

**“PUC Reforms Energy Programs to Support Future Sustainable Growth in Hawaii Rooftop Solar Market”**

With a Decision and Order issued on October 12, 2015, the Hawaii PUC has established reforms through a collaborative process that will support further sustainable growth in the market for rooftop solar systems and other distributed energy resources (“DER”) desired by Hawaii’s residents and businesses.

Earlier energy programs and initiatives have been successful in moving the state towards 100% renewable energy. Today, the Hawaii market has reached a level of rooftop solar that far surpasses any state or utility in the US. The HECO Companies have the highest percentage of customers with rooftop solar in the United States and the highest installed capacity of rooftop solar relative to the size of each island grid.

With this success comes new issues and challenges. The energy industry is not static. Hawaii’s energy programs must evolve to address these challenges and, more importantly, to continue the momentum towards achieving the state’s policy goal of 100% renewable energy.

The reforms established in this Order will (1) promote rapid adoption of the next generation of solar PV and other distributed energy technologies, (2) encourage more competitive pricing of DER systems, (3) lower overall energy supply costs for all customers, and (4) help to manage each island grid’s scarce capacity. The Commission views distributed energy resources (including rooftop solar PV) as an important contributor to meeting the state’s 100% renewable energy goal, complemented by the recently enacted community-based renewable legislation and larger utility-scale projects.

The Phase 1 Decision and Order contains three major elements:

- Streamlines the interconnection process for customers by adopting new technical standards for advanced inverters and energy storage systems that utilize grid-supportive features. With the increasing levels of rooftop solar systems on each island, advanced grid-supportive features are required to support further growth while maintaining grid reliability.
- Caps the Net Energy Metering (NEM) program at existing levels, including current NEM customers and those with applications pending in the queue at time of this Order. Under this Order, current NEM customers are grandfathered and new customers with NEM applications submitted by 10/12/15 are unaffected. Future solar customers will sign up under the new customer options created by this Order. NEM has been an extraordinary success in Hawaii, but a transition away from NEM is essential to ensure all customers benefit from continued growth in distributed energy, not just those who have the ability to install solar PV or other forms of DER.
- Creates 3 new options for customers who wish to invest in rooftop solar and other distributed energy resources. These options are:

- “Self-Supply” systems – The Self-Supply option is for customers that primarily intend to consume all of the energy produced by their solar system onsite at their home or business, and do not need to export excess energy to the grid. These systems will typically be designed to use energy management and energy storage systems to balance onsite generation with demand. With these advanced features, self-supply systems have reduced technical impact on the grid and will receive expedited interconnection review. At this time, there is no cap on the number of Self-Supply systems that may be installed.
- “Grid-Supply” systems – The grid-supply option will allow customers to export excess energy to the grid as needed, and customers will receive energy credits on their monthly bills, similar to the NEM program. The Grid-Supply option does reduce the credit rate for energy exported to the grid for participating customers, and as a result, it will reduce the overall cost of each island’s renewable energy portfolio, which benefits all customers (including those who do not have the ability to install DER). The lower credit rate for energy exported to the grid reflects the Commission’s commitment to achieve an affordable, cost-effective energy supply for all customers. There is a cap on the total capacity of Grid-Supply systems to ensure each island grid can accommodate Grid-Supply systems, complemented by community-based renewable projects, and lower-cost utility-scale projects.
- “Time-of-Use” tariff – The Commission has also directed the HECO Companies to develop a new, expanded time-of-use tariff that allows customers to save money by shifting energy demand to the middle of the day to take advantage of lower-cost solar energy. Initially, this tariff will be available for any residential customers that opt-in to the program. By sending the right price signals to customers, customers can increase energy demand during times of high solar supply and alleviate some of the grid constraints to further renewable integration. This new tariff will also spur investment into new “smart home” and “smart business” technologies that can help customers take advantage of this program.

Phase 1 of this docket was focused on evolving from the programs developed more than 10 years ago to a re-designed, market-based structure for interconnecting new distributed resources. The parties to the docket worked together to propose new policies, and the Commission has approved many of their proposals.

Phase 2 of this docket will focus on further developing competitive markets for distributed energy resources, including storage. The priority is to enhance the value of DER by enabling systems to provide grid-supportive benefits.

The Commission will closely monitor the progress of the HECO Companies and KIUC as each utility moves toward 100% renewable energy and will take further action to ensure the state’s electric utilities continue to reduce costs to customers while ensuring the safety and reliability of each island grid.