OBJECTIVE AND SIGNIFICANCE: The Hawaiian Electric Company (HECO) under guidance from the Hawai‘i Public Utilities Commission (PUC) has initiated the Integrated Grid Planning (IGP) process to determine the types of resources and grid services the utility should invest in over the coming years. A Technical Advisory Panel (TAP) has been established to provide a third-party, technical, and unbiased review of HECO’s modeling efforts to ensure it implements best practices and novel techniques being used in other regions. HNEI is currently chairing the TAP, which consists of experts from around the country. HNEI’s role as chair is in support of the PUC in response to their request for HNEI to provide leadership in this activity.

KEY RESULTS: HNEI’s involvement in the IGP and its leadership role in the TAP ensures that HECO will be able to move forward in addressing grid issues related to increasing amounts of renewable energy, which combines both distributed, behind-the-meter generation, and utility-scale projects. Thus, in addressing the IGP docket, HECO receives independent and technical oversight from outside experts. This helps ensure that the utility is using industry-accepted methods, inputs, and assumptions.

Following an initial period in which the progress of the IGP did not fully meet expectations, HNEI was requested to assume an expanded role in supporting the IGP initiative. This increased support has included re-constituting the TAP membership, working with HECO staff to revise their approach for TAP meetings, and assistance in the review of presentation materials to ensure that meetings are as effective as possible. In addition, due to issues that have arisen in Working Groups and with the Stakeholder Council (Figure 1), HNEI has also taken an expanded role in its participation in these activities.

This approach has been confirmed by the PUC request to HECO for the TAP to play a more substantive role in advising HECO as it moves forward with its integrated grid planning activities. This approach was confirmed in a May 2020 letter from HECO to the PUC.

BACKGROUND: By Order No. 35569, issued on July 12, 2018, the PUC opened the instant docket to investigate the IGP process. Pursuant to Order No. 35569, the Companies filed their IGP Workplan on December 14, 2018. The Workplan described the major steps of the Companies’ proposed IGP process, timelines, and the methods the Companies intend to employ, including various Working Groups. On March 14, 2019, the PUC issued Order No. 36218, which accepted the Workplan and provided the Companies with guidance on its implementation.

Based on direction from PUC Order No. 36725, Providing Guidance on the IGP, HNEI has taken a leadership role in the IGP’s TAP, which is currently made up of industry experts from the United States. Through its November IGP Commission Guidance, the PUC noted that, “[f]or the stakeholder process outlined in the Workplan to effectively serve as a replacement for independent evaluation, the Technical Advisory Panel would have to take an active role in analyzing, evaluating, and providing public feedback on Working Group activities and Review Point filings.” The PUC continued by stating its expectation that the Companies “use the Technical
Advisory Panel to provide independent review of each Review Point filing that the Companies will file.” While noting this more substantive approach, the TAP is an independent advisory group and is not a decision-making body, but provides input and advice on the methods and processes that the Companies use to perform such work.

**PROJECT STATUS/RESULTS:** HNEI’s role as the TAP Chair is an ongoing process that is intended to continue throughout the IGP process. This includes regular discussions with the HECO planning team, meetings with the TAP members, and expanded engagement in HECO’s technical working groups. Due to difficulties in ensuring the proper feedback in developing questions for the TAP to address, the PUC developed additional requests (and the utility has accepted and moved on those requests) to have HNEI play a more substantive role in obtaining additional outside experts. Further, this PUC directive allows for HNEI to play a more effective role in assisting HECO in properly formulating questions and agendas for TAP meetings.

On May 27, 2020, HECO responded to the PUC in a lengthy letter that covered a number of topics. One substantive topic was to acknowledge the expanded role of HNEI in leading the TAP and assisting the company in better preparation for meetings. As seen in Figure 3, there have been delays in meeting the original timelines. This has been due to a variety of factors, one of which is the impact of COVID-19.

As a result of these PUC requests, HNEI increased its interaction with the HECO planning staff to review the status and direction of the IGP process. As part of this process, HNEI also helps create consolidated reporting to better share IGP results with TAP members who may not be aware of Hawai‘i-specific events, trends, or challenges. Finally, HNEI and their contractor Telos Energy, has become more actively engaged in other parts of the IGP stakeholder process, including the Stakeholder Committee and Technical Working Groups. This allows selected TAP members, who are also more involved in these meetings, to have insight and visibility into the complete stakeholder process, without burdening the full TAP membership.

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**IGP Workplan & Schedule**

*Figure 3. Process flow diagram for IGP.*