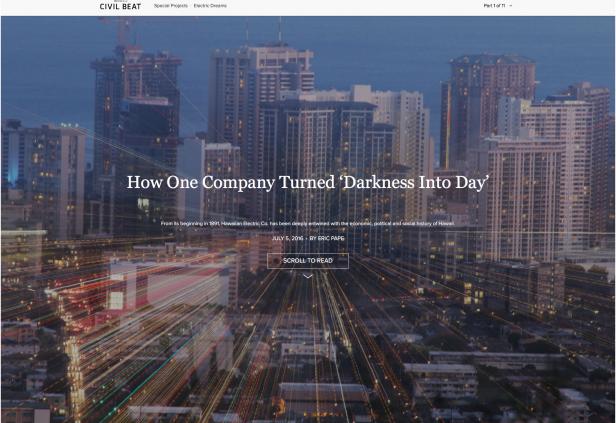
CIVIL BEAT Special Projects > Electric Dreams





On a long-ago summer night, thousands of people gathered on the grounds of Iolani Palace for what might be described as an illuminating tea party with David Kalakaua, Hawaii's last ruling



There was tea, coffee, ice cream, Hawaiian music, dance and high society in fine evening wear. But the real draw on the evening of July 21, 1886, was the simple spectacle of electric light that few locals had ever seen.

The 49-year-old king, who was fascinated by the potential of electricity, was something of an early adopter who had promised to bring electric light to Hawaii. Even the White House wouldn't have electric lights for years after Iolani Palace, in the middle of the Pacific Ocean, was electrified.

In 1881, during a trip around the world, Kalakaua had dropped in on Thomas Edison's "invention factory," a laboratory in New Jersey, to see if he could find a way to brighten Hawaii's future. It was less than two years after the inventor had come up with the incandescent light bulb.

As night fell on that July evening in 1886, a small steam engine located in the Honolulu Iron Works on Merchant Street successfully powered up cables that led to five lamps outside the palace. During the course of the night, the light around Palace Square drew a gawking crowd that the Honolulu Daily Bulletin put at more than 5,000. That amounted to one in every six people on the island.

It was, according to another news report in the Pacific Commercial Advertiser, a "soft but brilliant light which turned darkness into day."

Soon, the newspaper said, the Royal Hawaiian military band began playing, soldiers marched on the grounds and a tea party for children got underway, hosted by Princess Liliuokalani and Princess Likelike.

"The Palace was brightly illuminated, and the large crowd moving among the trees and tents made a pretty picture."

It wasn't the first time someone had used electricity for lighting in the islands. That had taken place at the plantation mill of sugar magnate Claus Spreckels on Maui in 1881. But the king's display in the heart of Honolulu in 1886 opened the way for the creation five years later of a new business enterprise that would be called the Hawaiian Electric Company Limited.

Now, 125 years later, Hawaiian Electric has grown into one of the most important and influential businesses in Hawaii.

It's long been essentially a monopoly that now generates and distributes electric power to every island but Kauai and tiny Nilhau. About 95 percent of Hawaii residents and businesses depend on the venerable electric utility to keep the lights on and the air conditioning running despite Hawaii's isolation in the middle of the Pacific Ocean.



Hawalian King David Kalakaua was a world traveler who brought many innovations and new ideas to the islands, including electric lights at Iolani Palace.

The history of HECO is in many

ways the history of Hawaii. The islands developed as HECO grew, the company's grid of electric lines and power generators steering the geographic development of communities and commercial districts.

The company's political power was arguably unrivaled for much of the last century. The same influential families who wrested control of the islands away from the Native Hawalian monarchy and established themselves as the dominant drivers of the economy also owned and operated the vital utility business.

Other iconic Hawaii companies that grew up alongside HECO in 20th century Hawaii have declined, transformed or been taken over by other owners. Hawaiian Electric is the largest survivor.

"I can think of other companies that have similar influence," says Hawaii's U.S Sen. Brian Schatz, "but not one that had more."



Like Honolulu, Fort Street has changed remarkably since the Hawaiian Electric Co. was founded. Notice early HECO street lights and power lines, as well as the streetcars that, as of the late 1920s, were energized by Hawaiian Electric. Historic photo courtesy JLB Press; Fort Street 2016 by Cory Lum/Civil Bead Stide the red arrow to the right for a journey through time.

For most of a century, Hawaiian Electric was in the hands of local owners, and it still is to a lesser degree. HECO's development and business decisions have long emanated from either the company's Richards Street headquarters — kitty-corner to lolani Palace — or, in more recent decades, from the offices of its umbrella company. Hawaiian Electric Industries.

But soon, Hawaiian Electric's local owners may well be replaced by mainland utility executives whose understanding of and tolerance for local culture would undoubtedly be overshadowed by their bottom lines.

Right now, it's Florida-based NextEra Energy that is in the spotlight. One of the largest power companies in the country, NextEra is looking to spend more than \$4 billion to take over Hawaiian Electric. It has been working to get the deal by regulators for more than a year and is now awaiting a decision by the Hawaii Public Utilities Commission as to whether the merger will be approved.

Regulators say that decision could come as soon as this week. Meanwhile, in what some see as a biatant political move, Gov. David Ige last week decided not to hold over Commissioner Mike Champley, whose term expired June 30, to see the NextEra decision through. Instead, Ige, who has consistently opposed the merger, installed the commission's staff attorney. Thomas Gorak, raising questions of whether the governor is trying to ensure the decision won't be favorable to NextEra

Still, if the utilities commission rejects the deal, or NextEra walks away, some predict it won't be too long before another buyer steps up. And that likely would be another big mainland utility operator. The latest speculation is that Warren Buffett's MidAmerican Energy Services may be interested.

Either way, change is coming. The company has little choice.

Policymakers, regulators and the utility itself agree on the need for a more modern, flexible, clean and, if possible, affordable power company, But practical questions abound about how that will happen, who will own the company, what its focus should be and who it will partner with to bring about the necessary change.

Interestingly, HECO's past is full of lessons for its future, as Civil Beat learned in reporting this special project that explores the economic, political and social life of a company that has had such an outsized influence on the people of Hawaii.

For this series, we interviewed dozens of current and former Hawaiian Electric executives and employees, business leaders, prominent politicians, administrators, energy experts and others. We searched through databases of old newspapers, scoured out-of-print or not-yet-published books and sorted through the company's early electricity ads, newsletters and video presentations. And we visited Oahu's aging power plants to glean some insight into this uniquely strategic company that is on the precipice of great change.



lolani Palace was the site of the first demonstrations of electricity on Oahu, including a birthday celebration for King David Kalakaua.

Illuminating Honolulu

The creation of Hawaiian Electric coincided with the last gasps of Hawaii's ruling royals. But history shows that it was far from coincidental.

Wealthy businessmen and landowners who were chafing under the authority of the monarchy were also eyeing the financial rewards of selling this new-fangled electric power to customers who were obviously enthralled with it.

The lighting of the palace in 1886 sparked dreams and questions about an innovative technology, a vision for the future not unlike the idea of achieving 100 percent renewable energy generation today.

"The little taste given," an editorial in the Honolulu Daily Bulletin noted, "has undoubtedly created the impression that the lighting of Honolulu by electricity is a desirable boon, but the question: 'Can we afford it at present?' is still in order."

By 1886, two mainland companies were competing to provide electricity in the islands, according to a history of Hawaiian Electric recounted in the 1980s by the company's then-President and CEO Dudley Pratt Jr.



Electric lights in the state dining room at Iolani Palace impressed visitors and locals alike in the late 1800s. The royal family entertained many foreign dignitaries in the ahead-of-its time

The Thomson-Houston Electric Co., which would later become General Electric, put on the July 21 spectacle at the palace. A competitor, Brush Electric Co., had illuminated King Kalakua's more spectacular 50th birthday bash in November of that same year.

Both were vying to provide street lighting in Honolulu and they worked hard to get the approval of the Legislative Assembly of Hawaii for their projects. Both were rejected — the government decided to oversee electricity production for electric streetlights downtown liself

So, on Dec. 8, 1886, King Kalakaua and a handful of key government and administrative officials trudged up Nuuanu Valley about 2 ½ miles from Merchant Street. Their goal was to see if it was feasible to use the stream there to generate electricity and they hoped that renewable energy source would be cheaper than importing coal, according to "Hawaii: The Electric Century," a book by Carl Myatt.

It took two more years, but on the evening of March 23, 1888, Princess Kaiulani turned on the hydropower-driven Nuuanu Government Electric Light Station, lighting up electric street lamps in Honolulu for the first time.

The water supply for much of the city passed through the bottom floor of a two-story building in the Nuuanu Valley that housed the power plant. Initially, it delivered electricity to 57 Jamps.

Given HECO's long dependence on foreign oil to power its generators, it's worth noting that the first illumination of a truly public space in Hawaii's largest city came from a renewable source.

While that might inspire renewable energy activists, it's also true that the river that powered the plant could provide only intermittent energy, the same challenge utilities face with wind and solar power today. In times of drought when the water level was low, the plant couldn't generate enough electricity for all of those lamps. And when there were problems at the plant — as when a couple of buckets were dislodged by the force of the stream, damaging the waterwheel — there was no power at all.



The old Hawaiian Electric building is located across the street from Iolani Palace in downtown Hoppinius

Still, within another two years, the Nuuanu Valley plant was providing electricity to lamps in 797 homes, as well as to some businesses and other establishments. At the time, Honolulu had about 30,000 residents, so electricity remained a fairly elite product.

The Ultimate Power Play

No one knew the exact ways electricity would penetrate island society but the potential seemed limitless. Shrewd businessmen including equipment providers began working to establish footholds in Honolulu. Privately owned generators were being installed in some homes and on plantations.

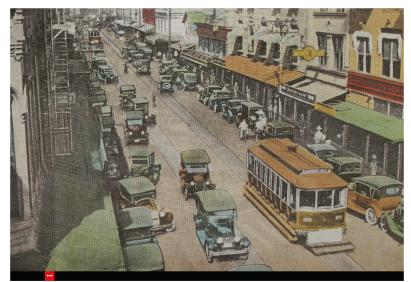
At the same time, the seeds of revolution were being planted largely by businessmen, including some from the United States or their locally born children, who sought to strip powers from the constitutional monarch so that they could more freely expand their own interests.

In 1887, an armed revolt ended with what has come to be known as the Bayonet Constitution. King Kalakaua was coerced into signing a document requiring substantial land ownership in order to vote, thereby excluding many Native Hawailans.

Every male resident of the islands "of Hawaiian, American or European birth or descent" could vote as long as he had been in the Islands at least three years, was at least 21 years of age and had paid taxes, according to Article 59 of the document. That meant that men from Asia (and all women) could not vote.

The overall impact was a marked shift in the balance of electoral power away from Native Hawaiians and toward the white elite.

The monarchy was reduced to little more than a figurehead.



King Street, shown here around 1930, hasn't just transformed over the last 125 years, it has also been a home base for Hawaiian Electric. The company opened an office on King Street around 1901, in a building adjacent to the company's current headquarters. (Historic photo courtesy of JLB Press; King Street 2016 by Cory Lum/Civil Beat)

In late 1891, the same year King Kalakaua died of a stroke while on a trip to San Francisco, the Hawaiian Electric Co. was incorporated with assets of \$17,000. That included the lease for a dozen years of a one-story brick building where the company had a small generator on King Street near Alakea Street.

Early on, the company installed lights for free and customers paid for the electricity on a per-lamp basis. In the beginning, it cost 1 cent per light per hour, but HECO realized it was losing money — and, likely, installing lamps for people who skimped on electricity consumption. The new company quickly raised its rates.

By mid-January 1892, Hawaiian Electric was charging 50 cents per light each month and another 20 cents for every 1,000 watts used.

The electric company grew out of a partnership of four men including William Hall, the scion of a prominent missionary-turned-merchant family.

Hall, who became the first president of HECO, was, by his own account as <u>cited in</u> the <u>Honolulu Daily Bulletin</u>, deeply involved in the armed revolt that gutted the monarchy while King Kalakaua was still in the palace.

He bragged about his role in supplying rifles to the militia and he was a member of the well-armed Committee of Thirteen that gave King Kalakaua the ultimatum to abdicate or greatly reduce his own power.

"We committeemen filed into the palace," Hall <u>later told the Daily Bulletin</u>, "and found the King at his desk in one of the rooms. He was pretty well frightened and extremely conciliatory."

"The spokesman said "Your Majesty will be given twenty-four hours within which to make an answer; if there is none by that time it will be considered a negative one."

Hall said that as the Committee of Thirteen, which represented about 500 members, nearly all white, filed out. "We felt no uneasiness, because all the reputable people of Honolulu were with us."

Hall and his partners continued to take advantage of a weakened monarchy while developing their burgeoning business.

In January 1893, Queen Liliuokalani, who had ascended to the throne after Kalakaua's death, signed a law passed by the Legislative Assembly that gave the government the power to sell an exclusive 10-year franchise to a company to provide electric light and power in Honolulu.

The franchise came with regulations on the electricity supplier, including limiting how much the winning bidder could charge and requirements to submit information that could be audited by authorities. Unquestionably, the franchise also gave an insurmountable head start to the electric company that obtained it.

The groundwork for what would be a 125-year monopoly was being laid in the shadow of a momentous change to the very fabric of Hawaii.

Two days after the utility deal was announced, the queen declared that she had written a new constitution for Hawaii that would restore many voting rights for Native Hawaiians and reenergize the power of the throne.

Three days later, a coterie of wealthy and overwhelmingly white businessman — including some connected to Hawaiian Electric — responded by overthrowing the royal family and declaring martial law to consolidate their power.



Hawaiian Queen Liliuokalani agreed to grant a franchise for electric generation to a local company. A few days later, the monarchy was overthrown by a group of men that included Hawaiian Electric

Backed by powerful friends in Congress, the businessmen put in place a provisional government that would later help bring about Hawaii's annexation by the United States. Hall was a quartermaster in the National Guard of Hawaii, whose role was, in part, to make sure there was no uprising against the new government.

The situation proved favorable for the locally owned Hawaiian Electric. When the time came to bid for the 10-year franchise to provide electricity in Honolulu, Hall made his pitch on the steps of Aliiolani Hale. There were no other bids.

The Beginning Of A Bright Future

The company, which had initially sold 145 shares to bring in \$20,000, grew guickly.

Such funds went far in those days. The coal-fired boilers at the company's early Alakea power plant were stocked and cleaned by employees who earned \$1 for their 12-hour days, according to "Hawaii: The Electric Century."

In 1893, the year of the queen's overthrow, Hawaiian Electric's capitalization leapt to \$150,000. As part of the franchise agreement, HECO was required to pay 2.5 percent of its gross earnings to the government and provide electricity, on request, to every home or business in Honolulu capable of paying for it.

The new company took out a newspaper advertisement that included grainy photos of its switchboard, small generators and the outside of the Alakea power plant, then at the corner of Halekauwila and Alakea streets and which now houses the Honolulu power plant.



William W. Hall, the first president of the Hawalian Electric Co., was the scion of a prominent missionary family. His body was laid to rest in Oahu Cemetery.

"The company was incorporated under a franchise from the Hawalian Government, and are prepared to furnish electricity for lighting or power, in any quantity," the ad pledged.

By 1894, with an eye on the profitable future, Hawaiian Electric's stockholders were pushing to expand service far beyond what is now downtown

Honolulu, with delivery to homes in Waikiki. But it took three years before a power line was running through the swamps, taro patches and rice fields to get there.

By then, electricity reached to the homes of the elite, including houses at Punahou and a Washington Place mansion that later became the governor's residence.

By 1897 Hawaiian Electric had raised \$350,000 through stock sales.

 $\ensuremath{\mathsf{HECO}}$ was benefiting from the convergence of factors and forces. In that first decade of its existence, the population of Oahu soared 87 percent, to nearly 60,000, with nearly 40,000 in the city of Honolulu.

A fast-growing city meant more people, more homes that would need electricity and more wealth to buy it. And that required more HECO power lines to shape the development of the island.

After a decade in which Hawaii's royalty had been transformed into a relic of history, it was clear that Hawaiian Electric's future looked bright.

Next in the series: Hawaiian Electric gets a great deal from new friends in Congress.



About the Author

Eric Pape

CIVIL BEAT STAFF

Fire Page is the special projects and innovations editor for Civil Beat. He's written extensively for Newsweek magazine, the Los Angeles Times, Foreign Policy and Spin magazine. He has also contributed to The New York Times, The Guardian, Mother Jones, Solon, Slate and Vibe magazine. You can reach him by email at epape@civilbeat.com or follow him on Twitter at @cricpape.

Use the RSS feed to subscribe to Eric Pape's posts today