

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
The Public Utilities Commission ) Docket No. 2018-0165  
Instituting a Proceeding to Investigate )  
Grid Planning )  
\_\_\_\_\_ )

LIFE OF THE LAND'S  
COMMENTS ON HECO COMPANIES IGP REPORT

and

CERTIFICATE OF SERVICE

HENRY CURTIS  
VICE PRESIDENT FOR CONSUMER ISSUES  
LIFE OF THE LAND  
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Aloha Commissioners and Commission Staff,

The Hawaii Public Utilities Commission (“Commission”) identified four phases of utility resource planning: Electricity Resource Planning (“ERP”) dating from PURPA in 1978, Integrated Resource Planning (“IRP”) started in 1990, Power Supply Improvement Planning (“PSIP”) starting in 2013 and Integrated Grid Planning which started in 2017 and is ongoing.

The Hawaiian Electric Companies (“HECO Companies”) published their Draft Report “Modernizing Hawai‘i’s Grid for Our Customers” (June 2017)<sup>1</sup>, and the “Integrated Grid Planning Report” (March 2018).<sup>2</sup> These introductory works focus on the grid planning and resource procurement processes.<sup>3</sup> Life of the Land’s Comments are made in accordance with Commission directives.<sup>4</sup>

The reports were process-heavy, substance-light, with little to no information on load defection (replacing grid load with on-site generation), customer defection (disconnecting from the grid), non-transmission alternatives, microgrids, environmental impacts, greenhouse gas emissions, climate change adaptation and mitigation, managed retreat, data access, black boxes, physical and cyber-attacks, hacking, and other critical substantive issues.

The HECO Companies established (1) a broad, multi-island IGP Stakeholder Council, (2) Black Box Working Groups to develop forecasts, assumptions, sensitivity analysis, proposals to streamline and standardize processes to result in regulatory and market barrier reductions, (3) a Black Box Technical Advisory Panel, and (4) as a result of a DOE Workshop held at the Commission office in early October 2018, discussions around establishing HECO/Commission Data Access/Security Workshops or a Working Group.

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<sup>1</sup> [https://www.hawaiianelectric.com/Documents/about\\_us/investing\\_in\\_the\\_future/grid\\_modernization\\_strategy\\_draft.pdf](https://www.hawaiianelectric.com/Documents/about_us/investing_in_the_future/grid_modernization_strategy_draft.pdf)

<sup>2</sup> [https://www.hawaiianelectric.com/Documents/about\\_us/our\\_commitment/20180301\\_IGP\\_final\\_report.pdf](https://www.hawaiianelectric.com/Documents/about_us/our_commitment/20180301_IGP_final_report.pdf)

<sup>3</sup> <https://www.hawaiianelectric.com/about-us/our-commitment/investing-in-the-future/integrated-grid-planning>

<sup>4</sup> Comments should be addressed to the attention of the commission and clearly state that they are being filed in Docket No. 2018-0165 to address the Companies' Integrated Grid Planning Report. Comments may be filed with the commission by October 15, 2018. Comments may be submitted as follows by email: Hawaii PUC@hawaii.gov [] With respect to public comments, the commission is not requiring the submission of hard copies of documents that are submitted electronically. [] Comments submitted via email should include the following in the subject line: "Docket No. 2018-0165 IGP Report [Filer Name]." (Commission Order 35569, dated July 12, 2018, Docket No. 2018-0165)

Commented [HC1]:

The Commission directed the HECO Companies to file a comprehensive IGP Workplan on December 14, 2018 to include stakeholder feedback, and timing and scope of major activities planned. Hopefully this will place some meat on the bone.

This proceeding, along with the Distributed Energy Resources (“DER”) (docket no. 2014-0192), and Performance-Based Ratemaking (docket no. 2018-0188) are likely the backbone proceedings for the next decade. How they interact as each advances is key and should be included in the analysis for each proceeding.

Life of the Land believes that Net Energy Metering (“NEM”) was key to transforming public opinion, and that DER combined with storage, energy efficiency, and Demand Response (“DR”) will eliminate any doubt about the value of DER, and any possible belief that rooftop solar cross-subsidies exist. Technological advances almost always require subsidies to beat back resistance from subsidized business-as-usual operations.

Climate change is undoubtably a major issue to be reckoned with. It is crucial that artificial boundaries not be used to smother lower climate impact choices by higher climate impact choices. Full life cycle analysis is paramount. The IGP regulatory proceeding must explicitly state how it interfaces with necessary greenhouse gas reduction efforts.

The Commission’s forward thinking must extend to all aspects of utility regulation. Afterall, HECO Company emissions are only part of Hawai`i emissions.

Life of the Land looks forward to a healthy discussion of all aspects of the HECO Company plan. Meaningful smart dialogue (two-way discussions with appropriate feedback mechanisms), open and timely access to public data, and early discussion of limited confidential data, will lead to a streamlined process.

One of the keys is to make sure that all entities are aware of what data and what assumptions will be relied upon. It is important to identify these early, and to have a robust discussion around them. Even if all parties do not agree, having the dialogue is important. A decade ago there was an extensive Externalities Proceeding embedded in the IRP process. The definition of externalirty was saved for the last meeting, whereupon parties could not agree.

Optimization is easiest when there are only a few types of inputs, and is cumbersome when multiple options are available. The HECO Companies attempted one HECO and MECO optimization run including a Maui-O’ahu cable. After seven days of processes, the single incomplete run was abandoned. Today, with non-transmission options, load shifting, demand

shifting, DR, rate regulation changes, tariff changes, etc., optimization is much harder. Understanding the models and their limitations is important. They should be identified upfront, with as much open source analysis as possible.

If Puerto Rico taught us anything, it is that microgrids are important. FEMA only allows what was broken to be replaced with the same thing. Auwe.

Life of the Land hopes that the new process is more than a name change, that the utility wants to be a conductor of a smooth-running orchestra, rather than being a conductor and simultaneously being several players competing against and drowning out other players.

IGP sounds like a comprehensive approach that includes ALL planning and ALL procurement. ALTERNATIVELY, it could include only SOME planning and SOME procurement. The utilities might believe that a project could be considered only if it was included in IGP, if it is similar to projects approved in the IGP, or through bilateral negotiations outside of the IGP. The utilities might believe that a project could be done through Competitive Bidding or Competitive Bidding Waivers or non-Competitive Bidding methodologies or by other approaches such as Requests for Proposals or Community Based Renewable Energy. The utilities might believe that a project listed in the IGP could be assumed to be needed in a subsequent Commission proceeding. These approaches should be clarified.

Currently the utility gives advance notice of an intent to file a rate case. This gives the Commission and the Consumer Advocate a heads up on what is coming and how to allocate scarce resources. Intervenors have less resources. The utility can spend two years preparing a regulatory filing and then when it is filed, potential intervenors have 20 days to decide whether to intervene. It doesn't have to be this way. It all depends upon whether the utility sees itself as a conductor of an orchestra or a rammer of projects.

For starters, please list the level associated with each of the 49 open Commission proceedings in which HECO, MECO, or HECO is a party.

**Levels**

- 1: This docket, if still open, is definitely part of IGP
2. If IGP were already in place, this docket would definitely be analyzed within IGP

Life of the Land's Comments On HECO Companies IGP Report, p. 4

3. If IGP were already in place, this docket might or might not be analyzed within IGP

4. This docket has no relationship to IGP

Docket	Issue	Docket Type	Level
2007-0176	INSTITUTING PROCEEDINGS TO INVESTIGATE THE IMPLEMENTATION OF INTRAGOVERNMENTAL WHEELING OF ELECTRICITY	PUC- Investigation	
2007-0323	INSTITUTING A PROCEEDING TO INVESTIGATE THE ISSUES AND REQUIREMENTS RAISED BY, AND CONTAINED IN, HAWAII'S PUBLIC BENEFITS FUND, PART VII OF CHAPTER 269, HAWAII REVISED STATUTES.		
2007-0341	INSTITUTING A PROCEEDING TO REVIEW HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC. AND MAUI ELECTRIC COMPANY, LTD.'S DEMAND-SIDE MANAGEMENT REPORTS AND REQUESTS FOR PROGRAM MODIFI	99: OTHERS	
2008-0069	INSTITUTING A PROCEEDING TO INVESTIGATE THE CALCULATION OF SCHEDULE Q PAYMENT RATES.	Miscellaneous	
2010-0139	APP. OF HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED FOR APPROVAL OF STANDARDS AND GUIDELINES FOR UTILITY FUNDING OF RENEWABLE INFRASTRUCTURE PROJECTS ASSOCIATED WITH INDEPENDENT POWER PRODUCERS.	Energy-Other	
2011-0206	INSTITUTING A PROCEEDING TO INVESTIGATE THE IMPLEMENTATION OF RELIABILITY STANDARDS FOR HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED.	PUC- Investigation	
2013-0194	INSTITUTING AN INVESTIGATION TO REEXAMINE THE FEED-IN TARIFF PROGRAM FOR HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED.	PUC- Investigation	
2014-0113	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 (EXCLUDING CUSTOMER CONTRIBUTIONS) FOR THE PURCHASE AND INSTALLATION OF ITEM P0001576, SCHOFIELD GENERATING STATION PROJECT.	Capital Improvement Project	
2014-0134	APPLICATION FOR A FINANCING ORDER TO ISSUE BONDS AND TO AUTHORIZE THE GREEN INFRASTRUCTURE FEE.	Miscellaneous	
2014-0135	APPLICATION FOR AN ORDER APPROVING THE GREEN INFRASTRUCTURE LOAN PROGRAM.	Miscellaneous	
2014-0170	APPLICATION FOR APPROVAL OF AN ENTERPRISE RESOURCE PLANNING & ENTERPRISE ASSET MANAGEMENT SYSTEM IMPLEMENTATION PROJECT AND RELATED ACCOUNTING TREATMENT.	Miscellaneous	
2014-0192	INSTITUTING A PROCEEDING TO INVESTIGATE DISTRIBUTED ENERGY RESOURCE POLICIES.	PUC- Investigation	
2015-0170	APPLICATION FOR APPROVAL OF GENERAL RATE CASE AND REVISED RATE SCHEDULES AND RULES.	Rate Case	
2015-0389	APPLICATION FOR APPROVAL TO ESTABLISH A RULE TO IMPLEMENT A COMMUNITY-BASED RENEWABLE ENERGY PROGRAM, AND OTHER RELATED MATTERS.	Tariff- Suspension	

2015-0412	APPLICATION FOR APPROVAL OF DEMAND RESPONSE PROGRAM PORTFOLIO TARIFF STRUCTURE, REPORTING SCHEDULE, AND COST RECOVERY OF PROGRAM COSTS THROUGH THE DEMAND-SIDE MANAGEMENT SURCHARGE.	Miscellaneous	
2016-0168	TRANSMITTAL FOR APPROVAL TO EXTEND SCHEDULE EV-F, COMMERCIAL PUBLIC ELECTRIC VEHICLE CHARGING FACILITY SERVICE PILOT, AND SCHEDULE EV-U, COMMERCIAL PUBLIC ELECTRIC VEHICLE CHARGING SERVICE PILOT. TRANSMITTAL NO. 13-07.	PUC-Other	
2016-0328	APPLICATION FOR APPROVAL OF GENERAL RATE CASE AND REVISED RATE SCHEDULES AND RULES.	Rate Case	
2016-0342	APPLICATION FOR APPROVAL OF WAIVER FROM THE FRAMEWORK FOR COMPETITIVE BIDDING AND TO COMMIT FUNDS IN EXCESS OF \$2,500,000 (EXCLUDING CUSTOMER CONTRIBUTIONS) FOR THE PURCHASE AND INSTALLATION OF ITEM P0003966, WEST LOCH PV PROJECT.	Capital Improvement Project	
2016-0345	APPLICATION FOR APPROVAL TO DEFER O&M EXPENSES, AND TO RECOVER DEFERRED AND CAPITAL COSTS FOR THE MA'ALAEA M14 HRSG AND M16 HRSG LOW LOAD MODIFICATION PROJECTS THROUGH THE RENEWABLE ENERGY INFRASTRUCTURE PROGRAM SURCHARGE.	Miscellaneous	
2017-0102	APPLICATION FOR APPROVAL TO RECOVER IMPLEMENTATION COSTS RELATED TO THE ON-BILL FINANCING PROGRAM.	Financing-Other	
2017-0150	APPLICATION FOR APPROVAL OF GENERAL RATE CASE AND REVISED RATE SCHEDULES AND RULES.	Rate Case	
2017-0213	APPLICATION FOR APPROVAL TO RECOVER COSTS FOR SCHOFIELD GENERATING STATION THROUGH THE MAJOR PROJECT INTERIM RECOVERY ADJUSTMENT MECHANISM.	Miscellaneous	
2017-0248	APPLICATION FOR APPROVAL OF ISSUANCE OF UNSECURED OBLIGATIONS AND GUARANTEE.	Miscellaneous	
2017-0352	TO INSTITUTE A PROCEEDING RELATING TO A COMPETITIVE BIDDING PROCESS TO ACQUIRE DISPATCHABLE AND RENEWABLE GENERATION.	PUC-Other	
2017-0423	APPLICATION FOR APPROVAL TO SELL A UTILITY SUBSTATION PROPERTY IN PAIA, MAUI.	Miscellaneous	
2018-0012	INSTITUTING A PROCEEDING TO INVESTIGATE THE IMPACTS OF THE TAX CUTS AND JOBS ACT OF 2017.	PUC-Investigation	
2018-0017	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 FOR ITEM P0004115, IWILEI SUBSTATION DOWNTOWN NETWORK TRANSFORMER AND SWITCHGEAR N2 REPLACEMENT	Capital Improvement Project	
2018-0049	LETTER REQUEST FOR APPROVAL TO SELL CERTAIN UTILITY PROPERTY TO SUPPORT THE PUERTO RICO HURRICANE RESTORATION EFFORTS AS A RESULT OF HURRICANE MARIA.	Miscellaneous	
2018-0055	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 (EXCLUDING CUSTOMER CONTRIBUTIONS) FOR ITEM Y00263, KA'AAHI SUBSTATION.	Capital Improvement Project	
2018-0056	APPLICATION FOR APPROVAL TO CONSTRUCT A 46KV OVERHEAD SUBTRANSMISSION LINE PURSUANT TO HRS SECTION 269-27.6(a) FOR MAUKA FIT ONE.	Overhead Power Lines	
2018-0064	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 FOR ITEM P0004139, HE'EIA BRIDGE POLE REPLACEMENT PROJECT.	Capital Improvement Project	

2018-0065	INSTITUTING A PROCEEDING TO ESTABLISH AFFILIATE TRANSACTION REQUIREMENTS.	PUC-Other	
2018-0068	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 (EXCLUDING CUSTOMER CONTRIBUTIONS) FOR THE P0004085 - AES-CEIP 1 138 KV OVERHEAD TRANSMISSION LINE RELOCATION PROJECT.	Capital Improvement Project	
2018-0075	APPLICATION FOR APPROVAL OF THE TRANSFER OF EQUITY OWNERSHIP INTEREST IN CERTAIN JOINT POLES, TO COMMIT FUNDS IN EXCESS OF \$2,500,000, ACCOUNTING AND RATEMAKING TREATMENT, ETC	Capital Improvement Project	
2018-0088	INSTITUTING A PROCEEDING TO INVESTIGATE PERFORMANCE-BASED REGULATION.	Miscellaneous	
2018-0089	APPLICATION FOR APPROVAL OF THE ISSUANCE AND PURCHASE OF COMMON STOCK.	Financing-Stocks/Bonds/Notes/Other Indebtedness	
2018-0102	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 FOR THE PURCHASE AND INSTALLATION OF ITEM P0003265, CONTINGENCY & REGULATING RESERVE BATTERY ENERGY STORAGE SYSTEM PROJECT, ETC.	Capital Improvement Project	
2018-0103	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 FOR THE PURCHASE AND INSTALLATION OF ITEM P0003267, WEST LOCH BATTERY ENERGY STORAGE SYSTEM PROJECT, ETC.	Capital Improvement Project	
2018-0135	INSTITUTING A PROCEEDING RELATED TO THE HAWAIIAN ELECTRIC COMPANIES' ELECTRIFICATION OF TRANSPORTATION STRATEGIC ROADMAP.	PUC-Other	
2018-0141	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 FOR THE PHASE 1 GRID MODERNIZATION PROJECT, TO DEFER CERTAIN COMPUTER SOFTWARE DEVELOPMENT COSTS, ETC.	Capital Improvement Project	
2018-0145	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 TO PURCHASE ITEMS P0004180, P0004116, P0002894 AND P0004120 80 MVA. SUBSTATION TRANSFORMER COMBINED PURCHASE AND INSTALLATION.	Capital Improvement Project	
2018-0163	INSTITUTING A PROCEEDING TO INVESTIGATE ESTABLISHMENT OF A MICROGRID SERVICES TARIFF.	PUC-Investigation	
2018-0165	INSTITUTING A PROCEEDING TO INVESTIGATE INTEGRATED GRID PLANNING.	PUC-Investigation	
2018-0168	APPLICATION FOR APPROVAL OF ISSUANCE OF UNSECURED OBLIGATIONS AND GUARANTEE	Miscellaneous	
2018-0185	APPLICATION FOR APPROVAL TO COMMIT FUNDS IN EXCESS OF \$2,500,000 (EXCLUDING CUSTOMER CONTRIBUTIONS) FOR PROJECT ITEM Y00291, AUIKI SUBSTATION, AND RELATED APPROVALS.	Capital Improvement Project	
2018-0195	APPLICATION FOR APPROVAL OF COST RECOVERY REQUESTS FOR THE COMMUNITY BASED RENEWABLE ENERGY PROGRAM.	Miscellaneous	
2018-0207	LETTER REQUEST FOR EMERGENCY EXPEDITED ACTION TO TRANSFER CERTAIN UTILITY PROPERTY RELATED TO HURRICANE LANE RECOVERY SUPPORT EFFORTS.	Miscellaneous	
2018-0208	LETTER REQUEST FOR EXPEDITED APPROVAL TO REFINANCE DURING 2019 ONE OUTSTANDING SERIES OF REVENUE BONDS	Miscellaneous	

	THROUGH THE ISSUANCE OF REFUNDING SPECIAL PURPOSE REVENUE BONDS.		
2018-0368	APPLICATION FOR APPROVAL OF A GENERAL RATE INCREASE AND REVISED RATE SCHEDULES AND RULES	Rate Case	

Mahalo

/s/ HENRY Q CURTIS  
HENRY Q CURTIS  
VICE PRESIDENT FOR CONSUMER ISSUES



FILED

2018 Oct 15 PM 14:00

PUBLIC UTILITIES  
COMMISSION

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