13:53	1:30	KWPII	13.457	20.708	Oversupply
12/2/2015 15:22	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 15:35	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 15:37	0:01	KWPII	0.002	20.496	Oversupply
12/2/2015 15:39	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 15:39	0:01	KWPII	0.001	20.605	Oversupply
12/2/2015 16:09	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 16:26	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 16:27	0:03	KWPII	0.016	20.702	Oversupply
12/2/2015 16:38	0:05	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 16:40	0:02	KWPII	0.015	20.701	Oversupply
12/2/2015 16:54	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 17:28	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 17:28	0:09	KWPII	0.185	20.708	Oversupply
12/2/2015 17:39	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 17:39	0:07	KWPII	0.079	20.708	Oversupply
12/2/2015 17:48	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/2/2015 17:49	0:01	KWPII	0.000	20.707	Oversupply
12/2/2015 19:27	0:01	KWPII	0.002	20.708	Oversupply
12/2/2015 20:21	0:01	KWPII	0.003	20.708	Oversupply
12/2/2015 20:35	0:11	KWPII	0.449	20.708	Oversupply
12/2/2015 20:47	0:14	KWPII	0.520	20.708	Oversupply
12/2/2015 21:44	0:01	KWPII	0.000	20.708	Oversupply
12/2/2015 21:58	0:05	KWPII	0.061	19.211	Oversupply
12/2/2015 22:19	0:01	KWPII	0.011	19.211	Oversupply
12/2/2015 22:28	0:05	KWPII	0.059	19.211	Oversupply
12/2/2015 22:34	0:32	KWPII	0.977	19.211	Oversupply
12/2/2015 23:23	6:36	KWPII	119.426	19.211	Oversupply
12/2/2015 23:54	6:00	AWE	54.677	21.000	Oversupply
12/3/2015 0:15	3:54	MH	Data is not available	Data is not available	Oversupply
12/3/2015 0:16	0:01	KWP	0.004	28.354	Oversupply
12/3/2015 0:19	3:48	KWP	29.692	28.366	Oversupply
12/3/2015 6:01	0:43	KWPII	4.551	19.106	Oversupply
12/3/2015 6:48	2:53	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 6:49	2:52	KWPII	15.648	20.708	Oversupply
12/3/2015 9:50	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 9:54	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 10:16	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 10:18	1:59	KWPII	23.097	19.409	Oversupply
12/3/2015 10:20	1:57	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 11:12	0:01	AWE	0.001	21.000	Oversupply
12/3/2015 11:25	0:02	AWE	0.002	21.000	Oversupply
12/3/2015 11:28	0:02	AWE	0.001	21.000	Oversupply
12/3/2015 11:32	0:01	AWE	0.001	21.000	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/3/2015 11:50	0:03	AWE	0.002	21.000	Oversupply
12/3/2015 11:54	0:19	AWE	0.344	21.000	Oversupply
12/3/2015 12:16	0:02	AWE	0.001	21.000	Oversupply
12/3/2015 12:19	1:13	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 12:19	0:15	AWE	0.308	21.000	Oversupply
12/3/2015 12:19	1:13	KWPII	12.647	15.237	Oversupply
12/3/2015 12:35	0:26	AWE	0.220	21.000	Oversupply
12/3/2015 13:02	0:24	AWE	0.122	21.000	Oversupply
12/3/2015 13:27	0:01	AWE	0.002	21.000	Oversupply
12/3/2015 13:31	0:02	AWE	0.002	21.000	Oversupply
12/3/2015 13:34	0:22	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 13:34	0:20	KWPII	2.326	16.426	Oversupply
12/3/2015 13:57	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 13:57	0:03	KWPII	0.119	12.419	Oversupply
12/3/2015 14:01	0:02	KWPII	0.032	11.250	Oversupply
12/3/2015 14:07	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:14	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:38	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:43	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:45	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:45	0:05	KWPII	0.106	16.049	Oversupply
12/3/2015 14:47	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:52	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:52	0:01	KWPII	0.008	15.908	Oversupply
12/3/2015 14:54	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:57	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 14:57	0:01	KWPII	0.007	16.574	Oversupply
12/3/2015 15:00	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 16:15	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 16:16	0:01	KWPII	0.001	20.225	Oversupply
12/3/2015 16:25	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 17:41	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/3/2015 21:59	0:35	KWPII	3.547	20.162	Oversupply
12/3/2015 22:36	0:02	KWPII	0.092	18.424	Oversupply
12/3/2015 22:39	0:01	KWPII	0.026	17.029	Oversupply
12/3/2015 22:53	0:01	KWPII	0.025	9.820	Oversupply
12/3/2015 22:56	0:10	KWPII	0.987	15.318	Oversupply
12/3/2015 23:21	2:06	KWPII	14.923	18.338	Oversupply
12/4/2015 0:00	0:01	AWE	0.001	20.973	Oversupply
12/4/2015 0:12	0:01	AWE	0.005	20.870	Oversupply
12/4/2015 0:14	0:01	AWE	0.001	20.980	Oversupply
12/4/2015 0:20	0:01	AWE	0.001	21.000	Oversupply
12/4/2015 0:26	0:01	AWE	0.001	21.000	Oversupply
12/4/2015 0:51	0:01	AWE	0.008	20.020	Oversupply
12/4/2015 0:56	0:02	AWE	0.027	20.743	Oversupply
12/4/2015 1:01	0:01	AWE	0.008	21.000	Oversupply
12/4/2015 1:06	0:17	AWE	0.791	20.223	Oversupply
12/4/2015 1:30	0:01	KWPII	0.038	6.325	Oversupply
12/4/2015 1:34	0:04	KWPII	0.158	6.732	Oversupply
12/4/2015 1:54	0:01	KWPII	0.019	8.208	Oversupply
12/4/2015 2:10	0:03	KWPII	0.042	5.722	Oversupply
12/4/2015 2:14	0:01	KWPII	0.015	5.063	Oversupply
12/4/2015 2:16	2:42	KWPII	25.372	16.155	Oversupply
12/4/2015 2:17	0:04	AWE	0.098	18.853	Oversupply
12/4/2015 2:38	0:01	AWE	0.006	16.237	Oversupply
12/4/2015 2:46	0:02	AWE	0.016	14.383	Oversupply
12/4/2015 3:23	0:22	AWE	1.960	18.900	Oversupply
12/4/2015 3:46	0:02	AWE	0.063	15.647	Oversupply
12/4/2015 3:51	0:02	AWE	0.033	15.197	Oversupply
12/4/2015 3:58	0:16	AWE	0.690	18.433	Oversupply
12/4/2015 4:15	0:13	AWE	0.610	17.977	Oversupply
12/4/2015 4:29	0:03	AWE	0.032	15.000	Oversupply
12/4/2015 4:49	0:01	AWE	0.025	14.513	Oversupply
12/4/2015 4:52	0:02	AWE	0.033	15.237	Oversupply
12/4/2015 5:01	1:24	KWPII	9.497	20.574	Oversupply
12/4/2015 6:27	0:01	KWPII	0.005	18.324	Oversupply
12/4/2015 6:29	0:07	KWPII	0.133	18.792	Oversupply
12/4/2015 6:47	0:12	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 6:47	0:07	KWPII	0.217	18.911	Oversupply
12/4/2015 6:56	0:02	KWPII	0.022	14.519	Oversupply
12/4/2015 7:00	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 7:04	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 7:04	0:03	KWPII	0.095	17.699	Oversupply
12/4/2015 7:09	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 7:09	0:04	KWPII	0.126	18.211	Oversupply
12/4/2015 7:22	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 7:24	1:38	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 7:25	1:37	KWPII	13.100	20.579	Oversupply
12/4/2015 9:03	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 11:27	0:10	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 11:27	0:01	AWE	0.000	21.000	Oversupply
12/4/2015 11:29	0:07	KWPII	0.148	1.945	Oversupply
12/4/2015 11:34	0:03	AWE	0.022	20.970	Oversupply
12/4/2015 11:43	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 11:48	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 11:51	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 12:48	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 17:27	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/4/2015 19:32	0:10	KWPII	0.473	20.550	Oversupply
12/4/2015 22:21	0:07	KWPII	0.042	20.700	Oversupply
12/4/2015 23:02	2:46	KWPII	32.022	20.708	Oversupply
12/5/2015 1:29	0:04	AWE	0.094	10.503	Oversupply
12/5/2015 1:36	0:07	AWE	0.279	11.103	Oversupply
12/5/2015 1:50	4:14	KWPII	55.085	20.708	Oversupply
12/5/2015 2:37	1:32	AWE	7.348	17.180	Oversupply
12/5/2015 4:11	1:15	AWE	6.949	21.000	Oversupply
12/5/2015 5:28	0:03	AWE	0.023	18.230	Oversupply
12/5/2015 5:32	0:03	AWE	0.032	16.540	Oversupply
12/5/2015 5:36	0:04	AWE	0.085	17.367	Oversupply
12/5/2015 5:42	0:12	AWE	0.578	21.000	Oversupply
12/5/2015 5:55	0:03	AWE	0.044	18.993	Oversupply
12/5/2015 6:07	0:34	KWPII	4.870	17.564	Oversupply
12/5/2015 6:47	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 6:49	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 8:08	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 8:14	0:18	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 8:14	0:17	KWPII	1.493	13.515	Oversupply
12/5/2015 8:33	0:22	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 8:36	0:19	KWPII	1.131	8.584	Oversupply
12/5/2015 8:40	0:12	AWE	0.177	21.000	Oversupply
12/5/2015 9:04	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 9:07	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 9:09	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 9:51	0:01	BS 250	Data is not available	Data is not available	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/5/2015 9:54	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 10:19	0:17	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 10:20	0:07	KWPII	0.411	11.281	Oversupply
12/5/2015 10:28	0:08	KWPII	0.374	9.022	Oversupply
12/5/2015 10:37	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 11:01	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 12:26	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 12:34	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 12:34	0:03	KWPII	0.040	4.045	Oversupply
12/5/2015 12:38	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 12:48	0:18	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 12:48	0:16	KWPII	0.503	6.267	Oversupply
12/5/2015 13:08	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 13:25	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 13:25	0:02	KWPII	0.026	4.529	Oversupply
12/5/2015 14:06	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:09	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:09	0:02	KWPII	0.046	7.569	Oversupply
12/5/2015 14:12	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:15	0:01	KWPII	0.007	7.610	Oversupply
12/5/2015 14:18	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:20	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:22	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:24	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:25	0:01	KWPII	0.029	6.451	Oversupply
12/5/2015 14:27	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:27	0:01	KWPII	0.035	7.104	Oversupply
12/5/2015 14:30	0:03	KWPII	0.089	8.592	Oversupply
12/5/2015 14:32	0:05	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:38	0:22	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 14:38	0:17	KWPII	0.953	14.031	Oversupply
12/5/2015 14:56	0:04	KWPII	0.113	11.885	Oversupply
12/5/2015 15:01	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 15:01	0:04	KWPII	0.173	12.984	Oversupply
12/5/2015 15:06	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 15:06	0:01	KWPII	0.016	13.202	Oversupply
12/5/2015 15:12	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 15:20	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 15:24	0:39	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 15:25	0:04	KWPII	0.072	13.956	Oversupply
12/5/2015 15:31	0:07	KWPII	0.265	14.654	Oversupply
12/5/2015 15:39	0:33	KWPII	2.668	19.906	Oversupply
12/5/2015 16:04	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 16:13	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 16:27	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 16:29	0:31	BS 250	Data is not available	Data is not available	Oversupply
12/5/2015 16:33	0:27	KWPII	1.062	20.658	Oversupply
12/5/2015 20:39	0:26	KWPII	1.520	20.708	Oversupply
12/5/2015 21:21	6:48	KWPII	91.869	20.708	Oversupply
12/5/2015 23:18	0:27	AWE	0.720	21.000	Oversupply
12/5/2015 23:48	0:03	AWE	0.068	20.090	Oversupply
12/5/2015 23:52	3:41	AWE	29.614	21.000	Oversupply
12/6/2015 3:34	0:09	AWE	0.020	21.000	Oversupply
12/6/2015 3:44	0:25	AWE	0.833	21.000	Oversupply
12/6/2015 7:01	0:01	KWP	0.000	0.013	Oversupply
12/7/2015 7:37	0:01	KWP	0.000	0.003	Oversupply
12/8/2015 0:19	0:01	KWPII	0.012	0.899	Oversupply
12/8/2015 0:19	0:02	AWE	0.023	16.753	Oversupply
12/8/2015 0:52	0:01	KWP	0.000	0.005	Oversupply
12/8/2015 3:43	0:11	AWE	0.119	21.000	Oversupply
12/8/2015 21:35	0:18	KWPII	0.830	19.209	Oversupply
12/8/2015 21:58	0:03	KWPII	0.050	19.181	Oversupply
12/8/2015 22:03	0:03	KWPII	0.027	19.204	Oversupply
12/8/2015 22:09	0:20	KWPII	2.506	19.210	Oversupply
12/8/2015 22:30	7:32	KWPII	104.600	19.211	Oversupply
12/9/2015 0:22	0:01	AWE	0.013	2.217	Oversupply
12/9/2015 0:37	0:02	AWE	0.015	1.133	Oversupply
12/9/2015 0:44	0:31	AWE	1.337	4.427	Oversupply
12/9/2015 0:49	0:05	KWP	0.027	28.133	Oversupply
12/9/2015 0:56	0:05	KWP	0.131	28.568	Oversupply
12/9/2015 1:04	0:09	KWP	0.156	28.893	Oversupply
12/9/2015 1:17	0:46	AWE	4.035	16.187	Oversupply
12/9/2015 2:08	0:07	AWE	0.297	13.097	Oversupply
12/9/2015 2:16	0:04	AWE	0.113	11.560	Oversupply
12/9/2015 2:23	0:01	AWE	0.010	7.730	Oversupply
12/9/2015 2:25	0:03	AWE	0.048	8.173	Oversupply
12/9/2015 2:37	0:01	AWE	0.007	5.807	Oversupply
12/9/2015 2:44	0:02	AWE	0.033	7.823	Oversupply
12/9/2015 2:47	0:52	AWE	3.630	8.833	Oversupply
12/9/2015 2:55	0:02	KWP	0.020	28.305	Oversupply
12/9/2015 2:58	0:05	KWP	0.070	28.610	Oversupply
12/9/2015 3:16	0:01	KWP	0.003	27.589	Oversupply
12/9/2015 3:19	0:01	KWP	0.005	27.673	Oversupply
12/9/2015 3:25	0:01	KWP	0.001	28.034	Oversupply
12/9/2015 3:40	0:23	AWE	1.179	6.183	Oversupply
12/9/2015 3:44	0:01	KWP	0.001	28.117	Oversupply
12/9/2015 3:46	0:01	KWP	0.001	28.238	Oversupply
12/9/2015 3:49	0:06	KWP	0.079	29.469	Oversupply
12/9/2015 3:56	0:01	KWP	0.007	29.154	Oversupply
12/9/2015 4:04	0:39	AWE	2.425	10.043	Oversupply
12/9/2015 7:07	0:13	BS 250	Data is not available	Data is not available	Oversupply
12/9/2015 7:08	0:12	KWPII	0.366	20.708	Oversupply
12/9/2015 7:40	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/9/2015 7:40	0:01	KWPII	0.000	20.708	Oversupply
12/9/2015 7:42	7:07	BS 250	Data is not available	Data is not available	Oversupply
12/9/2015 7:42	7:07	KWPII	95.317	20.708	Oversupply
12/9/2015 10:13	0:12	AWE	0.306	21.000	Oversupply
12/9/2015 11:47	0:15	AWE	0.185	21.000	Oversupply
12/9/2015 12:14	0:02	AWE	0.002	21.000	Oversupply
12/9/2015 12:18	0:11	AWE	0.218	21.000	Oversupply
12/9/2015 12:30	0:05	AWE	0.054	21.000	Oversupply
12/9/2015 12:36	0:04	AWE	0.071	21.000	Oversupply
12/9/2015 12:42	0:14	AWE	0.235	21.000	Oversupply
12/9/2015 12:58	0:02	AWE	0.007	21.000	Oversupply
12/9/2015 13:03	0:01	AWE	0.002	21.000	Oversupply
12/9/2015 13:06	0:19	AWE	0.203	21.000	Oversupply
12/9/2015 13:28	0:02	AWE	0.014	21.000	Oversupply
12/9/2015 13:31	0:12	AWE	0.102	21.000	Oversupply
12/9/2015 15:00	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/9/2015 15:01	0:05	KWPII	0.101	20.708	Oversupply
12/9/2015 21:10	0:03	KWPII	0.030	20.708	Oversupply
12/9/2015 21:17	0:09	KWPII	0.208	20.708	Oversupply
12/9/2015 21:36	8:59	KWPII	156.997	20.708	Oversupply
12/9/2015 23:40	6:07	AWE	57.719	21.000	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/10/2015 7:51	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/10/2015 7:52	0:02	KWPII	0.038	20.708	Oversupply
12/10/2015 7:55	5:56	BS 250	Data is not available	Data is not available	Oversupply
12/10/2015 7:55	5:56	KWPII	88.908	20.708	Oversupply
12/10/2015 10:25	0:06	AWE	0.020	21.000	Oversupply
12/10/2015 10:52	0:02	AWE	0.001	21.000	Oversupply
12/10/2015 10:55	2:35	AWE	12.274	21.000	Oversupply
12/10/2015 13:31	0:04	AWE	0.029	21.000	Oversupply
12/10/2015 13:36	0:01	AWE	0.003	21.000	Oversupply
12/10/2015 13:39	0:01	AWE	0.002	21.000	Oversupply
12/10/2015 13:42	0:03	AWE	0.035	21.000	Oversupply
12/10/2015 13:52	0:33	BS 250	Data is not available	Data is not available	Oversupply
12/10/2015 13:54	0:31	KWPII	4.969	16.829	Oversupply
12/10/2015 14:05	0:01	AWE	0.000	21.000	Oversupply
12/10/2015 14:27	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/10/2015 14:31	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/10/2015 14:31	0:01	KWPII	0.012	12.450	Oversupply
12/10/2015 21:58	0:02	KWPII	0.017	19.975	Oversupply
12/10/2015 22:02	0:02	KWPII	0.014	20.438	Oversupply
12/10/2015 22:10	0:04	KWPII	0.111	19.062	Oversupply
12/10/2015 22:17	0:03	KWPII	0.054	18.769	Oversupply
12/10/2015 22:31	0:03	KWPII	0.066	17.748	Oversupply
12/10/2015 22:38	0:06	KWPII	0.331	16.746	Oversupply
12/10/2015 22:51	1:33	KWPII	14.128	19.266	Oversupply
12/10/2015 23:33	0:02	AWE	0.017	21.000	Oversupply
12/11/2015 0:08	0:02	AWE	0.016	21.000	Oversupply
12/11/2015 0:12	0:03	AWE	0.004	21.000	Oversupply
12/11/2015 7:07	0:01	KWP	0.000	0.010	Oversupply
12/12/2015 1:43	0:01	AWE	0.002	21.000	Oversupply
12/13/2015 0:47	0:01	AWE	0.001	21.000	Oversupply
12/13/2015 0:51	0:02	AWE	0.002	21.000	Oversupply
12/15/2015 7:59	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 8:01	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:13	0:13	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:13	0:02	KWPII	0.014	9.773	Oversupply
12/15/2015 10:16	0:10	KWPII	0.395	11.461	Oversupply
12/15/2015 10:27	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:27	0:01	KWPII	0.028	10.496	Oversupply
12/15/2015 10:30	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:33	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:40	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:47	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:52	0:07	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 10:54	0:03	KWPII	0.106	13.635	Oversupply
12/15/2015 11:04	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 11:04	0:03	KWPII	0.044	12.734	Oversupply
12/15/2015 11:08	0:02	KWPII	0.032	11.831	Oversupply
12/15/2015 11:14	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 11:16	0:29	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 11:16	0:04	KWPII	0.115	12.116	Oversupply
12/15/2015 11:22	0:16	KWPII	0.570	9.859	Oversupply
12/15/2015 11:39	0:04	KWPII	0.099	10.864	Oversupply
12/15/2015 11:51	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:04	0:15	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:06	0:03	KWPII	0.091	9.927	Oversupply
12/15/2015 12:10	0:06	KWPII	0.253	10.463	Oversupply
12/15/2015 12:20	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:21	0:02	KWPII	0.036	11.345	Oversupply
12/15/2015 12:24	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:29	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:32	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:42	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:43	0:01	KWPII	0.023	9.717	Oversupply
12/15/2015 12:45	0:01	KWPII	0.022	9.019	Oversupply
12/15/2015 12:50	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:53	0:12	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 12:54	0:07	KWPII	0.261	10.793	Oversupply
12/15/2015 13:02	0:03	KWPII	0.077	11.282	Oversupply
12/15/2015 13:09	0:49	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 13:11	0:47	KWPII	9.238	20.028	Oversupply
12/15/2015 13:29	0:11	AWE	0.375	21.000	Oversupply
12/15/2015 13:42	0:05	AWE	0.010	21.000	Oversupply
12/15/2015 13:49	0:01	AWE	0.002	21.000	Oversupply
12/15/2015 13:53	0:01	AWE	0.001	20.800	Oversupply
12/15/2015 13:59	1:16	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 14:00	1:21	KWPII	8.985	20.625	Oversupply
12/15/2015 15:18	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 15:20	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 15:34	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/15/2015 15:34	0:03	KWPII	0.029	20.559	Oversupply
12/15/2015 22:01	0:01	KWPII	0.001	20.708	Oversupply
12/15/2015 22:06	4:17	KWPII	72.582	20.708	Oversupply
12/15/2015 23:41	2:25	AWE	9.491	21.000	Oversupply
12/16/2015 2:07	0:03	AWE	0.022	21.000	Oversupply
12/16/2015 2:12	0:03	AWE	0.005	21.000	Oversupply
12/16/2015 2:17	0:01	AWE	0.003	21.000	Oversupply
12/16/2015 2:23	0:02	AWE	0.006	21.000	Oversupply
12/16/2015 2:25	0:12	KWPII	1.260	10.333	Oversupply
12/16/2015 2:28	0:06	AWE	0.029	21.000	Oversupply
12/16/2015 2:43	2:28	KWPII	40.679	20.672	Oversupply
12/16/2015 2:48	2:16	AWE	11.464	21.000	Oversupply
12/16/2015 5:12	0:49	KWPII	9.760	20.708	Oversupply
12/16/2015 6:19	2:41	KWPII	14.191	20.708	Oversupply
12/16/2015 6:46	2:14	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:15	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:19	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:19	0:03	KWPII	0.019	20.132	Oversupply
12/16/2015 9:21	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:23	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:23	0:02	KWPII	0.037	19.848	Oversupply
12/16/2015 9:41	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:41	3:18	KWPII	42.910	20.680	Oversupply
12/16/2015 9:43	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 9:52	3:07	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 11:51	0:01	AWE	0.000	21.000	Oversupply
12/16/2015 11:54	0:01	AWE	0.001	21.000	Oversupply
12/16/2015 11:56	0:53	AWE	0.841	21.000	Oversupply
12/16/2015 12:52	0:04	AWE	0.013	21.000	Oversupply
12/16/2015 13:01	2:10	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 13:01	2:27	KWPII	28.245	20.708	Oversupply
12/16/2015 13:31	0:05	AWE	0.040	21.000	Oversupply
12/16/2015 13:38	0:02	AWE	0.001	21.000	Oversupply
12/16/2015 13:42	0:01	AWE	0.001	21.000	Oversupply
12/16/2015 13:44	0:02	AWE	0.003	21.000	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/16/2015 15:12	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 15:22	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 15:28	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 15:30	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 15:32	0:02	KWPII	0.011	20.581	Oversupply
12/16/2015 15:33	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/16/2015 22:01	0:20	KWPII	0.949	20.708	Oversupply
12/16/2015 22:23	2:03	KWPII	27.719	20.708	Oversupply
12/16/2015 23:45	0:06	AWE	0.023	21.000	Oversupply
12/16/2015 23:54	0:09	AWE	0.115	21.000	Oversupply
12/17/2015 0:04	0:11	AWE	0.287	20.830	Oversupply
12/17/2015 0:17	0:03	AWE	0.006	21.000	Oversupply
12/17/2015 0:27	5:22	KWPII	104.127	20.708	Oversupply
12/17/2015 0:54	0:02	AWE	0.013	21.000	Oversupply
12/17/2015 0:57	3:42	AWE	22.983	21.000	Oversupply
12/17/2015 4:43	1:01	AWE	5.317	21.000	Oversupply
12/17/2015 5:51	0:40	KWPII	3.984	20.708	Oversupply
12/17/2015 6:39	0:31	KWPII	0.934	20.708	Oversupply
12/17/2015 6:46	0:23	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 7:10	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 7:29	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 7:30	5:51	KWPII	80.259	20.708	Oversupply
12/17/2015 7:31	5:50	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 11:24	0:01	AWE	0.001	21.000	Oversupply
12/17/2015 11:35	0:19	AWE	0.340	21.000	Oversupply
12/17/2015 11:55	0:02	AWE	0.002	21.000	Oversupply
12/17/2015 11:59	0:03	AWE	0.005	21.000	Oversupply
12/17/2015 12:03	0:08	AWE	0.147	21.000	Oversupply
12/17/2015 12:15	0:03	AWE	0.015	21.000	Oversupply
12/17/2015 12:19	0:04	AWE	0.015	21.000	Oversupply
12/17/2015 12:25	0:14	AWE	0.363	21.000	Oversupply
12/17/2015 12:41	0:36	AWE	2.142	21.000	Oversupply
12/17/2015 13:22	1:53	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 13:23	2:14	KWPII	19.094	20.708	Oversupply
12/17/2015 15:40	0:20	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 15:40	0:19	KWPII	0.974	17.714	Oversupply
12/17/2015 16:01	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 16:01	0:01	KWPII	0.010	16.217	Oversupply
12/17/2015 16:06	0:11	BS 250	Data is not available	Data is not available	Oversupply
12/17/2015 16:09	1:12	KWPII	7.296	20.708	Oversupply
12/17/2015 22:32	6:33	KWPII	111.626	20.708	Oversupply
12/18/2015 0:30	0:48	AWE	2.276	21.000	Oversupply
12/18/2015 1:53	3:01	AWE	15.540	21.000	Oversupply
12/18/2015 5:06	2:35	KWPII	20.329	20.708	Oversupply
12/18/2015 7:57	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 7:57	0:01	KWPII	0.001	20.708	Oversupply
12/18/2015 8:54	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 9:00	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 9:11	0:50	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 9:11	3:33	KWPII	32.348	20.708	Oversupply
12/18/2015 10:02	2:42	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 12:45	2:58	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 12:45	0:19	KWPII	0.684	20.693	Oversupply
12/18/2015 13:05	2:38	KWPII	23.554	20.707	Oversupply
12/18/2015 15:18	0:12	AWE	1.112	21.000	Oversupply
12/18/2015 15:44	1:08	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 15:45	1:07	KWPII	22.601	20.708	Oversupply
12/18/2015 15:47	1:02	AWE	14.132	21.000	Oversupply
12/18/2015 16:54	0:21	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 16:55	0:12	KWPII	0.428	16.666	Oversupply
12/18/2015 17:08	0:07	KWPII	0.149	11.726	Oversupply
12/18/2015 17:25	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 17:25	0:14	KWPII	0.556	20.708	Oversupply
12/18/2015 17:35	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 17:41	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 17:41	0:01	KWPII	0.001	20.708	Oversupply
12/18/2015 17:44	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/18/2015 17:44	0:01	KWPII	0.002	20.708	Oversupply
12/18/2015 22:00	0:02	KWPII	0.035	14.720	Oversupply
12/18/2015 22:52	0:01	KWPII	0.009	13.223	Oversupply
12/18/2015 23:05	0:03	KWPII	0.061	13.223	Oversupply
12/18/2015 23:09	0:04	KWPII	0.150	13.223	Oversupply
12/18/2015 23:54	0:03	AWE	0.003	21.000	Oversupply
12/18/2015 23:58	0:02	AWE	0.011	21.000	Oversupply
12/19/2015 0:01	0:02	AWE	0.012	21.000	Oversupply
12/19/2015 0:03	0:02	KWPII	0.054	2.645	Oversupply
12/19/2015 0:04	0:41	AWE	2.877	21.000	Oversupply
12/19/2015 0:06	0:45	KWPII	5.842	8.732	Oversupply
12/19/2015 0:47	0:01	AWE	0.003	20.617	Oversupply
12/19/2015 0:54	0:01	AWE	0.016	20.683	Oversupply
12/19/2015 0:54	0:17	KWPII	1.425	5.738	Oversupply
12/19/2015 0:56	0:15	AWE	0.457	21.000	Oversupply
12/19/2015 1:25	0:02	AWE	0.008	20.457	Oversupply
12/19/2015 1:28	0:03	AWE	0.018	20.527	Oversupply
12/19/2015 1:38	0:01	AWE	0.005	20.623	Oversupply
12/19/2015 1:41	0:03	AWE	0.045	20.843	Oversupply
12/19/2015 1:49	0:08	AWE	0.195	21.000	Oversupply
12/19/2015 1:58	0:44	AWE	2.966	21.000	Oversupply
12/19/2015 2:43	0:17	AWE	0.909	21.000	Oversupply
12/19/2015 3:01	0:01	AWE	0.006	21.000	Oversupply
12/19/2015 3:06	0:55	AWE	6.413	21.000	Oversupply
12/19/2015 3:28	1:02	KWPII	12.214	16.217	Oversupply
12/19/2015 4:03	0:10	AWE	0.141	21.000	Oversupply
12/19/2015 4:15	0:12	AWE	0.460	21.000	Oversupply
12/19/2015 4:32	0:29	KWPII	5.842	13.223	Oversupply
12/19/2015 4:33	0:22	AWE	1.090	21.000	Oversupply
12/19/2015 4:56	0:02	AWE	0.002	21.000	Oversupply
12/19/2015 5:03	0:32	KWPII	4.223	11.726	Oversupply
12/19/2015 5:17	0:02	AWE	0.007	21.000	Oversupply
12/19/2015 5:21	0:04	AWE	0.066	21.000	Oversupply
12/19/2015 5:28	0:04	AWE	0.039	21.000	Oversupply
12/19/2015 5:46	0:02	KWPII	0.018	10.229	Oversupply
12/19/2015 5:49	0:11	KWPII	0.399	11.726	Oversupply
12/19/2015 6:06	0:08	KWPII	0.242	11.726	Oversupply
12/19/2015 6:40	0:03	KWPII	0.074	8.732	Oversupply
12/19/2015 7:45	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 8:05	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 8:12	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 8:16	0:05	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 8:18	0:03	KWPII	0.042	10.229	Oversupply
12/19/2015 8:22	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 10:02	0:43	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 10:02	0:43	KWPII	3.764	17.714	Oversupply
12/19/2015 10:49	0:34	BS 250	Data is not available	Data is not available	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/19/2015 10:49	0:34	KWPII	8.500	20.708	Oversupply
12/19/2015 10:58	0:02	AWE	0.010	21.000	Oversupply
12/19/2015 11:01	0:02	AWE	0.020	21.000	Oversupply
12/19/2015 11:06	0:09	AWE	0.311	21.000	Oversupply
12/19/2015 11:16	0:02	AWE	0.013	21.000	Oversupply
12/19/2015 11:24	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 11:24	0:08	KWPII	1.873	17.714	Oversupply
12/19/2015 11:25	0:07	AWE	0.300	21.000	Oversupply
12/19/2015 11:33	5:07	KWPII	93.058	20.708	Oversupply
12/19/2015 11:34	0:16	AWE	1.308	21.000	Oversupply
12/19/2015 11:52	0:25	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 11:53	3:49	AWE	33.911	21.000	Oversupply
12/19/2015 14:31	1:19	BS 250	Data is not available	Data is not available	Oversupply
12/19/2015 15:51	0:48	BS 250	Data is not available	Data is not available	Oversupply
12/20/2015 1:13	0:02	AWE	0.002	21.000	Oversupply
12/20/2015 1:56	0:08	AWE	0.189	21.000	Oversupply
12/20/2015 2:05	0:16	AWE	0.704	21.000	Oversupply
12/20/2015 2:23	0:10	AWE	0.048	21.000	Oversupply
12/20/2015 2:41	0:02	AWE	0.010	21.000	Oversupply
12/20/2015 3:02	0:02	AWE	0.014	21.000	Oversupply
12/20/2015 3:07	2:01	AWE	12.660	21.000	Oversupply
12/20/2015 4:10	1:29	KWPII	15.982	17.714	Oversupply
12/20/2015 5:16	0:02	AWE	0.010	21.000	Oversupply
12/20/2015 5:19	0:01	AWE	0.001	21.000	Oversupply
12/20/2015 5:26	0:09	AWE	0.109	21.000	Oversupply
12/20/2015 5:41	0:18	KWPII	2.707	14.720	Oversupply
12/20/2015 5:48	0:01	AWE	0.003	21.000	Oversupply
12/20/2015 6:46	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/20/2015 9:33	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/20/2015 9:33	0:01	AWE	0.013	17.700	Oversupply
12/20/2015 10:15	0:03	AWE	0.030	21.000	Oversupply
12/20/2015 10:16	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/20/2015 10:24	0:41	KWPII	6.927	13.223	Oversupply
12/20/2015 12:06	0:18	KWPII	0.504	2.744	Oversupply
12/20/2015 12:52	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/20/2015 12:52	0:01	KWPII	0.004	1.247	Oversupply
12/20/2015 12:52	0:02	AWE	0.015	20.743	Oversupply
12/20/2015 13:51	1:02	KWPII	5.819	16.217	Oversupply
12/20/2015 15:57	0:34	KWPII	0.723	20.708	Oversupply
12/20/2015 21:54	0:01	KWPII	0.001	20.636	Oversupply
12/20/2015 21:59	0:04	KWPII	0.018	20.581	Oversupply
12/20/2015 22:24	0:01	KWPII	0.003	20.631	Oversupply
12/20/2015 22:26	0:01	KWPII	0.005	20.487	Oversupply
12/20/2015 22:49	0:01	KWPII	0.008	20.009	Oversupply
12/20/2015 22:51	7:38	KWPII	127.836	20.708	Oversupply
12/21/2015 0:04	5:36	AWE	55.160	21.000	Oversupply
12/21/2015 9:16	6:31	KWPII	76.255	19.211	Oversupply
12/21/2015 13:06	2:42	BS 250	Data is not available	Data is not available	Oversupply
12/21/2015 13:31	0:03	AWE	0.008	21.000	Oversupply
12/21/2015 14:08	0:08	AWE	0.028	21.000	Oversupply
12/21/2015 15:56	0:40	BS 250	Data is not available	Data is not available	Oversupply
12/21/2015 15:58	0:38	KWPII	1.900	19.211	Oversupply
12/21/2015 16:38	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/21/2015 16:50	0:26	BS 250	Data is not available	Data is not available	Oversupply
12/21/2015 16:52	0:24	KWPII	0.656	19.211	Oversupply
12/21/2015 20:55	0:06	KWPII	0.135	19.145	Oversupply
12/21/2015 22:07	7:22	KWPII	117.449	19.211	Oversupply
12/22/2015 0:03	0:02	AWE	0.008	20.923	Oversupply
12/22/2015 0:09	5:12	AWE	51.747	21.000	Oversupply
12/22/2015 5:25	0:01	AWE	0.001	21.000	Oversupply
12/22/2015 5:32	0:31	KWPII	3.322	17.077	Oversupply
12/22/2015 6:31	0:10	KWPII	0.889	16.123	Oversupply
12/22/2015 8:41	0:30	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 8:42	0:28	KWPII	1.680	19.103	Oversupply
12/22/2015 9:21	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 9:21	0:08	KWPII	0.094	19.099	Oversupply
12/22/2015 9:36	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 9:38	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 9:40	0:05	KWPII	0.087	19.163	Oversupply
12/22/2015 9:51	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 9:54	0:21	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 9:54	0:02	KWPII	0.028	17.878	Oversupply
12/22/2015 9:57	0:02	KWPII	0.048	17.627	Oversupply
12/22/2015 10:00	0:14	KWPII	0.557	17.378	Oversupply
12/22/2015 10:16	0:57	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 10:16	0:57	KWPII	13.680	19.211	Oversupply
12/22/2015 10:30	0:06	AWE	0.077	21.000	Oversupply
12/22/2015 10:37	0:32	AWE	2.713	21.000	Oversupply
12/22/2015 11:14	0:40	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 11:15	0:39	KWPII	4.521	19.211	Oversupply
12/22/2015 11:57	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 11:57	0:02	KWPII	0.030	17.217	Oversupply
12/22/2015 12:26	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 12:26	0:02	KWPII	0.043	18.892	Oversupply
12/22/2015 12:30	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 12:31	0:01	KWPII	0.012	18.837	Oversupply
12/22/2015 12:44	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 12:51	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 12:52	0:07	KWPII	0.286	17.866	Oversupply
12/22/2015 12:58	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 13:00	0:06	KWPII	0.226	18.399	Oversupply
12/22/2015 13:15	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 13:15	0:44	KWPII	3.811	18.839	Oversupply
12/22/2015 13:47	0:12	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:00	0:23	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:00	0:23	KWPII	1.878	18.826	Oversupply
12/22/2015 14:24	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:24	0:01	KWPII	0.021	18.301	Oversupply
12/22/2015 14:29	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:33	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:33	0:01	KWPII	0.001	18.515	Oversupply
12/22/2015 14:35	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:47	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:47	0:02	KWPII	0.016	18.602	Oversupply
12/22/2015 14:50	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 14:51	0:05	KWPII	0.106	18.692	Oversupply
12/22/2015 14:58	0:07	KWPII	0.126	19.171	Oversupply
12/22/2015 14:59	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 15:09	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 16:03	0:23	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 16:05	0:21	KWPII	0.910	18.623	Oversupply
12/22/2015 16:34	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 16:34	0:01	KWPII	0.001	16.626	Oversupply
12/22/2015 16:36	0:01	BS 250	Data is not available	Data is not available	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/22/2015 16:40	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/22/2015 16:40	0:01	KWPII	0.008	16.325	Oversupply
12/23/2015 0:30	0:01	AWE	0.000	21.000	Oversupply
12/23/2015 0:36	0:01	KWPII	0.018	5.949	Oversupply
12/23/2015 1:12	0:18	KWPII	0.910	7.901	Oversupply
12/23/2015 1:16	0:01	AWE	0.001	21.000	Oversupply
12/23/2015 1:18	0:02	AWE	0.003	21.000	Oversupply
12/23/2015 1:23	0:04	AWE	0.014	21.000	Oversupply
12/23/2015 1:28	0:02	AWE	0.004	21.000	Oversupply
12/23/2015 9:07	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 10:41	0:11	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 10:42	0:06	KWPII	0.202	9.476	Oversupply
12/23/2015 10:49	0:01	KWPII	0.000	7.193	Oversupply
12/23/2015 10:53	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 10:54	0:01	KWPII	0.017	7.968	Oversupply
12/23/2015 10:57	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 11:07	0:07	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 11:08	0:05	KWPII	0.134	11.017	Oversupply
12/23/2015 11:17	0:12	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 11:17	0:12	KWPII	0.442	13.247	Oversupply
12/23/2015 11:30	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 11:32	0:02	KWPII	0.062	10.514	Oversupply
12/23/2015 11:38	0:14	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 11:39	0:03	KWPII	0.034	9.483	Oversupply
12/23/2015 11:43	0:09	KWPII	0.381	9.912	Oversupply
12/23/2015 12:00	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 12:00	0:07	KWPII	0.109	10.602	Oversupply
12/23/2015 12:03	1:04	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 12:11	0:56	KWPII	3.535	14.254	Oversupply
12/23/2015 13:08	0:37	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 13:08	0:37	KWPII	2.643	14.270	Oversupply
12/23/2015 13:47	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 13:47	0:08	KWPII	0.442	13.669	Oversupply
12/23/2015 13:57	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 13:57	0:01	KWPII	0.033	11.426	Oversupply
12/23/2015 14:00	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:03	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:05	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:05	0:01	KWPII	0.005	13.136	Oversupply
12/23/2015 14:09	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:12	0:26	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:12	0:25	KWPII	1.349	17.217	Oversupply
12/23/2015 14:40	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:42	0:05	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:42	0:05	KWPII	0.085	15.823	Oversupply
12/23/2015 14:48	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 14:49	0:04	KWPII	0.088	16.590	Oversupply
12/23/2015 15:05	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 15:06	0:01	KWPII	0.026	17.808	Oversupply
12/23/2015 15:08	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 15:08	0:01	KWPII	0.010	17.419	Oversupply
12/23/2015 15:39	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 15:39	0:01	KWPII	0.003	17.275	Oversupply
12/23/2015 16:17	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/23/2015 16:17	0:02	KWPII	0.016	18.636	Oversupply
12/23/2015 22:06	0:02	KWPII	0.029	19.708	Oversupply
12/23/2015 22:18	0:01	KWPII	0.021	19.474	Oversupply
12/23/2015 22:39	0:04	KWPII	0.082	19.964	Oversupply
12/23/2015 22:59	1:25	KWPII	7.405	20.512	Oversupply
12/24/2015 0:52	1:44	KWPII	12.389	14.743	Oversupply
12/24/2015 0:54	0:02	AWE	0.029	17.407	Oversupply
12/24/2015 1:35	0:01	AWE	0.006	11.083	Oversupply
12/24/2015 1:38	0:02	AWE	0.026	11.097	Oversupply
12/24/2015 1:44	0:52	AWE	3.606	16.467	Oversupply
12/24/2015 4:33	0:01	KWP	0.000	0.004	Oversupply
12/24/2015 10:10	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 10:10	0:01	KWPII	0.009	7.359	Oversupply
12/24/2015 10:21	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 10:25	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 10:29	0:04	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 10:31	0:01	KWPII	0.019	9.757	Oversupply
12/24/2015 10:37	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 10:58	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:05	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:11	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:13	0:13	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:14	0:01	KWPII	0.028	9.284	Oversupply
12/24/2015 11:16	0:10	KWPII	0.359	8.516	Oversupply
12/24/2015 11:30	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:33	0:06	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:35	0:04	KWPII	0.074	9.051	Oversupply
12/24/2015 11:44	0:08	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 11:45	0:07	KWPII	0.229	9.047	Oversupply
12/24/2015 11:58	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:00	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:10	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:10	0:08	KWPII	0.301	7.776	Oversupply
12/24/2015 12:20	0:09	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:20	0:09	KWPII	0.526	10.092	Oversupply
12/24/2015 12:31	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:31	0:03	KWPII	0.063	11.442	Oversupply
12/24/2015 12:35	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:40	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:44	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:47	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:52	0:25	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 12:53	0:21	KWPII	1.297	15.225	Oversupply
12/24/2015 13:19	1:23	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 13:19	2:24	KWPII	14.275	20.708	Oversupply
12/24/2015 14:43	1:00	BS 250	Data is not available	Data is not available	Oversupply
12/24/2015 21:47	0:40	KWPII	2.180	20.708	Oversupply
12/24/2015 22:37	0:04	KWPII	0.019	20.708	Oversupply
12/24/2015 22:46	0:28	KWPII	1.064	20.708	Oversupply
12/24/2015 23:44	0:02	KWPII	0.025	20.708	Oversupply
12/24/2015 23:50	0:01	KWPII	0.000	20.708	Oversupply
12/24/2015 23:55	6:02	KWPII	100.983	20.708	Oversupply
12/25/2015 1:38	0:22	AWE	1.667	17.413	Oversupply
12/25/2015 2:05	0:01	AWE	0.017	10.340	Oversupply
12/25/2015 2:15	0:01	AWE	0.001	11.200	Oversupply
12/25/2015 2:18	2:39	AWE	14.820	15.173	Oversupply
12/25/2015 5:06	0:03	AWE	0.057	11.880	Oversupply
12/25/2015 5:12	0:03	AWE	0.046	12.230	Oversupply
12/25/2015 5:24	0:04	AWE	0.101	14.380	Oversupply
12/25/2015 5:30	0:01	AWE	0.021	13.427	Oversupply

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Start Date and Time	Duration	IPP Curtailed	Estimated Curtailed MWH	Peak MW Curtailed	Reasons for Curtailment
12/25/2015 5:33	0:03	AWE	0.069	14.773	Oversupply
12/25/2015 5:39	0:05	AWE	0.075	15.717	Oversupply
12/25/2015 5:45	0:03	AWE	0.055	16.340	Oversupply
12/25/2015 5:58	1:18	KWPII	11.321	19.211	Oversupply
12/25/2015 6:46	0:30	BS 250	Data is not available	Data is not available	Oversupply
12/25/2015 7:17	7:02	BS 250	Data is not available	Data is not available	Oversupply
12/25/2015 7:17	6:54	KWPII	80.939	20.708	Oversupply
12/25/2015 12:04	0:05	AWE	0.026	19.983	Oversupply
12/25/2015 12:10	0:14	AWE	0.428	19.893	Oversupply
12/25/2015 12:28	0:01	AWE	0.009	18.120	Oversupply
12/25/2015 12:39	0:05	AWE	0.067	19.007	Oversupply
12/25/2015 12:46	0:05	AWE	0.130	18.940	Oversupply
12/25/2015 12:55	0:01	AWE	0.019	18.183	Oversupply
12/25/2015 12:57	0:01	AWE	0.009	17.660	Oversupply
12/25/2015 13:01	0:18	AWE	0.712	20.617	Oversupply
12/25/2015 14:12	0:01	KWPII	0.002	19.210	Oversupply
12/25/2015 14:15	0:04	KWPII	0.042	20.708	Oversupply
12/25/2015 14:29	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/25/2015 14:31	0:01	KWPII	0.004	20.708	Oversupply
12/25/2015 14:34	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/25/2015 14:35	0:01	KWPII	0.002	20.708	Oversupply
12/25/2015 14:58	0:02	BS 250	Data is not available	Data is not available	Oversupply
12/25/2015 14:59	0:01	KWPII	0.001	20.708	Oversupply
12/25/2015 19:57	0:01	KWPII	0.000	20.708	Oversupply
12/26/2015 2:09	4:28	KWPII	65.457	20.708	Oversupply
12/26/2015 2:15	0:03	AWE	0.282	20.393	Oversupply
12/26/2015 8:55	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/26/2015 11:12	3:52	KWPII	25.001	20.708	Oversupply
12/27/2015 0:52	5:51	KWPII	90.451	20.708	Oversupply
12/27/2015 2:49	0:04	AWE	0.044	20.300	Oversupply
12/27/2015 3:04	1:01	AWE	2.642	20.700	Oversupply
12/27/2015 10:27	0:18	KWPII	0.706	20.708	Oversupply
12/27/2015 11:40	1:29	KWPII	13.955	20.708	Oversupply
12/27/2015 12:31	0:38	BS 250	Data is not available	Data is not available	Oversupply
12/27/2015 12:48	0:06	AWE	0.090	20.717	Oversupply
12/27/2015 13:10	0:59	BS 250	Data is not available	Data is not available	Oversupply
12/27/2015 13:11	0:56	KWPII	11.794	20.652	Oversupply
12/27/2015 14:10	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/27/2015 14:12	0:01	KWPII	0.028	16.410	Oversupply
12/27/2015 14:15	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/27/2015 14:22	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/27/2015 22:22	0:01	KWPII	0.014	15.173	Oversupply
12/27/2015 22:26	0:06	KWPII	0.294	17.643	Oversupply
12/27/2015 22:47	0:02	KWPII	0.050	16.076	Oversupply
12/30/2015 10:36	0:01	BS 250	Data is not available	Data is not available	Oversupply
12/30/2015 10:41	0:05	BS 250	Data is not available	Data is not available	Oversupply
12/30/2015 10:41	0:03	KWPII	0.036	18.474	Oversupply
12/30/2015 10:47	0:03	BS 250	Data is not available	Data is not available	Oversupply
12/30/2015 10:47	0:03	KWPII	0.073	17.326	Oversupply
12/31/2015 0:42	0:20	KWPII	0.519	20.512	Oversupply
12/31/2015 1:29	0:38	KWPII	1.734	20.196	Oversupply
12/31/2015 1:40	0:01	AWE	0.000	0.013	Oversupply
12/31/2015 2:17	0:03	KWPII	0.058	17.934	Oversupply
12/31/2015 2:23	0:03	KWPII	0.053	19.649	Oversupply
12/31/2015 2:27	0:16	KWPII	0.688	19.405	Oversupply
12/31/2015 2:46	0:28	KWPII	3.267	17.928	Oversupply
12/31/2015 4:00	1:25	KWPII	9.291	19.845	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 ("KWPII") 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 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 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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Lanai Curtailment Report December 2015

Start Date/Time	Duration	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
12/1/2015 9:11	0:27	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:07	0:02	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:10	0:02	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:16	0:10	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:27	0:05	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:34	0:10	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 10:47	1:06	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 11:56	0:45	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 12:42	0:01	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 12:57	0:01	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 13:01	0:01	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 13:04	0:01	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 13:12	1:08	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 15:16	0:03	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 15:52	0:18	LSR	Data is not available	Data is not available	Oversupply
12/1/2015 16:31	0:01	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 9:30	0:47	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 10:19	0:09	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 10:31	0:04	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 10:37	0:05	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 10:48	0:20	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 11:10	0:10	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 11:21	0:45	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 12:09	0:20	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 12:31	0:04	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 13:18	1:10	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 14:49	1:29	LSR	Data is not available	Data is not available	Oversupply
12/2/2015 16:21	0:06	LSR	Data is not available	Data is not available	Oversupply
12/3/2015 16:39	0:04	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 7:40	0:12	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 7:53	1:15	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 9:20	0:05	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 9:30	1:06	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 11:54	0:01	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 15:33	0:05	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 15:39	0:46	LSR	Data is not available	Data is not available	Oversupply
12/4/2015 16:29	0:25	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 8:15	0:24	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 8:40	0:12	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 8:57	0:01	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 9:21	0:02	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 9:52	0:04	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 9:57	0:06	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 10:06	0:32	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 11:15	0:04	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 11:20	0:03	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 11:38	0:03	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 12:08	0:05	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 12:16	0:04	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 12:21	0:50	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 13:12	0:01	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 13:17	0:10	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 13:59	0:11	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 14:18	0:01	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 14:24	0:01	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 14:40	0:05	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 15:40	0:07	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 16:33	0:16	LSR	Data is not available	Data is not available	Oversupply
12/5/2015 16:57	0:13	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 7:21	0:05	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 7:30	0:49	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 8:20	1:00	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 9:31	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 10:27	0:25	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 10:55	0:04	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 11:00	0:05	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 11:07	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 11:17	0:20	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 11:38	0:05	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 11:45	0:02	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 12:43	0:10	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 12:55	0:04	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 13:01	0:32	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 13:35	0:24	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:01	0:02	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:05	0:17	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:24	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:32	0:04	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:39	0:05	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:45	0:03	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 14:50	0:21	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 15:13	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 15:18	0:04	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 15:24	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 15:27	0:21	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 15:50	0:13	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 16:05	0:14	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 16:21	0:09	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 16:32	0:01	LSR	Data is not available	Data is not available	Oversupply
12/6/2015 16:36	0:17	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 7:40	1:35	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 9:16	0:01	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 9:41	0:02	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 10:23	0:03	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 10:58	0:02	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 13:43	0:01	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 13:51	2:06	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 15:59	0:01	LSR	Data is not available	Data is not available	Oversupply

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Start Date/Time	Duration	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
12/7/2015 16:02	0:28	LSR	Data is not available	Data is not available	Oversupply
12/7/2015 16:36	0:33	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 7:22	1:15	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 8:39	0:07	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 8:52	0:04	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 8:59	0:04	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 9:04	2:32	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 13:54	0:10	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 15:45	0:02	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 15:52	0:39	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 16:48	0:28	LSR	Data is not available	Data is not available	Oversupply
12/8/2015 17:29	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 7:44	0:17	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 8:06	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 8:11	0:37	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 9:02	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 9:07	0:35	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 9:44	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 9:47	0:01	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 9:59	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 10:46	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 10:50	0:12	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 11:28	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 11:32	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 12:18	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 12:27	0:13	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 12:42	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 12:48	0:03	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 12:53	0:08	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 13:29	0:07	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 13:47	0:14	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 14:02	0:01	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 14:11	0:01	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 14:36	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 14:39	0:19	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 15:02	0:16	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 15:19	1:09	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 16:29	0:02	LSR	Data is not available	Data is not available	Oversupply
12/9/2015 16:51	0:16	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 8:00	0:04	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 8:06	0:36	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 8:44	0:04	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 9:09	0:21	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 9:31	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 9:33	0:04	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 9:40	0:13	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 9:55	0:21	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 10:18	0:03	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 10:22	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 10:39	0:03	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 10:46	0:40	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 12:07	0:05	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 12:22	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 12:35	0:04	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 12:40	0:13	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 12:58	0:15	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 13:14	0:06	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 13:22	0:19	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 13:42	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 13:44	0:12	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 13:57	0:10	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 14:21	0:09	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 14:31	0:03	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 14:43	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 14:46	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 14:55	0:01	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 15:15	0:03	LSR	Data is not available	Data is not available	Oversupply
12/10/2015 15:30	0:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 9:18	0:32	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 9:52	1:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 11:12	0:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 11:22	0:09	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 11:32	0:01	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 11:38	0:33	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 12:19	0:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 12:23	0:01	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 12:25	0:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 12:30	0:26	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 13:24	0:01	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 13:37	0:04	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 13:42	0:03	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 14:03	0:01	LSR	Data is not available	Data is not available	Oversupply
12/11/2015 14:13	2:22	LSR	Data is not available	Data is not available	Oversupply
12/12/2015 15:42	0:02	LSR	Data is not available	Data is not available	Oversupply
12/12/2015 15:46	0:04	LSR	Data is not available	Data is not available	Oversupply
12/12/2015 16:23	0:04	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 8:56	0:11	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 10:52	0:05	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 11:05	0:01	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 12:18	0:04	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 12:28	0:05	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:03	0:01	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:10	0:03	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:19	0:08	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:31	0:02	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:44	0:01	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 14:52	0:14	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 15:07	0:10	LSR	Data is not available	Data is not available	Oversupply

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Start Date/Time	Duration	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
12/13/2015 15:19	0:37	LSR	Data is not available	Data is not available	Oversupply
12/13/2015 16:04	0:04	LSR	Data is not available	Data is not available	Oversupply
12/14/2015 16:19	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 11:35	0:04	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 11:40	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 11:42	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 12:47	0:07	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 13:12	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 13:29	0:04	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 13:36	0:07	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 13:46	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 14:55	0:03	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:03	0:01	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:09	0:05	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:15	0:07	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:27	0:05	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:33	0:04	LSR	Data is not available	Data is not available	Oversupply
12/16/2015 15:38	0:04	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 8:23	0:41	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 9:07	0:04	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 9:12	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 9:29	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 9:36	0:28	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 10:25	0:14	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 10:42	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 10:45	0:11	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 10:57	0:10	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:09	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:13	0:04	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:19	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:28	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:32	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:35	0:03	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:39	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:43	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:50	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 11:55	0:07	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 12:04	0:13	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 12:19	0:42	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 13:04	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 13:11	0:02	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 13:17	0:30	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 13:51	0:06	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 13:58	0:03	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 14:22	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 14:34	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 14:41	0:01	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 14:46	0:14	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 15:07	0:24	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 15:51	0:10	LSR	Data is not available	Data is not available	Oversupply
12/17/2015 16:03	0:43	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 8:11	0:07	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 8:22	0:04	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 8:34	0:33	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:09	0:05	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:16	0:04	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:21	0:02	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:27	0:03	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:34	0:09	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 9:44	0:20	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 10:16	0:12	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 10:36	0:01	LSR	Data is not available	Data is not available	Oversupply
12/18/2015 10:38	1:00	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 8:12	0:34	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 8:50	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 9:03	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 9:14	0:05	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 9:39	0:07	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 9:57	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:03	0:08	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:23	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:29	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:35	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:43	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:48	0:02	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 10:56	0:12	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 11:10	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 11:17	0:04	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 11:23	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 11:36	0:23	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 12:01	0:02	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 12:12	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 12:37	0:08	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:00	0:20	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:26	0:05	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:38	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:44	0:01	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:49	0:02	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 13:53	0:10	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 14:06	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 14:18	0:02	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 15:09	0:03	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 15:28	0:05	LSR	Data is not available	Data is not available	Oversupply
12/19/2015 15:34	0:09	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 10:51	0:04	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 10:56	0:13	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 11:25	0:10	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 11:36	0:03	LSR	Data is not available	Data is not available	Oversupply

Maui Electric

Lanai Curtailment Report December 2015

Start Date/Time	Duration	IPP Curtailed	Estimated MWH Curtailed	Peak MW Curtailed	Reasons for Curtailment
12/20/2015 12:27	0:08	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 13:19	0:06	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 13:29	0:04	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 13:34	0:01	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 13:52	0:01	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 13:54	0:05	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 14:00	0:02	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 14:15	0:07	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 14:25	0:01	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 14:28	0:03	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 14:39	0:25	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 15:10	0:02	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 15:14	0:01	LSR	Data is not available	Data is not available	Oversupply
12/20/2015 15:17	0:04	LSR	Data is not available	Data is not available	Oversupply
12/23/2015 12:21	0:01	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 13:07	0:01	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 13:41	0:07	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 14:31	0:05	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 15:16	0:01	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 15:52	0:01	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 15:54	0:10	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 16:06	0:05	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 16:14	0:02	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 16:18	0:02	LSR	Data is not available	Data is not available	Oversupply
12/24/2015 16:21	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:08	0:05	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:21	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:26	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:29	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:43	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:45	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 9:49	0:18	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 10:11	0:03	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 10:19	0:07	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 10:29	0:03	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 10:43	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 10:46	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 11:03	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 11:12	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 11:43	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 11:59	0:04	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:06	0:04	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:14	0:16	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:42	0:03	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:49	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:52	0:04	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 12:58	0:17	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 13:24	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 13:32	0:01	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 13:48	0:27	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 14:32	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 14:36	0:16	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 15:34	0:10	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 15:54	0:02	LSR	Data is not available	Data is not available	Oversupply
12/26/2015 16:00	0:01	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 8:09	0:10	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 8:20	0:02	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 11:45	0:04	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 13:12	0:02	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 13:17	0:02	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 13:31	0:01	LSR	Data is not available	Data is not available	Oversupply
12/31/2015 13:36	0:04	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.

Hawai`i Electric Light Company Curtailment Report December 2015

Start Date/Time	MW output prior to start of curtailment	End Date/Time	MW output after curtailment released[1]	IPP	Reason for Curtailment
12/02/15 23:42	16.0 MW	12/03/15 00:58	13.1 MW	Tawhiri	Oversupply
12/07/15 23:29	17.4 MW	12/07/15 23:39	14.4 MW	Tawhiri	Oversupply
12/09/15 08:54	16.5 MW	12/09/15 13:59	14.5 MW	Tawhiri	Facility requested
12/12/15 00:03	14.2 MW	12/12/15 01:12	11.7 MW	Tawhiri	Oversupply
12/13/15 23:54	12.5 MW	12/14/15 01:40	11.3 MW	Tawhiri	Oversupply
12/17/15 16:29	18.3 MW	12/17/15 19:26	14.8 MW	Tawhiri	Facility requested
12/19/15 02:22	13.3 MW	12/20/15 19:11	13.5 MW	Tawhiri	Facility requested
12/21/15 07:12	17.3 MW	12/21/15 14:38	16.2 MW	Tawhiri	Facility requested / System constraint
12/22/15 00:44	16.5 MW	12/22/15 02:51	15.9 MW	Tawhiri	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.