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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	Docket No. 05-0069
	)	
For Approval and/or Modification of	)	
Demand-Side and Load Management	)	
Programs and Recovery of Program	)	
Costs and DSM Utility Incentives.	)	
	)	
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RESPONSE TO HECO'S INTERIM DSM PROPOSALS

and

CERTIFICATE OF SERVICE

ROCKY MOUNTAIN INSTITUTE

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RESPONSE TO HAWAIIAN ELECTRIC COMPANY, INC'S INTERIM DSM PROPOSALS

This Response is submitted by Rocky Mountain Institute (RMI) in accordance with the Schedule of Proceedings in the parties' proposed prehearing order submissions in this docket. In particular, this Response states RMI's position regarding the requests made by Hawaiian Electric Company, Inc. (HECO) in HECO's letter to the Commission dated December 5, 2005 (Interim DSM Proposals).

RMI is mindful that the Commission has not issued a prehearing order in this docket and has not yet decided or agreed with the parties' proposal to hear and decide some DSM proposals on an interim basis. This Response is respectfully offered to provide for a timely disposition of these proposals should the Commission ultimately agree to the Schedule of Proceedings proposed by the parties.

It is RMI's understanding that the purpose of considering interim proposals early in this docket is to allow HECO to proceed expeditiously with specific and non-controversial measures to address HECO's capacity reserve shortfall situation. If there is considerable controversy regarding any aspects of the Interim DSM Proposals, these aspects could be deferred for ultimate resolution in the later more comprehensive proceedings in the docket.

RMI provides discussion below regarding several aspects of the Interim DSM Proposals.

- Should HECO be allowed or directed to implement[1] the proposed interim program modifications[2]?
- Should HECO be allowed to recover the costs of the proposed interim program modifications?
- Should the "existing" lost margins or shareholder incentives mechanisms apply to the proposed interim program modifications?

PERMISSION TO IMPLEMENT HECO'S PROPOSED INTERIM PROGRAM MODIFICATIONS

RMI supports HECO's request to be allowed to implement the delivery mechanisms and measures in its proposed interim DSM program modifications on an expedited basis. Immediate implementation of the proposed program modifications would be beneficial and reasonable for several reasons:

1) RMI finds that the proposed interim program modifications promise to be valuable components of HECO's more comprehensive portfolio of DSM programs proposed in this docket. In RMI's view, the full portfolio of residential, commercial and industrial DSM programs should be deployed to improve Hawaii's reliability, energy security, and mitigate the rising cost of fossil fuels.

2) RMI accepts HECO's assertions regarding its capacity reserve shortfall situation. Our understanding of the draft findings from the current HECO IRP and the HECO Adequacy of Supply (March 10, 2005) report is that there is a potential reserve capacity shortfall of approximately 70 MW. In the absence of immediate implementation of demand side measures, rapid residential load growth in Oahu could make the situation worse. While RMI recognizes that HECO's IRP has not yet been approved by the Commission, it would be negligent to fail to take action in a timely manner to avoid a worsening capacity reserve situation. This is the time for action, not further study.

3) Energy and economic security are both critical concerns that should bear on the Commissions decision to allow these programs to proceed. Until 2003, Hawaii imported less than 1% of its oil from the volatile Middle East region. As of 2004, we are importing 13.5% of our oil from the Middle East. Prices for oil have risen rapidly and projections are for continued high prices. The EIA has revised its 20

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[1] RMI makes a deliberate distinction between (1) the implementation of the delivery mechanisms and measures of the proposed programs (program implementation) and (2) the issues and methods regarding the recovery of program costs, lost margins or shareholder incentives from utility customers.

[2] HECO has proposed a new interim residential DSM program and several interim modifications to existing commercial DSM programs. RMI refers to the implementation of the measures in these programs collectively as "interim program modifications."

year forecast of low sulfur crude oil (the kind used in Hawaii) from $32.94/bbl to $54.08 bbl in 2025- a $21/bbl increase from the AEO2005. RMI estimates that in the last two years, each Hawaii household has paid nearly $1,000 more per year in increased energy costs. This situation must be remedied with an aggressive program for energy efficiency.

4) HECO will need the full suite of demand side management programs in order to fully mitigate the capacity shortfall, as well as the security and economic risks. As the Commission is aware, the residential demand, particularly water heating is the primary contributor to the evening peak. HECO has an exceptionally flat load curve, and air conditioning load is increasing which will further increase load factor. From a reliability perspective, the concern over loss of load probability therefore extends beyond the evening hours into the afternoon hours. The difference between the evening peak and mid-afternoon load is only 30-40 MW. Thus, once a combination of distributed generation and load management provide this differential, additional evening centered load management will be less valuable in improving reliability than broader ranged efficiency measures.

The myopic view of certain parties is that HECO efficiency interim programs, such as the E$H program, would not be valuable enough in managing the reliability challenge because they do not contribute enough coincident peak load reduction. In reality, the correct approach is to implement a portfolio of efficiency and load management programs to address the instant issue of reliability and concurrently deal with energy security and economic hardship challenges we face. RMI applauds HECO for taking the initiative to propose such a suite of programs that will be necessary to protect the best interests of Oahu's ratepayers.

5) Valuation of DSM measures should be based on both their capacity and energy impacts in avoiding utility costs and reducing risk. The standard regulatory test for the cost effectiveness of DSM is the Total Resource Cost (TRC) test. All of the measures proposed by HECO would pass the TRC test. The TRC test is a conservative indicator that does not include the value of hedging fossil fuel risk or any environmental benefits. The TRC tests submitted by HECO rely on a forecast price for oil that is far below the market price, underestimating the economic benefits of efficiency. Further, the TRC test does not differentiate the difference between the speed at which DSM measures can be achieved versus the lead time of central power plants. Thus, if anything, these programs are more valuable that HECO is estimating.

In the informal comments, the Consumer Advocate applied the *total* cost of DSM programs to their coincident peak capacity benefits to define the annualized cost of peak load reductions. The Consumer Advocate then compared the annualized cost of peak load reductions to either other DSM programs or the cost of generation. Such an approach is utterly misguided and incorrect. If the Commission is interested in understanding the equivalent peak cost of DSM programs, the avoided energy and other benefits from these programs should be subtracted from their total cost to determine the net costs to be applied as peak capacity. However,

RMI does not believe this approach is relevant to the risk mitigation issues at hand.

The near term risks involve a potential capacity shortfall, escalating energy costs, and energy insecurity. The proposed programs pass the conservative TRC test. As explained above, HECO should be given permission to implement the proposed programs promptly.

6) RMI struggles with the idea that there is any party that is contesting whether the large scale dissemination of CFLs and the repeal of the two year payback rule would be an effective program to achieve energy efficiency. A single CFL will save 0.7 bbls of oil over its lifetime, literally at 10 times its cost. Other utilities around the world have successfully implemented large scale CFL lighting programs. HECO has offered programs since 1996.

Even in the most recent analysis by Global Energy Partners (Exhibit T-11), HECO could save up to 5% of total energy demand *at less than variable costs* (based on the 2003 cost of oil). Clearly, consumers have not taken full advantage of the low cost efficiency opportunities, nor have we reached saturation of CFLs. Since nearly ten years have transpired, perhaps it is time for a new approach.

RMI supports HECO's approach of using rebates directly at the retailers point of sale to accelerate adoption. In the informal comments, the Consumer Advocate suggests that without the capture of customer data, evaluation of adoption would be impossible. This argument has no merit. There are numerous statistical approaches to that could be used to estimate adoption of use of any product, including CFLs, without the onerous paperwork requirement.

COST RECOVERY FOR THE PROPOSED INTERIM PROGRAM MODIFICATIONS

RMI supports recovery of the costs of the proposed interim program modifications from HECO's customers.

It is not necessary to address more general questions of whether emergency mitigation measures for capacity shortfalls should be the financial responsibility of the utility versus a utility's customers. In this case, the proposed program modifications promise to be cost-effective long-range resource components of HECO's more comprehensive DSM program portfolio proposed in this docket. If the value of the proposed program modifications as cost-effective long range resources is contested, the question of cost recovery for the modifications could be deferred (or could be made subject to retroactive adjustment) to the later proceedings in this docket.

LOST MARGINS AND SHAREHOLDER INCENTIVES FOR THE PROPOSED INTERIM PROGRAM MODIFICATIONS

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Request for Additional Service Address upon the following parties and participant, by first class mail.

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