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TESTIMONY OF LEODOLOFF R. ASUNCION, JR. CHAIR OF THE HAWAII PUBLIC UTILITIES COMMISSION BEFORE THE HOUSE ENERGY & COMMERCE OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE HEARING: "INVESTIGATING THE ROLE OF ELECTRIC INFRASTRUCTURE IN THE CATASTROPHIC MAUI FIRE"

September 28, 2023

Dear Chairwoman Rodgers, Chairman Duncan, and Chairman Griffith:

On behalf of the Hawaii Public Utilities Commission ("Commission" or "PUC"), I wish to express our appreciation for the outpouring of support for our communities in the wake of this tragedy. We appreciate this Committee's focus on this issue and the opportunity to speak with you, as addressing the increasing number and magnitude of natural disasters requires unprecedented levels of collaborative action. We are still grappling with the devastation of this tragedy and our hearts remain with all of the victims and their loved ones. These communities have been irreversibly impacted and we intend to maintain our focus on supporting them as the months and years go by.

In this Statement, the Commission wishes to share with the Committee its perspective on the following topics:

1. The Commission's role and jurisdiction to regulate Hawaii's electric utilities, particularly as it relates to natural disaster preparedness, safety, reliability, and resilience.
2. The Commission's priorities in responding to the August wildfires, that include:
    - Addressing immediate needs;
    - Preventing future catastrophic events;
    - Ensuring reliable, safe, clean, and affordable energy services; and
    - Protecting ratepayers by utilizing investigative findings to guide potential restorative actions.
3. The Commission's activities to mitigate the risk of wildfires that might be caused by or impact the electrical grid.

The Commission looks forward to answering any questions about these and other topics during this hearing, as well as collaborating on an ongoing basis to ensure events like the Maui wildfires never occur again. The Commission addresses the identified topics in turn below.

1. The Commission's role and jurisdiction to regulate Hawaii's electric utilities, particularly as it relates to natural disaster preparedness, safety, reliability, and resilience.

The PUC regulates 1,845 entities in Hawaii, including public utilities that provide electricity, gas, telecommunications, private water and wastewater services, and motor and water carrier transportation services. In addition to Hawaiian Electric, the Commission regulates the member-owned electric cooperative on Kauai, Kauai Island Utility Cooperative (KIUC), the only other electric utility in Hawaii. We are tasked with reviewing and approving rates, determining allowable rate of earnings, acting on requests for sales, acquisitions, mergers, and consolidations, and issuing guidelines regarding general utility management, among many other responsibilities. The PUC is comprised of three Commissioners, appointed by the Governor to serve staggered six-year terms, and one of whom is designated by the Governor to serve as the Chair. The PUC also has about 55 staff members that work in our Office of Policy & Research, Office of Commission Counsel, Consumer Affairs and Compliance Division, Engineering Section, Audit Section, as well as in a variety of administrative roles. As a regulatory body, the Commission has statutory authority to investigate utilities, both generally and in response to incidents, and to set regulatory policy for utilities to meet State and Commission objectives.

Although the PUC itself does not operate or maintain any electrical infrastructure, the Commission employs a proactive approach to ensure that Hawaiian Electric is mitigating risk and preparing to respond to natural disasters. Prior to 2021, Hawaiian Electric was governed by traditional cost-of-service ratemaking, in which the Commission approved rates based on a comprehensive review of the Company's programs and costs necessary to meet its service obligations. In 2020, the Commission established a Performance-Based Regulation (PBR) Framework for Hawaiian Electric, which took effect in 2021. This consists of a set of alternative regulatory mechanisms intended to focus utilities on performance with respect to desired outcomes and objectives established by the Commission, such as reliability, resilience, affordability, and improved customer service. The PBR Framework allows Hawaiian Electric flexibility to manage its funds in the manner it feels will best meet outlined objectives, with stringent oversight mechanisms, such as robust reporting and tracking requirements, that allow the Commission to assess whether both the PBR Framework and the utility are functioning as intended. For example,

Hawaiian Electric is subject to a performance incentive mechanism that penalizes poor reliability. Additionally, the Commission tracks the utility's safety performance for public and company-related safety incidents, the utility's training and certifications for emergency preparedness, and many other metrics. The Commission also sets safety standards for electrical infrastructure, ensuring alignment with industry best practices, reviews the utility's safety and restoration plans, monitors a robust set of metrics and data, and takes corrective actions as it deems necessary.

2. The Commission's priorities in responding to the August wildfires:

A. **Addressing Immediate Needs**

Because the Commission is a public-service agency, our immediate and ongoing priority is supporting victims and community members that have been irreversibly impacted by this tragedy. When the wildfires hit, we took immediate action to bolster the State's and utilities' emergency response, including: (1) participating in the State's energy sector "Emergency Support Functions" to help solve immediate logistical and resource issues; (2) suspending tariff provisions to allow the transfer of goods and materials via ship between islands; and (3) communicating frequently with the utilities we regulate (beyond Hawaiian Electric) to understand their needs and promote the safe restoration and/or continued provision of services during the emergency. The Commission also suspended customer disconnections across all Maui utilities on August 31, 2023, to ensure that customers do not lose access to critical services during this uncertain time. These efforts are part of our near-term focus on supporting safe and efficient service restoration of affected areas, while our activities in the longer-term will eventually turn to rebuilding the electrical grid and other infrastructure in a way that reflects community priorities and state of the art resilient infrastructure.

Beyond emergency actions, our activities in response to the August wildfires center around continuing to push forward major regulatory objectives for Hawaiian Electric, which have been vetted through a robust stakeholder process. The guiding principles that govern the Commission's regulation of Hawaiian Electric include: 1) A Customer-centric Approach; 2) Administrative Efficiency; and 3) Utility Financial Integrity. Those principles have informed the Commission's three major priorities beyond addressing immediate needs in responding to the wildfires, which I will further discuss now:

B. **Preventing future catastrophic events.**

The devastation of the August wildfires should never happen again. In thinking about this priority, the Commission aims to ensure to the greatest extent possible that electric utility operations, infrastructure, and equipment in Hawaii are safe, reliable, and resilient to natural disasters such as wildfires, hurricanes, and flooding. We are working with the utilities to take immediate actions to meet this objective, such as by identifying and implementing any necessary changes to operational protocols on Red Flag Warning days, and reviewing the utilities' approach to determining whether powerlines should be built above or below ground. Preventing future events will also require thoughtful research, thorough investigations, strategic planning, and engagement with key stakeholders. For example, as we gain a better understanding of why the fires ignited, we will evaluate whether changes to utility operations, infrastructure, or equipment could have prevented such ignition.

While resilience planning work has been ongoing for many years at the Commission, at Hawaiian Electric, and at the Hawaii State Energy Office (HSEO), the urgency and importance of that work has never been clearer. We are committed to analyzing the likely effectiveness and customer impacts associated with Hawaiian Electric's proposed Climate Adaptation Transmission and Distribution Project ("T&D Resilience Project", filed on June 30, 2022) as expeditiously as possible, both to support potential receipt of Federal funds to reduce the costs for Hawaii's residents, and to ensure that approved work will start quickly. We also know from years of work with a broad coalition of stakeholders on resilience planning for the electric sector that the T&D Resilience Project is a foundational effort on which we can continue to layer additional work. It is important, however, that the Commission continue to emphasize customer-centricity and remember throughout this critical effort that many families in Hawaii already struggle to pay their electric bills. On Maui, the average monthly residential electric bill was approximately $216.00 in 2022, the biggest portion of which is fossil fuels, making up about half the bill.[1] Maui's residential

[1] See: https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/energy-cost-filings/maui-energy-cost-filings.

electricity cost $0.43/kWh in 2022, nearly three times the national average.[2] The Commission has sought to balance the interconnected and critical priorities of affordability, reliability, energy independence, and resilience in our decision-making and will continue to do so. We take the challenge of striking that balance seriously and understand its importance to our state, particularly in light of recent events.

C. **Ensuring reliable, safe, clean, and affordable energy services.**

Hawaiian Electric, with oversight from the Commission, has a basic obligation to ensure that Hawaii's residents have access to safe and reliable electric service. When the Commission established guiding regulatory principles for Hawaiian Electric, it stated that, "the financial integrity of the utility is essential to its basic obligation to provide safe and reliable electric service for its customers."[3] Ultimately, the Commission understands the relationship between the utility's financial integrity and its ability to provide the ongoing maintenance and upgrades that are critical to a safe and resilient electrical grid. A financially stable utility also supports lower rates for customers by allowing the utility to attract low-cost capital. Following the catastrophic fires, we have encouraged all utilities in the State to seek funds that can support recovery without placing additional strain on customers. We are also carefully monitoring the evolving landscape and considering what measures are necessary to keep the lights on for Hawaii customers affordably and safely.

The Commission views reliability, affordability, and energy independence as interconnected and parallel goals. As the State has transitioned to higher levels of renewable energy, system reliability has remained relatively stable.[4] Based on our experience to date, most outages are attributable to activity on the transmission and distribution system, not due to any reliability differences between renewable and fossil generation.[5] Additionally, renewable energy reduces the State's reliance on volatile fossil fuels that make

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[2]United States Energy Information Administration (EIA), "Today in Energy; U.S. residential electricity bills increased 5% in 2022, after adjusting for inflation", May 31, 2023. See also, https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/average-price-of-electricity.

[3]See: Docket No. 2018-0088, Decision and Order No. 36326, filed May 23, 2019.

[4]See: Historical System Average Interruption Duration Index ("SAIDI") data provided at: https://www.hawaiianelectric.com/about-us/performance-scorecards-and-metrics/service-reliability.

[5]See: https://puc.hawaii.gov/reports/energy-reports/service-quality-reliability-annual-reports/.

up the bulk of customers' bills, as noted above. Transitioning to clean energy increases the State's energy independence, supports reductions in customer bills, and reduces exposure to fossil fuel market risks. These investments are critical to meeting policy objectives established by the State largely in furtherance of Hawaii's energy independence, and do not come at the cost of reliability or resilience. The renewable energy that plays an increasingly large role in powering Hawaii's grid provides critical reliability and resilience services, such as fast frequency response, black start, grid forming capabilities, and other services that keep the grid online and in balance. Microgrids that are served by on-site renewable energy and storage can reduce vulnerabilities to interruptions on the transmission and distribution system, keep the lights on for critical buildings or communities via islanding services, and help manage the larger grid's requirement of responsive demand and generation. As the Commission moves forward from this disaster, the resilience capabilities that renewable energy and technologies like microgrids can provide are even more critical, and we are committed to evaluating these options when rebuilding.

D. **Protecting ratepayers by utilizing investigative findings to guide potential restorative actions.**

In addition to an unimaginable human and emotional toll, customers are already bearing an immense financial impact from these events. We are committed to utilizing the Commission's tools to minimize such impacts. Consistent with our regulatory principle of administrative efficiency, the most appropriate and effective action in furtherance of this objective is to dedicate Commission staff to engage in and support external investigations of the events surrounding the August wildfires. Commission staff with expertise on grid engineering, planning, and system operations are providing ongoing assistance to the lead investigators. This allows the agencies and entities with the most expertise in investigating the root cause of this event to take the lead without duplication of efforts. As the situation evolves, the Commission will continue to assess the best approach to meeting this objective and will adjust its approach, if necessary, as it gains more information.

3. <u>The Commission's activities to mitigate wildfires that might be caused by or impact the electrical grid.</u>

The Commission has consistently emphasized the importance of the electric system's resilience and has proactively developed and used the tools at its disposal to ensure performance. As early as 2014, the Commission focused more acutely on how its regulatory policy can align Hawaiian Electric's business model with the public interest. At that time, the Commission offered its priorities for doing so, including, in relevant part, modernizing the transmission and distribution grids, implementing microgrids to improve critical infrastructure resilience, and improving energy independence.[6]

In 2018, the Commission's and Hawaiian Electric's focus turned more explicitly to planning for natural disasters and hazards. The Commission opened two major proceedings in 2018 that included resilience as a foundational principle. One proceeding determined the structure of the PBR Framework, discussed above, and the other proceeding addressed plans for a reliable, affordable, and energy-independent grid of the future via an Integrated Grid Planning ("IGP") process. In the PBR Framework, the Commission identified resilience as an emergent and priority regulatory outcome to guide Hawaiian Electric's operations. In doing so, the Commission took a broad view of the term resilience, defining it as "the ability of a system or its components to adapt to changing conditions, as well as withstand and rapidly recover from disruptions."[7] The Commission also identified some of the key mechanisms that it would use to induce resilience improvements, such as via robust grid planning.

Throughout 2019 and 2020, the Commission participated in a series of workshops on resilience planning in the IGP proceeding, via what was termed the Resilience Working Group ("RWG"). The RWG includes representatives from a broad coalition of key stakeholders from industry and government. It worked to identify and prioritize threats to the electric system, identify resilience gaps, and provide recommendations for actions and priorities to improve outcomes. The RWG produced a robust report that has served as a foundation for Hawaiian Electric's ongoing grid hardening activities and its proposed T&D Resilience Project.

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[6]See: Docket No. 2012-0036, Decision and Order No. 32502, Exhibit A: "Commission's Inclinations on the Future of Hawaii's Electric Utilities", filed April 28, 2014.

[7]See: Docket No. 2018-0088, "Staff Proposal for Updated Performance-Based Regulations", filed February 7, 2019.

In its oversight role, the Commission has continuously sought information regarding the policies, procedures, and activities of the utility related to wildfire and natural disaster mitigation and response. These inquiries have led the Commission to press the utility on its performance on resilience, as noted by Hawaiian Electric in its T&D Resilience project application.[8] Presently, the Commission is focused on reviewing the T&D Resilience Project, which proposes an important package of technologies, practices, and planning techniques to improve system resilience.

On a statewide level, the PUC recently provided input on the Hawaii State Energy Office's draft energy sector hazard mitigation strategies for Oahu, which will be expanded statewide. The PUC is identified as a lead implementer on one strategy (developing resilience metrics) and support on another (implementing grid modernization strategies). The PUC has also partnered with emergency support agencies at the State and national level by supporting review of the State's Emergency Operations Plan and participating in trainings and exercises on disaster response and support. These are just a few pieces of a rapidly evolving hazard and regulatory landscape. The Commission continues to be focused on issues of disaster mitigation and response, and it remains steadfastly committed to preventing anything of this nature from happening again.

Once again, the Commission thanks the Committee for its attention to this matter and looks forward to further discussion and collaboration.

[8]See: Docket No. 2022-0135, Application for Approval to Commit Funds in Excess of $2,500,000 for Climate Adaptation Transmission and Distribution Resilience Program and to Recover Costs through the Exceptional Project Recovery Mechanism," filed June 30, 2022, at 18., quoting then PUC Chair Jay Griffin as stating, "[w]hen we talk about . . . increasing frequency and intensity of these storms in the future, I think the public expects us to be creating a system that will be more resilient to [extreme weather] . . . This was an extreme event and we're expecting more of those . . . We've got to do better . . . We need to have answers we can take back to the public [regarding] how we're responding to these events."