When People Power Meets Electricity On The Big Island

NextEra Energy's proposed takeover of Hawaii's century-old utility has sparked a renewed effort to establish an electric utility co-op on Hawaii Island.

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At Hamakua Springs Country Farms on the Big Island earlier this year, rows of aging arched white awnings covered surprisingly barren soil along the dirt road that leads into the farm.

The awnings once sheltered about 20 acres of tomatoes that accounted for about half of all of the farm's production, owner Richard Ha says, and about 35 employees worked on tomato production.

But Ha and his family shut it down in November 2014. The reason: the cost of electricity needed to upgrade the tomato production process was too high. The average electricity rate on the Big Island in 2014 was about three and a half times times the national average. It just didn't make financial sense to grow tomatoes commercially because of volatile energy prices.

Like many in Hawaii, Ha has struggled with high energy costs and especially what the consequences are for family farms like his. Energy costs put Big Island farmers at a major competitive disadvantage when they try to sell their goods elsewhere.



Hawaii island farmer Richard Ha brought hydroelectric power to his property in an effort to cut down on exorbitant electricity costs.

Ha has been studying Hawaii electricity issues for years, including attending mainland oil industry conferences to better understand how oil price fluctuations affect electric costs in Hawaii, where most electricity is generated by burning fuel oil. Several years ago, he was part of a group called Kuokoa that hoped to take over Hawaiian Electric, an idea that fizzled.

More recently, he's been working with others in the community to try to secure less expensive energy prices to give struggling farmers a competitive boost as the Big Island brings more locally generated renewable energy sources online.

"Expensive renewables do nothing," Ha said. "Cheap energy is the whole thing."

So it's no surprise that when Florida-based NextEra Energy announced, just over a year ago, that it wanted to buy Hawaiian Electric, which became a company in 1891, Ha took a renewed interest in utility ownership and management.

Now, he's president of a new group — the Hawaii Island Energy Cooperative. The HIEC aims to empower residents by creating an electric utility whose shareholders would be the island's customers, a model put in place on Kauai more than a decade ago with the Kauai Island Utility Cooperative.

It's an intriguing concept, despite the fact that it's far from certain a co-op will ever take over the Big Island's electric utility, Hawaiian Electric Light Co. Too many details are still murky, including whether Hawaiian Electric would sell the HELCO and what the cost would be.

The people behind the Big Island co-op assert that its nonprofit model and its membership in a generationsold network of nearly 900 co-ops around the country place it in a position to better serve people's needs. They promise to produce electricity in a way that is more local-friendly, democratic, renewable and — perhaps most importantly — more affordable than shareholder-owned power companies like Hawaiian Electric and NextEra Energy.

Marco Mangelsdorf, a solar industry executive who is the director and spokesman for the Big Island energy coop, argues that a customer-owned utility led by a board elected by ratepayers would protect the people's interests better than a company like NextEra, that is based in Juno Beach, Florida, nearly 5,000 miles away.

"Our rallying cry," said Mangelsdorf, "is one (electric) meter, one vote."



Richard Ha, right, and Marco Mangelsdorf are leading efforts to form an electric utility co-op on the Big Island.

Creating A Cooperative

After the NextEra-Hawaiian Electric proposal was announced, Ha and Mangelsdorf arranged a meeting with people involved with the Kauai Island Utility Cooperative, which has overseen power generation and distribution on that island since 2002. Serving a population of about 70,000 people — which is a bit more than one-third of the population of the Big Island — the KIUC offers the only broad-based functional alternative to Hawaiian Electric in the islands.

HIEC has been discouraging the Public Utilities Commission from allowing the NextEra deal to go through.

Activists on the Big Island wanted to see if a similar model might be suitable there.

In the year since then, they have raised money to cover start-up costs for a cooperative, put together the legal framework for a Big Island co-op and convinced the Hawaii Public Utilities Commission to allow them to play an intervening role in the regulatory hearings that will decide the fate of NextEra's bid for the Hawaiian Electric companies, including HELCO.

Asked why the nascent HIEC sought intervening status in the hearing, Ha said it was "to make the case to the PUC that it should consider an alternate business model for ratepayers."

The best argument in favor of an electric co-op is "the pocketbook pitch," said Mangelsdorf.

"A co-op should be able to (deliver electricity) significantly cheaper compared to the investor-owned utility model," he added.

The idea is that a co-op offers financial benefits to customers that a for-profit, investor-owned utility that serves shareholders cannot.

The HIEC's financial advisor is investment banker Bill Collet, who calculated that the Big Island co-op should, in a four-year period, save customers \$113 million compared to the existing HELCO rate base.

And that savings, by his calculations, could jump to \$234 million if there are extensive efforts to modernize the Big Island's electric system.

His reasoning is that the nonprofit utility model facilitates access to low-cost borrowing through an array of lenders to cooperatives to pay for upkeep and upgrades, without needing to siphon off money to pay shareholders or income taxes.

The result, he concluded, is that the co-op model results in a 6 percent cost-of-capital difference when it spends the same money that shareholder-owned companies like Hawaiian Electric or NextEra do.

Collet has plenty of electricity co-op experience. He facilitated the \$215 million purchase of the Kauai Electric Co. by the nonprofit customer-owned KIUC 13 years ago.

He concluded that a nonprofit utility model would allow Hawaii Island customers to save nearly twice as much on their costs as NextEra promises to save ratepayers in the counties of Honolulu, Maui and the Big Island combined.

NextEra Says HIEC Analysis Is Flawed

NextEra doesn't buy Collet's financial analysis.

"While we can't speak to what a co-op would mean for a specific community in Hawaii, it appears that the analysis conducted by HIEC is incomplete and does not demonstrate that a co-op ownership model could deliver lower rates for Hawaii Island customers than an investor-owned utility ownership model," said Rob Gould, NextEra Energy's vice president of communications. "Expensive renewables do nothing. Cheap energy is the whole thing." — HIEC President Richard Ha

NextEra has pledged to produce a base-rate saving of \$60 million for its customers over the same four-year period. The company has repeatedly said it hopes to produce hundreds of millions of dollars in additional savings in the coming years, but there are no guarantees that it will succeed. NextEra executives readily acknowledge that an increase in oil prices risks erasing any savings they produce for customers as long as Hawaii remains hooked on fuel oil to generate a large amount of electricity.

Gould predicted that while some co-ops around the country have provided excellent service to their customers for many decades, "a new co-op in Hawaii would struggle to do the same" because it would not possess some critical attributes.

"Generating clean, affordable and reliable energy in Hawaii requires economies of scale, a deep bench of technical and managerial expertise, and an extremely strong balance sheet that provides financial stability and an ability to invest in new technology," Gould said.

The leadership of the Hawaii Island cooperative counters that they do have a deep nonprofit bench that includes a network of co-ops nationwide that allows them to boost buying power, learn from other co-ops' experiences with technology and deal with other complex issues.

That network of co-ops was made possible thanks to the Rural Electrification Act of 1936, which allowed for the founding of hundreds of co-ops that electrified large swaths of rural America — places private utilities ignored in their search for more profitable terrain with greater population density.

Co-ops have incentives to manage conservatively, Mangelsdorf noted. Hawaiian Electric companies earn a percentage based on what they invest; the nonprofit co-op model doesn't concern itself with profits at all. Co-ops have an incentive to invest when they foresee some benefit for shareholders, which is to say their customers.



The energy cooperative on Kauai oversaw the massive Anahola solar project.

This means they are less likely to spend on risky high-priced, cutting-edge technologies, Mangelsdorf and Ha suggested, but they can modernize in some cases far more efficiently than shareholder-owned companies.

Case in point: the KIUC has instituted a wide array of modernizing components — including the smart grid initiative that it completed two years ago for all customers willing to take part. For Hawaiian Electric customers, smart grids are still about five years off. NextEra promises to speed that process up by two years.

The KIUC has also managed to add utility-scale storage and utility-scale solar to Kauai's energy generation mix.

"They have walked their talk, and shown they can move faster and more nimbly," said Mangelsdorf.

The Question of Cost

Given a plethora of complicated and, in some cases, unknowable factors, it is difficult — if not impossible — to assess whether a co-op on the Big Island would ultimately produce electricity at rates cheaper than those delivered by Hawaiian Electric, or that NextEra might ultimately produce.

There are major elements that are not addressed in the Big Island co-op's estimates.

For one, it is unclear how much money the co-op might need to spend to purchase HELCO, which it would aim to do entirely with borrowed cash. Obtaining that money would involve servicing the debt over time, and customers would ultimately be on the hook for that — just as they are on the hook for Hawaiian Electric Light's investments now.

Financial markets have not established how much HELCO is worth and neither NextEra nor Hawaiian Electric seem to have placed a value on the Big Island utility.

Collet acknowledged that he couldn't do a broader projection that would incorporate what it will ultimately cost to buy HELCO or run the HIEC in the longer term because of the many uncertain factors.

"But I would say: Think about the interest-rate environment we are in. Our cost of capital is purely what we pay in debt. We don't have (to pay) a return on investment," he said.

So, given low interest rates, "what better time to buy it than now?"

That takes them back to one big problem: No one is selling. NextEra executives have repeatedly said they want to buy and hold onto all of Hawaiian Electric's electricity companies for a decade or perhaps far longer.

That helps to explain why the Big Island co-op has been discouraging the PUC from allowing the deal to go through.

If NextEra's acquisition effort falls apart, the co-op might find itself in a position to put in a competitive bid with Hawaiian Electric for HELCO.

"All we are doing is positioning ourselves," said Ha. "It is the Wayne Gretsky strategy; skate to where the puck is going to be, not where it is."