



October 6, 2014

Via Electronic Mail: hawaii.puc@hawaii.gov

Hawaii Public Utilities Commission
465 S. King St., Room 103
Honolulu, HI 96813

Subject: Public Comment – Docket Nos. 2014-0192 – DGIP and 2014-0183 – PSIPs – Green Energy Institute

Dear Hawaii Public Utilities Commission,

The Green Energy Institute (GEI) respectfully submits these comments regarding the HECO Companies' Power Supply Improvement Plan (PSIP) and Distributed Generation Improvement Plan (DGIP), filed with the PUC on August 28, 2014. The Green Energy Institute is committed to the goal of mitigating climate change through complete decarbonization of the electricity sector, and works at regional, state, and local levels to develop innovative policy strategies to advance renewable energy in the United States. We appreciate the PUC's efforts to reform the electricity sector to reflect emerging trends, and we are grateful for the opportunity to participate in this important proceeding.

On April 28, 2014, the PUC outlined a bold new vision for the role of electric utilities in Hawaii. In an order rejecting the HECO Companies' Integrated Resource Planning Report, the PUC directed the consolidated utilities to file both a PSIP and DGIP that establish the steps the utilities will take to expeditiously retire inefficient fossil-fuel generation facilities, increase generation flexibility, adopt new technologies like demand response and energy storage, and enable the integration of diverse renewable energy resources.¹ To provide direction to the HECO Companies, the PUC concurrently issued a guidance document, *Commission's Inclinations on the Future of Hawaii's Electric Utilities*, which set out policy measures to modernize the utilities' generation, transmission and distribution systems, and recommended policy and regulatory reforms to reach Hawaii's Renewable Portfolio Standard of 40% renewable energy by 2030.²

On August 26, 2014, the HECO Companies filed its PSIP and DGIP, which outline a number of proposals to reform aspects of the utilities' operations to better align the companies with future realities in the electricity industry. Many of those proposed reforms relate to the rate treatment of distributed generation customers. These comments will focus narrowly on the DG-customer rate reforms contained in the HECO Companies' PSIP and DGIP.

I. The Hawaii PUC does not have the authority to eliminate the Net Energy Metering program.

The HECO Companies appear to have their sights set on weakening Hawaii's Net Energy Metering (NEM) program, and the Companies' proposed "Gross Export Purchase" model would eliminate the net metering program entirely. Under that model, DG customers would not have the option of enrolling in the net-metering program; instead, they would be "credited at a rate determined by market-based proxy (e.g., latest renewable purchase power agreements) or some rate more consistent with wholesale renewable generation costs."³ In support of that proposed action, the HECO Companies cite inequitable cost allocation caused by the

¹ Hawaii PUC Order 32052, April 28, 2014.

² Hawaii PUC, Order 32052, *Exhibit A: Commission's Inclinations on the Future of Hawaii's Electric Utilities*, April 28, 2014.

³ *DGIP* at 6-14.

fixed costs associated with NEM customers as their primary motivation.

The Net Energy Metering program, however, was established by statute, so the PUC cannot eliminate the program without legislative authority to do so. The net-metering statute, enacted originally in 2001, requires that:

The net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and:

- (1) The electricity generated by the eligible customer-generator and fed back to the electric grid over a monthly billing period; and
- (2) Any unused credits for excess electricity from the eligible customer-generator carried over from previous months since the last twelve-month reconciliation period.⁴

Based on that language and other compensation provisions in the net metering statute,⁵ NEM customers may offset the power that they receive from the utility with power that they generate; in effect receiving retail rates for the electricity that they produce. The net metering statute does not provide the PUC the discretion to adjust the rates at which NEM customers are compensated. Therefore, rate reform for the net metering program would have to come from the legislature.

Rather than rely on future legislative action in deciding whether to approve the HECO Companies' DGIP, the PUC should seek alternative proposals from the HECO Companies addressing the perceived inequities in cost allocation among customer classes.

II. The HECO Companies miscalculate the value and necessity of the Net Energy Metering Program.

In their DGIP, the Companies assert that “[t]he need to provide retail compensation for DG no longer exists,” arguing that utility-scale PV projects can be built at rates below the retail cost of electricity.⁶ The Companies further believe “that the intent of the NEM program at its inception, in combination with federal and state incentives, was to nurture a developing technology and industry, because the cost to self-generate clean renewable energy was prohibitive.”⁷ The net metering law, however, has purposes and benefits that extend beyond nurturing a fledgling industry, including many objectives that are not met solely by constructing utility-scale PV facilities. Distributed generation can ease system congestion and reduce the need for new transmission. Additionally, the NEM program benefits the local economy by facilitating the installation of residential solar PV systems. The HECO Companies undersell the value of the NEM program in their DGIP.

The HECO Companies also note that other states have recently passed laws that enable PUCs to address concerns about rate allocation inequalities stemming from the added costs of serving DG customers.⁸ The DGIP cites California's AB 327 as an example of legislative action granting the California PUC authority to reform net metering rates. That law, however, reflects a measured approach to NEM rate reform; it grandfathers customers with existing systems into the current rate structure for

⁴ H.R.S. 269-105.

⁵ H.R.S. 269-105 – 269-109.

⁶ HECO Companies, *Distributed Generation Integration Plan* (DGIP), filed August 26, 2014 at 6-9.

⁷ *Id.*

⁸ *DGIP* at 6-11.

the life of their systems (20 years) and opens a CPUC proceeding to determine a “NEM 2.0” model that ensures “that customer-sited renewable distributed generation continues to grow sustainably.”⁹ While California’s reforms open the door for the eventual retirement of the state’s net metering program, policymakers took pains to ensure that customers relying on the program will continue to receive those benefits in the long term.

III. The Hawaii PUC should avoid placing a cap on participation in the Net Energy Metering program that runs contrary to the Hawaii Clean Energy Initiative.

In lieu of legislative action to eliminate the net metering law, the HECO Companies propose that the PUC reinstate the NEM program cap “or otherwise obtain permission to close the NEM program to new customers.”¹⁰ The net metering law gives the PUC authority to cap net metering at a certain percentage of system peak demand.¹¹ However, in 2008, stakeholders—including the Governor of Hawaii, consumer advocates, and the HECO Companies—signed an energy agreement providing, among other things, that there should be no system-wide caps on net metering.¹² That energy agreement was incorporated into the Hawaii Clean Energy Initiative.

Even if the Hawaii PUC has the authority to reinstate caps on the NEM program, doing so would conflict with the energy agreement incorporated into the Hawaii Clean Energy Initiative, and thus would constitute bad policy on the part of the PUC.

IV. The hypothetical fixed charges put forward by the HECO companies would discourage energy conservation and may lead to grid defection.

In their PSIP, the HECO Companies discuss the bill impacts of hypothetical DG-PV reform, consisting of a fixed charge for all customers and an additional fixed charge for DG customers.¹³ Despite the Companies’ assertion that those charges are used for the purposes of illustration, the implications of establishing significant charges are potentially significant and should therefore be briefly discussed.¹⁴

Section 6 of the HECO Companies’ PSIP includes a discussion of “Residential Bill Impacts With DG-PV Reform.”¹⁵ In that discussion, the Companies assess the impacts of two hypothetical fixed charges: a \$55 per month fixed charge for all residential utility customers, and a \$16 per month fixed charge for DG customers.¹⁶ Fixed charges at those levels would have two notable impacts: 1) a substantial monthly fixed charge for all customers would reduce the economic incentive to conserve electricity; and 2) high fixed charges for DG customers would make grid defection more likely.

In the first instance, a fixed charge of \$55 per month for all customers would decrease the volumetric rate of electricity, resulting in less efficient use of electricity. When fixed charges represent a higher proportion

⁹ California Public Utilities Code § 2827.1 (West).

¹⁰ *DGIP* at 6-15.

¹¹ H.R.S. 269-104.

¹² See <http://energy.gov/savings/net-metering-9>.

¹³ *PSIP* at 6-3 – 6-7.

¹⁴ A more in-depth analysis of the implications of fixed charges should be conducted in the proceeding on DG tariffs, initiated by Order No. 32269 on August 21, 2014.

¹⁵ *PSIP* at 6-3.

¹⁶ *Id* at 6-4.

of the cost of electricity service, then the price per kilowatt-hour of electricity decreases proportionally. Fixed charges can obscure the price signals to the consumers to use less electricity.¹⁷

Second, high fixed monthly charges may make it economical for existing DG customers to defect from the grid. When DG customers are required to pay high fixed charges for utility backup service, DG customers may begin to realize an economic benefit from disconnecting from the grid entirely as the cost of battery storage comes down.¹⁸ As utility customers start to realize a benefit from defection, the potential for a “utility death spiral” scenario is magnified.¹⁹ Fixed charges should therefore be assessed both on the basis of whether they equitably allocate costs to all classes of consumers, and also on the basis of whether they are likely to result in a customer exodus from utility service. It is preferable to have DG customers paying some of the utilities’ revenue requirement than not paying any of it.

Fixed charges may have a role to play in Hawaii’s future rate structure, but the charges should be properly calculated to account for the system benefits that DG customers provide. Those benefits include the rate benefits to other utility customers discussed above, as well as avoided transmission and distribution costs, and environmental and societal benefits resulting from the use of carbon-free, clean resources. The PUC should take a measured approach in the future when addressing the issue of fixed charges to avoid incentivizing customer defection.

V. Conclusion

The Hawaii PUC should reject the portions of the HECO Companies’ PSIP and DGIP that propose to eliminate or cap the Net Energy Metering Program. The PUC lacks authority to eliminate net metering, and placing a cap on the program would contravene the energy agreement signed by stakeholders as part of the Hawaii Clean Energy Initiative. In addition, the Hawaii PUC should note the potential implications of approving high fixed charges as it addresses the issue in future proceedings.

Sincerely,

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¹⁷ National Action Plan for Energy Efficiency, *Customer Incentives for Energy Efficiency Through Electric and Natural Gas Rate Design* at 2 (2009), available at: www.epa.gov/eeactionplan.

¹⁸ See Rocky Mountain Institute, *The Economics of Grid Defection: When and Where Distributed Solar Generation Plus Storage Competes with Traditional Utility Service*, February 2014, available at: http://www.rmi.org/electricity_grid_defection.

¹⁹ See e.g., Bloomberg Businessweek, *Why the US Power Grid’s Days are Numbered*, August 22, 2013, available at: <http://www.businessweek.com/articles/2013-08-22/homegrown-green-energy-is-making-power-utilities-irrelevant>.