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PUBLIC UTILITIES COMMISSION
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March 15, 2005

Edward L. Reinhardt
President

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, 1st Floor
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Adequacy of Supply
Maui Electric Company, Limited

In accordance with paragraph 5.3a of General Order No. 7, MECO's Adequacy of Supply ("AOS") Report is due within 30 days after the end of the year. On January 31, 2005, MECO requested an extension of time, to no later than March 15, 2005, to file the AOS Report. The extension of time was needed to allow MECO to incorporate updates to its Combined Heat and Power ("CHP") projections. On February 9, 2005, the Commission issued Order No. 05-ORD-05, approving MECO's request.

MECO respectively submits the following information pursuant to paragraph 5.3a. of General Order No. 7.

Maui's 2004 system peak occurred on November 8, 2004 and was 206,500 kW (net) or 210,900 kW (gross). Lanai's 2004 system peak occurred on December 28, 2004 and was 4,900 kW (gross). Molokai's 2004 system peak occurred on January 12, 2004 and was 6,800 kW (gross). The total system capability of Maui had a reserve margin of approximately 19% over the 2004 system peak. Lanai had a 2004 reserve margin of approximately 112%. Molokai had a 2004 reserve margin of approximately 77%.

Attachment 1 shows the expected reserve margins over the next three years, based on MECO's 2004-2009 Sales and Peak Forecast dated June 25, 2004, and includes DSM impacts from the implementation of Maui Division's load management DSM programs forecasted to start in 2007.

MECO Combined Heat and Power Program

On October 10, 2003, MECO (along with HECO and HELCO, collectively, the "Companies") filed a PUC Application for approval of a proposed utility-owned Combined Heat

and Power Program in Docket No. 03-0366. On March 2, 2004, by Order No. 20831, the Commission suspended the Companies' CHP Program application, indicating that its Distributed Generation ("DG") docket is intended to "form the basis for rules and regulations deemed necessary to govern participation into Hawaii's electricity market through distributed generation." The proceedings for the DG Docket No. 03-0371 are currently in progress, and the matter is expected to be ready for a decision by the PUC after briefing is completed at the end of March 2005.

In addition, on January 21, 2005, the Commission issued Order No. 21554 in Docket No. 04-0366 suspending HELCO's application requesting approval of a combined heat and power agreement with Koa Hotel, LLC. Also on January 21, 2005, the Commission also issued Order No. 21555 in Docket No. 04-0314 suspending HECO's application requesting approval of a combined heat and power agreement with Pacific Allied Products, Limited. With the continued suspension of MECO's CHP Program application and the recent suspension of HELCO's and HECO's applications for individual CHP projects, there is significant uncertainty as to when the benefits of utility CHP can begin to be realized.

For the purposes of MECO's near- and long-term planning, MECO is currently assuming that the installation of CHP under the CHP program (and/or individual CHP agreements) will begin in 2006 (as per the Maui February 7, 2005 CHP Forecast). The currently estimated impacts of the proposed CHP Program on future system peaks are indicated in Attachment 1[1].

The following capacity planning criterion is used to determine the timing of an additional generating unit for the Maui Division:

> *New generation will be added to prevent the violation of the rule listed below where "units" mean all units and firm capacity suppliers physically connected to the system, and "available unit" means an operable unit not on scheduled maintenance.*
>
> *The sum of the reserve ratings of all units minus the reserve rating of the largest available unit minus the reserve ratings of any units on maintenance must be equal to or greater than the system peak load to be supplied.*
>
> *In addition, consideration will be given to maintaining a reserve margin of approximately 20 percent based on Reserve Ratings.*

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[1] For purposes of this report, utility-owned CHP systems are reflected in the System Peak numbers (based on the net equivalent capacity of the CHP system, taking into account the electrical capacity supplied to a customer, the reduction of the customer' s electrical load through waste heat application for the system, and a reduction in line losses). The load reduction impacts of CHP systems and/or DG owned by third parties are also reflected in the System Peak numbers.

The following criterion is used to determine the timing of an additional generating unit for the Lanai Division and the Molokai Division:

New generation will be added to prevent the violation of any one of the rules listed below where "units" mean all units and firm capacity suppliers physically connected to the system, and "available unit" means an operable unit not on scheduled maintenance.

1. *The sum of the normal top load ratings of all units must be equal to or greater than the system peak load to be supplied.*

2. *With no unit on maintenance, the sum of the reserve ratings of all units minus the reserve rating of the largest available unit must be equal to or greater than the system peak to be supplied.*

3. *With a unit on maintenance:*

   a) *The sum of the reserve ratings of all units minus the reserve rating of the largest available unit must be equal to or greater than the daytime peak load to be supplied.*

   b) *The sum of the reserve ratings of all units must be equal to or greater than the evening peak load to be supplied.*

Potential Load Service Capability Shortfalls on Maui in 2005 and 2006

On Maui, in 2005 and in 2006, prior to the installation of M18, a nominal 17,100 kW (net) steam turbine generator, the Maui system could potentially experience load service capability (LSC) margin shortfalls, as shown in Attachment 2, unless the mitigation measures identified below are taken. Reserve margin is the difference between system generating capability and peak demand. The term "load service capability" is a measure of MECO's ability to meet system load requirements accounting for both planned maintenance and the loss of its largest unit. LSC margin shortfalls (which are indicated by values less than zero) are used as a planning tool to identify potential conditions of generating reserve capacity shortfalls and do not equate to either service interruptions or rolling blackouts. During periods when LSC margin values are less than zero, there is a possibility that a service interruption could occur if the largest unit is lost from service during the peak period.

In 2005, without mitigation measures, LSC margin shortfalls could occur in May, August, and October. In May, a LSC margin shortfall could occur during the periods when one-half of the dual train combined cycle (approximately 28 MW) is taken out of service for planned maintenance. The potential LSC margin shortfall in May is -4.1 MW. In August and October, LSC margin shortfalls could occur during periods of planned maintenance on M5 and K2 (approximately 11

MW), and K3 (approximately 12 MW), respectively. The potential LSC margin shortfalls in August and October are -2.3 MW and -2.2 MW, respectively.

In 2006, without mitigation measures, LSC margin shortfalls could occur in January, April, June, and August. In January, a LSC margin shortfall could occur during the period when HC&S is unavailable (16 MW) to delivery electrical power to the Maui grid during HC&S's annual maintenance outage period. The potential LSC margin shortfall in January is -3.9 MW. In April, a LSC margin shortfall could occur when Kahului Unit 4 (approximately 12 MW) is taken out of service for planned maintenance, and simultaneously Maalaea Unit 17 (approximately 21 MW) must be taken out of service to allow it to be converted to combined-cycle operation in conjunction with the Maalaea Unit 18 construction schedule. Another LSC margin shortfall could occur in June, when either M14 and its associated heat recovery steam generator (HRSG) or M16 and its associated HRSG is taken out of service for planned maintenance (approximately 28 MW), and Maalaea Unit 15 (approximately 9 MW remaining) is taken out of service for its six year planned maintenance overhaul. The potential LSC margin shortfalls are -14.6 MW in April and -9.5 MW in June. Another LSC margin shortfall could occur in August, when Maalaea Unit M9 (approximately 5 MW) is taken out of service for planned maintenance. The potential LSC margin shortfall in August is -0.5 MW.

Given the uncertainty in the timing and amount of CHP impacts as discussed above, the number of potential LSC margin shortfalls may increase and the magnitude of the shortfalls may be larger than the estimates indicated above. The extent of the additional shortfalls will be dependent upon when the CHP projects are authorized by the Commission to proceed.

The planned maintenance of the units during the periods of the LSC margin shortfalls must be performed during those times because the maintenance must occur within certain intervals to meet manufacturers' and insurance requirements. The timing of the planned outage of Maalaea Unit 17 for conversion to combined-cycle operation supports the earliest installation date of M18, thereby eliminating possible further LSC shortfalls. The previous Adequacy of Supply letter, filed with the Commission on January 31, 2004, did not show LSC margin shortfalls in 2005 and 2006 because the June 2003 peak demand forecast used in that letter contained lower peaks than currently forecasted, higher utility CHP forecasted impacts due to the CHP impacts starting in an earlier year using the August 20, 2003 CHP Forecast, and the M18 construction schedule was not yet set because of the uncertainty of the receipt of the Prevention of Significant Deterioration/Covered Source Permit (PSD/CSP) to authorize construction/operation. The PSD/CSP became effective as of September 9, 2004 and a construction schedule was established.

Using estimated procurement times for the long-lead equipment items and projecting a reasonable construction schedule, Maalaea Unit M18 cannot be installed any sooner than September 2006, and therefore, is unable to help mitigate the potential LSC margin shortfalls in 2005 and 2006. Equipment procurement is currently in progress.

As indicated previously, MECO Maui Division's capacity planning criteria indicates that "consideration will be given to maintaining a reserve margin of approximately 20% based on Reserve Ratings." As can be seen from Table 1 of Attachment 1, Maui's reserve margin will be below 20% in 2005 and 2006, even with the peak reduction benefits of CHP and energy efficiency and load management DSM programs.

LSC Margin Shortfalls and Reserve Margin Shortfalls

An LSC margin shortfall is an indication that there is a reserve margin shortfall. Reserve margin shortfall is defined as not having enough reserve margin from firm capacity resources on the system to cover for the loss of the largest unit (with a unit on planned maintenance). The calculation of reserve margin shortfalls does not take into account the availability of as-availability of as-available resources, such as the Kaheawa Wind Farm that is scheduled to be in operation the early part of 2006. Reserve margin shortfalls do not equate to rolling blackouts. Other factors must be considered when making an assessment of the possibility that available generation will be insufficient to serve the system load (i.e., that rolling blackouts will have to be implemented). These factors include the availability of non-firm resources (such as the wind farm), differences between actual and forecast peaks (which are impacted by factors such as weather), differences between monthly peaks, and normal weekday and weekend peaks, differences between actual and normal unit capabilities (due to such factors as temporary unit deratings, ambient conditions in the case of Maalaea Units 14, 16, 17 and 19, and the overall condition of the units), differences between actual and planned maintenance schedules (maintenance outages may be extended or shortened, depending on circumstances), and the risk of multiple unit outages.

For planning purposes, *projections* are used to forecast the timing of future resource additions. The following factors affect reserve margin projections:

- System Capability – Long-term projections of unit capabilities based on normal top load ratings are required in addition to the committed capacity of firm power producers with existing Power Purchase Agreements.

- Monthly Peak Forecast – The base load forecast is used.

- Planned Maintenance Schedule – MECO's normal maintenance scheduling practices are used. Maintenance scheduling is performed by the MECO Power Supply Department. Scheduling involves many different operational factors. Maintenance scheduling can be expected to change several times over the year because of operational factors. In the event planned capacity is delayed, rearranging maintenance schedules should be considered as a measure to mitigate the effects of delays in installing generation or acquiring the peak reduction benefits of energy efficiency DSM, load management DSM or CHP.

- Loss of Largest Unit – The basis for providing sufficient reserve margin to cover this unit while another unit is on planned maintenance.

Generation Shortfall

Generation shortfall is defined as not having sufficient capacity on the system to meet the expected load. Rolling blackouts may occur with generation shortfalls, but other factors need to be considered before any assessment of rolling blackouts can be made. Factors that affect whether or not there is adequate generation to meet the load are more complex than those that affect reserve margin shortfalls. These factors include the following:

- Actual vs. Forecasted Peak and Actual DSM Penetration – Actual or expected daily peaks are affected by factors such as time of year and weather variables such as rainfall, cloud cover, humidity and temperature. Actual DSM penetration is affected by many other factors; for example, whether or not a compact fluorescent light bulb in a home is actually on during the actual MECO system day peak. These factors are very difficult to quantify, let alone forecast.

- Condition and Reliability of Existing Units – Even with timely and prudent maintenance practices, all generating units are subject to forced outages. There is also a risk of multiple forced outages on a given day. Statistical or stochastic analysis may be appropriate for longer-term analyses; however, on a day-to-day basis, forecasting whether or not forced outages are likely to occur is very difficult to quantify.

- Availability of Non-Dispatchable As-Available Resources – Resources in this category include run-of-river hydro units and wind turbines. A key characteristic of non-dispatchable as-available resources is their unpredictable variability. Because each of these resources depends either directly or indirectly on the weather, the amount of capacity they will provide at a given time cannot be quantified. As-available resources do provide a system benefit (fuel savings) when they are able to provide energy; the amount they can provide at a given moment cannot be quantified.

Reliability Issues

Based on the above discussion, quantifying the risk of rolling blackouts is difficult. Many factors cannot be quantified. A qualitative analysis can be performed, but in the end, only assessments can be made of what can and cannot be done.

MECO has sufficient capacity on its system to meet the forecasted load. MECO may not, at times, have sufficient capacity to cover for the loss of the largest unit. Several mitigation measures have been identified to mitigate the effects.

The implementation of mitigation measures does not provide the same level of reliability as a large increment of firm capacity. It is, however, a necessary alternative.

Mitigation Measures in 2005 and 2006

MECO plans to mitigate potential LSC margin shortfalls in 2005 and 2006 through one or more of the mitigation measures identified below, depending on the particular circumstances. These mitigation measures are as follows:

Optimize Unit Overhaul Schedule: MECO will optimize its unit overhaul schedule to minimize any LSC margin shortfall by matching a unit's outage with the available reserve capacity at that time.

Combined-Cycle Unit Overhaul: MECO will modify its combined-cycle unit overhaul procedure to minimize the outage capacity for that unit. The exhaust bypass option of MECO's Maalaea DTCC No. 1 (units M14, M16, and M15) will be used to allow for the possible operation of the combustion turbine (CT) (if needed) in simple-cycle mode while certain planned maintenance is being performed on the HRSG. This modified maintenance procedure will allow, if the situation warrants, the possible use of an additional 20 MW from the CT.

Coordination with HC&S: MECO will coordinate closely with HC&S for the delivery of supplemental power, if needed, as described in the Purchase Power Agreement under Section II D.

Hana Standby Generators: MECO's two, 1,000 kW standby diesel engine generators located at Hana Substation No. 41 will be considered in emergency conditions as a capacity source, if required.

Public Communications Campaign: MECO may request voluntary customer curtailment of demand during LSC margin shortfall conditions.

In consideration of the above, MECO's generation capacities for the islands of Maui, Lanai, and Molokai for the next three years are sufficiently large to meet all reasonably expected demands for service and provide reasonable reserves for emergencies.

Very truly yours,

Edward L. Reinhardt

Attachments

cc: Division of Consumer Advocacy

Table 1
Maui Adequacy of Supply

	With Utility CHP (Includes 3rd Party CHP)[I]				
		Without Future DSM (Includes Acquired DSM)[II]		With Future DSM (Includes Acquired DSM)[III]	
Year	System Capability at Annual Peak Load[IV] (kW) [A]	System Peak[V] (kW) [B]	Reserve Margin (%) [[A-B] / B]	System Peak[V] (kW) [C]	Reserve Margin (%) [[A-C] / C]
Maui Division (Net Generation)					
Recorded					
2004	245,200	206,500 [VI]	19%	N/A	N/A
Future					
2005	245,200 [VII]	209,600	17%	207,900	18%
2006	245,200 [VIII]	214,700	14%	211,900	16%
2007	262,300	218,300	20%	211,400 [IX]	24%
Maui Division (Gross Generation) [X]					
Recorded					
2004	250,100	210,900 [VI]	19%	N/A	N/A
Future					
2005	250,100	214,100	17%	212,400	18%
2006	250,100	219,300	14%	216,500	16%
2007	268,100	223,500	20%	216,400 [IX]	24%

Notes – Table 1:

(I) With Utility CHP: Forecasted system peaks include reductions for both forecasted utility CHP system level impacts[1] and third-party CHP impacts.

(II) System Peaks (Without Future Peak Reduction Benefits of DSM Programs): Implementation of full-scale DSM programs began in the second half of 1996 following Commission approval of the programs. The forecasted system peak values for the years 2005-2007 include the actual peak reduction benefits acquired in 1996-2003 and also include the estimated peak reduction benefits acquired in 2004, as well as peak reduction benefits of Rider M and T customer contracts, utility CHP impacts and third party CHP impacts.

(III) System Peaks (With Future Peak Reduction Benefits of DSM Programs). The forecasted System Peaks for 2005-2007 include the peak reduction benefits of DSM programs (acquired and future) and peak reduction benefits of Rider M and T customer contracts, utility CHP impacts and third party CHP impacts.

(IV) The net reserve ratings of the units are used in the determination of the Maui system capability. In addition, the Maui Division system capability includes 16,000 kW (which includes 4,000 kW of system protection capacity) from Hawaiian Commercial and Sugar Company ("HC&S"). All unit projected retirement dates are planned for December 31 of the designated year unless otherwise specified. When the system capability at the time of the system peak differs from the year-end system capability, an applicable note will indicate the year-end system capability.

(V) The 2005 - 2007 annual forecasted system peaks are based on MECO's 2004-2009 Sales and Peaks Forecast dated June 25, 2004 and includes reductions for both forecasted utility CHP system level impacts and third-party CHP impacts. The Maui annual forecasted system peak is expected to occur in the month of August.

(VI) The actual 2004 recorded system peak was 210.9 MW (gross) which is equivalent to 206.5 MW (net).

(VII) A proposed 30 MW independent power producer (IPP) wind farm resource is projected to be added to the Maui system by the early part of 2006. MECO and Kaheawa Wind Power (KWP) executed a new purchase power agreement (PPA) on December 3, 2004 and co-participated in an informal briefing to the PUC and Consumer Advocate (CA) on December 6, 2004 presenting the specifics of the agreed upon PPA. MECO submitted a PUC Application on December 16, 2004 for approval of the terms of the PPA. The installation of this wind resource will not affect the system capability, because the wind

[1] Utility CHP impacts are from a CHP forecast dated February 7, 2005. These impacts are at system level based on a T&D loss factor of 6.15%. For capacity planning analysis, an availability factor is also included to account for periods when the utility CHP is unavailable due to forced outage and maintenance.

resource is considered an as available resource due to the unpredictability of its wind regimen.

(VIII) Maalaea Unit 18, a nominal 17,100 kW (net) steam turbine generator (Phase III of a nominal 58,700 kW (net) dual train combined-cycle unit), is scheduled to be placed in service in September 2006. System Capability at the end of 2006 is 262,300 kW (net).

(IX) Includes a reduction in system peak load due to the implementation of planned Capacity Buy Back (CBB) and Residential Direct Load Control (RDLC) Load Management DSM Programs developed in MECO's IRP-2 Report. Full-scale Load Management DSM Program benefits are forecasted to start in 2007.

(X) The Maui Division Gross Generation data is provided here for comparative purposes.

Table 2
Lanai and Molokai Adequacy of Supply

	With Utility CHP (Includes 3rd Party CHP)[I]				
		Without Future DSM (Includes Acquired DSM)[II]		With Future DSM (Includes Acquired DSM)[III]	
Year	System Capability at Annual Peak Load[IV] (kW) [A]	System Peak[V] (kW) [B]	Reserve Margin (%) [[A-B] / B]	System Peak[V] (kW) [C]	Reserve Margin (%) [[A-C] / C]
Lanai Division (Gross Generation)					
Recorded					
2004	10,400	4,900	112%	N/A	N/A
Future					
2005	10,400	5,256	98%	N/A	N/A
2006	10,400 [VI]	5,309	96%	N/A	N/A
2007	8,400 [VII]	5,362	57%	N/A	N/A
Molokai Division (Gross Generation)					
Recorded					
2004	12,010 [VIII]	6,800	77%	N/A	N/A
Future					
2005	12,010	6,850	75%	N/A	N/A
2006	12,010	6,900	74%	N/A	N/A
2007	12,010	6,925	73%	N/A	N/A

Notes – Table 2:

(I) With Utility CHP: For Lanai see Note VI below. No Utility CHP or third-Party CHP is forecasted for the years 2005-2007 for Molokai.

(II) System Peaks (Without Future Peak Reduction Benefits of DSM Programs): Implementation of full-scale DSM programs began in the second half of 1996 following Commission approval of the programs. The forecasted system peak values for the years 2005-2007 include the actual peak reduction benefits acquired in 1996-2003 and also include the estimated peak reduction benefits acquired in 2004.

(III) System Peaks (With Future Peak Reduction Benefits of DSM Programs): Currently no future DSM impacts are forecasted for Lanai or Molokai.

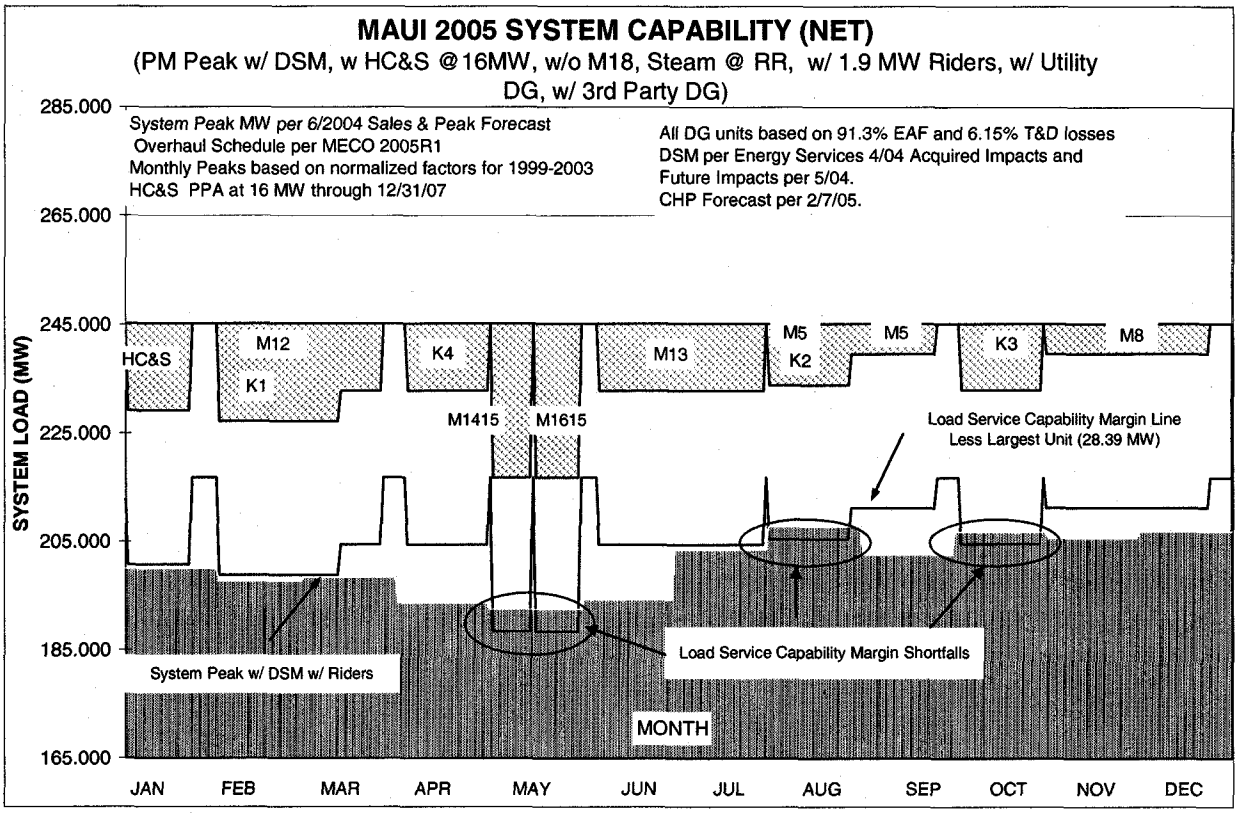
(IV) The gross reserve ratings of the units are used in the determination of the Lanai and Molokai system capabilities. All unit projected retirement dates are planned for December 31 of the designated year unless otherwise specified. When the system capability at the time of the system peak differs from the year-end system capability, an applicable note will indicate the year-end system capability.

(V) The 2005 - 2007 annual forecasted system peaks are based on MECO's 2004-2009 Sales and Peaks Forecast dated June 25, 2004. The Lanai and Molokai annual forecasted system peaks are expected to occur in the months of November and December, respectively.

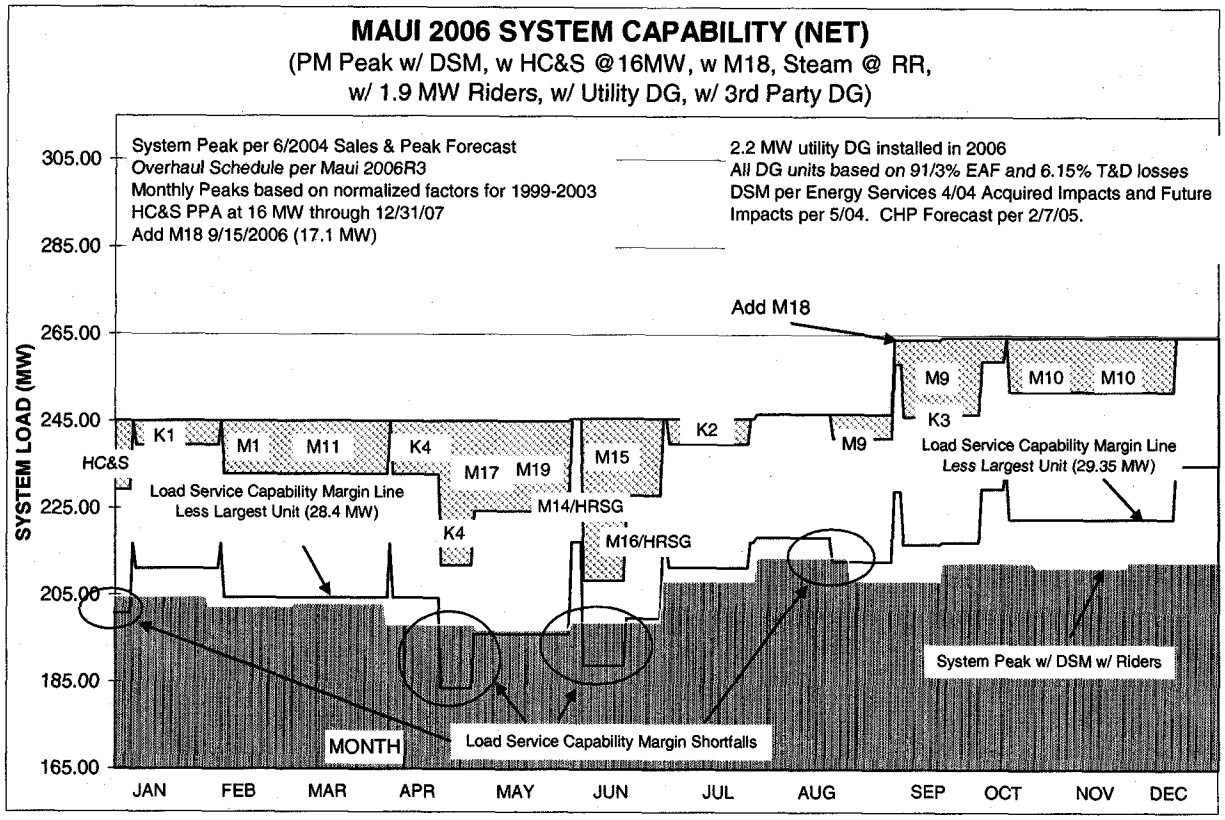
(VI) MECO is currently in discussions with Castle & Cooke Resorts, LLC ("C&C Resorts") about the possibility of MECO installing a CHP generating unit at the Manele Bay Hotel in the 2006 timeframe. This is pursuant to the terms of a service contract between MECO and C&C Resorts which was approved by the Commission in Decision and Order No. 20811 in Docket No. 03-0261. A CHP Agreement has not been executed yet between MECO and C&C Resorts. Under the terms of the service contract, should a CHP Agreement be executed between MECO and C&C Resorts, MECO would seek Commission approval of the Agreement under a separate application. C&C Resorts is not obligated to install MECO's proposed CHP system at the Manele Bay Hotel.

(VII) Miki Basin Units LL-1 to LL-6 (six,1,000 kW diesel engine-generator units totaling 6,000 kW) are assumed to be converted to peaking status at the end of 2006, and as such, will only be counted on for 4,000 kW of capacity to the Lanai system at that time. However, MECO is currently evaluating each of these six units to determine if their conversion to peaking status can be deferred into the future, and thereby deferring all or part of the 2,000 kW capacity reduction.

(VIII) Palaau Units 1 and 2 (two 1,250 kW Caterpillar units), and Palaau Units 3, 4, 5 and 6 (four 970 kW Cummins units) operate in peaking service. Because of the age and operating history of these units, MECO includes one Caterpillar unit and two Cummins units (1,250 + 970 + 970 = 3,190 kW) towards firm capacity for the Molokai system.



Month (1)	System Peak w/ DSM w/ Riders w/3rd Party CHP (MW) (2)	System Cap w/ Utility CHP (MW) (3)	Maint (MW) (4)	Reserve (MW) (5)=(3)-(4)-(2)	% Reserve (Less Maint) (5) / (2)	Lrgst Avail (MW) (7)	LSC Diff (MW) (8) = (5) - (7)	LSC Diff + LM (impact) (MW) (8) + 0 MW
JAN	200.0	245.2	16.0	29.2	15%	28.4	0.8	0.8
FEB	197.7	245.2	18.0	29.5	15%	28.4	1.1	1.1
MAR	198.4	245.2	18.0	28.8	15%	28.4	0.4	0.4
APR	193.7	245.2	12.4	39.1	20%	28.4	10.7	10.7
MAY	192.5	245.2	28.4	24.3	13%	28.4	-4.1	-4.1
JUN	194.3	245.2	12.3	38.5	20%	28.4	10.1	10.1
JUL	203.5	245.2	12.3	29.3	14%	28.4	0.9	0.9
AUG	207.8	245.2	11.3	26.1	13%	28.4	-2.3	-2.3
SEP	202.6	245.2	5.5	37.0	18%	28.4	8.7	8.7
OCT	206.8	245.2	12.2	26.2	13%	28.4	-2.2	-2.2
NOV	205.7	245.2	5.5	34.0	17%	28.4	5.6	5.6
DEC	206.9	245.2	5.5	32.8	16%	28.4	4.4	4.4



Month (1)	System Peak w/ DSM w/ Riders w/ 3rd Party CHP (MW) (2)	System Cap w/ Utility CHP (MW) (3)	Maint (MW) (4)	Reserve (MW) (5)=(3)-(4)-(2)	% Reserve (Less Maint) (5) / (2)	Lrgst Avail (MW) (7)	LSC Diff (MW) (8) = (5) - (7)	LSC Diff + LM (impact) (MW) (8) + 0 MW
JAN	204.6	245.2	16.0	24.5	12%	28.4	-3.9	-3.9
FEB	202.3	245.2	12.3	30.5	15%	28.4	2.1	2.1
MAR	203.0	245.2	12.3	29.8	15%	28.4	1.4	1.4
APR	198.1	245.2	33.2	13.8	7%	28.4	-14.6	-14.6
MAY	196.9	245.2	20.8	27.4	14%	28.4	-1.0	-1.0
JUN	198.4	245.7	37.2	10.1	5%	19.6	-9.5	-9.5
JUL	207.9	245.7	5.8	32.0	15%	28.4	3.6	3.6
AUG	213.4	246.8	5.5	27.9	13%	28.4	-0.5	-0.5
SEP	208.0	246.8	5.5	33.2	16%	29.4	3.9	3.9
OCT	212.3	264.4	17.6	34.4	16%	29.4	5.1	5.1
NOV	211.2	264.4	12.3	40.9	19%	29.4	11.5	11.5
DEC	212.5	264.4	12.3	39.6	19%	29.4	10.2	10.2

Maui Unit Ratings

As of January 31, 2005

Units	Gross (MW)		Net (MW)	
	Reserve	NTL[I]	Reserve	NTL[I]
M1	2.50	2.50	2.50	2.50
M2	2.50	2.50	2.50	2.50
M3	2.50	2.50	2.50	2.50
X1	2.50	2.50	2.50	2.50
X2	2.50	2.50	2.50	2.50
M4	5.60	5.60	5.51	5.51
M5	5.60	5.60	5.51	5.51
M6	5.60	5.60	5.51	5.51
M7	5.60	5.60	5.51	5.51
M8	5.60	5.60	5.48	5.48
M9	5.60	5.60	5.48	5.48
M10	12.50	12.50	12.34	12.34
M11	12.50	12.50	12.34	12.34
M12	12.50	12.50	12.34	12.34
M13	12.50	12.50	12.34	12.34
M14/15/16	58.00	58.00	56.78	56.78
M17	21.20	21.20	20.80	20.80
M19	21.20	21.20	20.80	20.80
Maalaea GS	196.50	196.50	193.24	193.24
K1	5.90	5.00	5.62	4.71
K2	6.00	5.00	5.77	4.76
K3	12.70	11.50	12.15	10.98
K4	13.00	12.50	12.38	11.88
Kahului GS	37.60	34.00	35.92	32.33
HC&S[II]	16.00	12.00	16.00	12.00
Maui System	250.10	242.50	245.16	237.57
Hana 1[III]	1.00	1.00	1.00	1.00
Hana 2[III]	1.00	1.00	1.00	1.00

Notes:

(I) NTL = Normal Top Load

(II) All values for HC&S are net to the system. The reserve ratings include an additional 4.0 MWs of system protection capacity.

(III) Unit located at Hana Substation No. 41. Unit is operated in standby mode, and therefore, not counted toward system capability. Unit used primarily to provide electrical power to the Hana community during planned maintenance or unplanned power outages of the transmission line that services Hana.

Lanai Unit Ratings

As of January 31, 2005

Units	Gross (kW)	
	Reserve	NTL(I)
LL-1	1,000	1,000
LL-2	1,000	1,000
LL-3	1,000	1,000
LL-4	1,000	1,000
LL-5	1,000	1,000
LL-6	1,000	1,000
LL-7	2,200	2,200
LL-8	2,200	2,200
Miki Basin GS	10,400	10,400

Molokai Unit Ratings

As of January 31, 2005

Units	Gross (kW)	
	Reserve	NTL[(I)]
P-1[(IV)]	1,250	1,250
P-2[(IV)]	1,250	1,250
P-3[(IV)]	970	970
P-4[(IV)]	970	970
P-5[(IV)]	970	970
P-6[(IV)]	970	970
Solar CT	2,220	2,220
P-7	2,200	2,200
P-8	2,200	2,200
P-9	2,200	2,200
Palaau GS	12,010	12,010

(IV) Palaau Units 1 and 2 (two 1,250 kW Caterpillar units), and Palaau Units 3, 4, 5 and 6 (four 970 kW Cummins units) operate in peaking service. Because of the age and operating history of these units, MECO includes one Caterpillar unit and two Cummins units (1,250 + 970 + 970 = 3,190 kW) towards firm capacity for the Molokai system.

Maui Electric Company, Ltd. • 2[redacted] West Kamehameha Avenue • PO Box 398 • K[redacted]lui, Maui, HI 96733-6898 • (808) 871-8461

OKK/KN

January 31, 2005

Edward L. Reinhardt
President

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PUBLIC UTILITIES
COMMISSION

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, 1st Floor
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Adequacy of Supply
Maui Electric Company, Limited

In accordance with paragraph 5.3a of General Order No. 7, MECO's Adequacy of Supply Report ("AOS Report") is due within 30 days after the end of the year. MECO respectfully requests an extension to no later than March 15, 2005 in which to submit its AOS Report.

In general, the AOS Report assesses the adequacy of central station generation (including firm purchased power) to serve forecasted loads, as those loads are reduced due to the projected impacts of energy efficiency demand-side management ("DSM") programs, load management programs, and customer-sited combined heat and power systems ("CHP"), during the next three years. MECO requests a delay to file its AOS Report until no later than March 15, 2005, because MECO is in the process of updating its CHP projections (given the current state of the proposed CHP program, Rule 4 contract applications and generic distributed generation docket). The Consumer Advocate does not object to this request.

Very truly yours,

Edward L. Reinhardt

cc: Division of Consumer Advocacy