

LOL-HECO-IR-79

Ref: "HECO has been involved in demand-side management ('DSM') and load management ("LM") programs for some time." (Exhibit 6, page 32) "The current MECO (and HECO and HELCO) rate design is flawed, in that the declining block load-factor blocks provide an incentive to remain on the system during peak periods for any customer whose non-coincident peak demand occurs at a different time than the system coincident peak demand." (PUC DN 03-0371. COM Response to LOL-WDT-IR-28, page 92)

Question(s):

Has HECO evaluated, analyzed, and/or considered switching to a load management that rewards night-time use instead of one that rewards constant (high power factor) use?

HECO Response:

Yes, HECO has evaluated, analyzed, or considered load management that rewards night-time use. HECO has been offering various forms of time-of-use rates, referred to as load management riders, to commercial and industrial customers on an optional basis since 1981. These load management riders include Rider T, Rider M, and Rider I. In addition, HECO implemented Schedule U in 1991, which is a stand alone time-of-use rate schedule for large customers. Last year, HECO implemented Schedule TOU-R, which is a residential time-of-use service pilot program.

HECO's load management riders provide alternative time-of-use pricing options for customers that are able either to schedule operations outside of HECO's priority-peak operating hours (5:00 pm to 9:00 pm weekdays), or to run primarily during the off-peak hours. These riders provide customers with incentives to manage their load by modifying the billing kW demand determination in the regular Schedules J, PS, PP, or PT.

The following provides a brief explanation of each load management rider:

Rider T - Time-of-Day Rider

Rider T provides time-of-use service to commercial and industrial customers served under Schedule J, PS, PP, or PT. To encourage customers to manage their load and shift their usage to off-peak hours, Rider T modifies the determination of the billing demand in the regular applicable rate schedule by considering only the customer's maximum measured demand occurring during the on-peak hours in the determination of the billing kW demand. To the extent that the customer is able to shift most of his load to off-peak hours, this modification to the regular schedule's billing demand determination lowers the customer's demand charge as well as energy charges. In addition, the customer's kW loads during the off-peak hours are not charged the demand charge.

Rider T is open to all customers with at least 25 kW demand, and currently serves 25 customers.

Rider M - Off-Peak and Curtailable Service

Rider M provides two service options: Option A – Off-Peak Service, and Option B – Curtailable Service. Like Rider T, HECO's Rider M – Option A provides incentives to customers to shift their load to the off-peak period by modifying the determination of the billing kW demand in the regular applicable rate schedule by considering only the customer's maximum demand occurring during the on-peak period in the demand ratchet calculation. This modification to the determination of billing kW demand effectively reduces the customer's demand charge and energy charge to the extent that the customer is able to shift most of his/her load to the off-peak hours.

Rider M - Option B encourages customers to curtail their load during the system priority peak hours defined from 5:00 P.M. to 9:00 P.M., Monday to Friday, or to curtail their load

during a 2-hour period specified in their Rider M contract. In exchange for load curtailment, the customer's billing kW demand under the regular applicable rate schedule is reduced by 40% to 75% of the customer's curtailed kW load. As in Rider M – Option A, this modification to the customer's billing kW demand effectively reduces his demand charge, as well as his energy charge.

A total of 23 customers are currently served under HECO's Rider M.

Rider I - Interruptible Contract Service

Rider I provides interruptible service to large customers. The standard service contract provides for a maximum of 15 service interruptions per year and a maximum of 8 hours service interruption per billing period, and requires customers to install an underfrequency relay. In exchange for allowing the Company to interrupt their service, the customers' billing kW demand under the applicable regular rate schedule is reduced by 30% of their interruptible load.

HECO current serves 5 customers under Rider I, providing for a total of about 9.6 MW of interruptible load.

Schedule U – Time-of-Use Service

HECO's Schedule U provides time-differentiated rates to large customers. The demand charge is applied only to the customer's maximum measured kW demand occurring during the on-peak hours. The energy rates are differentiated by time-of-use rating periods. There are 4 customers currently receiving service under Schedule U.

Schedule TOU-R – Residential Time-of-Use Service Pilot Program

In 2003, HECO implemented a Residential Time-of-Use Pilot Program to determine the residential customers' response to time-of-use pricing, as well as to determine the potential residential customers' subscription rate to time-of-use pricing, and the sustainability of such

residential participation or subscription to such rate offering. The pilot program is limited to 200 residential customers for a three-year period, beginning in May 2003 to May 2006. The program is currently in-progress with a total of 162 customers, and data collection on the customers' response is continuing.