

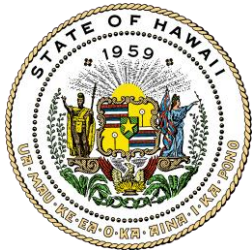
Renewable Energy Facilitation Activities & the Renewable Energy Facility Siting Process

Periodic Report to the Legislature

In Accordance with Act 208, Session Laws of Hawaii, 2008



Kalaeloa Renewable Energy Park – Hanwha Solar Energy America (Kalaeloa, Oahu)



STATE OF HAWAII

Department of Business, Economic Development, and Tourism

Hawaii State Energy Office

December 2014

EXECUTIVE SUMMARY

In 2008, Act 208 was enacted, which directed the Hawaii State Department of Business, Economic Development, and Tourism (DBEDT) to establish the Renewable Energy Facilitator position. Act 208 requires DBEDT to submit periodic reports to the Hawaii State Legislature describing the renewable energy facilitation activities conducted by DBEDT and the progress of the Renewable Energy Facility Siting Process established under Act 207, also enacted in 2008. This is the second Periodic Report to the Hawaii State Legislature on these activities. The first Periodic Report was submitted in 2013.

In 2008, 9.4% of Hawaii's electricity was generated by renewable energy sources (2008 Renewable Portfolio Standards Status Reports). In 2013, 18% of the State of Hawaii's electricity was generated by renewable energy sources (2013 Renewable Portfolio Standards Status Reports). This commendable progress over the last six years is attributable to the commitment made by all stakeholders – residents, policymakers, regulators, community groups, and industry professionals – to lower Hawaii's electricity costs and decrease our heavy reliance on imported fossil fuels. Since 2009, the Hawaii State Energy Office (HSEO) within DBEDT has played a key role in this progress by, among other things, assisting the permitting and siting of installed facilities (see below chart) with capacity to produce over 125 megawatts (MW) of local renewable energy and two pilot projects with promising biofuel and synthetic natural gas potential:

Facility	Developer	Location	Resource	MW
Port Allen Solar Facility	Alexander & Baldwin	Port Allen, Kauai	Photovoltaic	6
Kawaihoa Wind Farm	First Wind	Haleiwa, Oahu	Wind	69
Kapolei Sustainable Energy Park	Forest City	Kapolei, Oahu	Photovoltaic	1.1
Kalaeloa Solar Power II	SunPower	Kalaeloa, Oahu	Photovoltaic	5
Kalaeloa Renewable Energy Park	Hunt, Hanwha Solar	Kalaeloa, Oahu	Photovoltaic	5
Synthetic Renewable Natural Gas Pilot Facility	HAWAII GAS	Kalaeloa, Oahu	Biofuel	Pilot
Integrated Bio Refinery Pilot Facility	UOP/Honeywell	Kalaeloa, Oahu	Biofuel	Pilot
Kaheawa Wind Power II	First Wind	Kaheawa, Maui	Wind	21
Auwahi Wind Farm	Sempra Generation	Ulupalakua, Maui	Wind	21
SkyGrid Energy Agricultural Wind Project	Gen-X Energy	Hawi, Hawaii	Wind	0.1
Waikoloa Water Community Wind Project	HWS Wind 001 LLC	Waikoloa, Hawaii	Wind	0.1

HSEO has also provided ancillary support for many other projects in various stages of development. Permitting assistance provided by HSEO is in direct support of Hawaii's goal of cost-effectively going beyond 40% Renewable Portfolio Standards (RPS) by 2030 and in recognition that project permitting can comprise up to 20% of the construction costs (National Renewable Energy Laboratory, 2013).¹ Specifically, HSEO permitting services expedite the permitting process of new renewable energy facilities while helping to reduce associated soft costs. For example, the interactive self-help resources described below better prepare renewable energy facility permit applicants for the various permitting processes required, increase facility permitting transparency and predictability, aid the faster processing of permits, and support the appropriate siting of renewable energy facilities.

¹ *Renewable Energy Permitting Barriers in Hawaii: Experience from the Field*, National Renewable Energy Laboratory (Mar. 2013), <http://www.nrel.gov/docs/fy13osti/55630.pdf>

Progress on High Impact Renewable Energy Facilitation Activities

The following provides a brief description of DBEDT's renewable energy facilitation activities and the progress made on these activities since the Periodic Report to the Legislature submitted in 2014. More discussion of each resource, its usage, the challenges and issues each one seeks to address, and the beneficial impacts of each resource are described in detail in the "Progress on High Impact Renewable Energy Facilitation Activities" section of this report.

- HSEO Guidance and Interactive Self-Help Resources
 - *Developer & Investor Center (Center)* (<http://energy.hawaii.gov/developer-investor>)
 - The *Center* provides important technical assistance, permitting tools and local connections to accelerate a renewable energy project's journey to the marketplace, where the rewards will be felt statewide. HSEO is currently working with partner Tetra Tech, a firm with experience developing and permitting renewable energy projects in Hawaii, to update this resource. The initial public release of updated materials will be December 2014.
 - *Project Permitting Assistance and Resources* (<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>)
 - This website is the only online resource HSEO is aware of that provides detailed information on obtaining individual permits from numerous county, state, and federal permitting agencies in Hawaii; reducing project due diligence costs and timelines by providing a comprehensive central repository of project permitting and siting information. HSEO is currently working with partner Tetra Tech to update this resource. The initial public release of updated materials will be December 2014.
 - *Guide to Renewable Energy Facility Permits in the State of Hawaii (Guide)* (<http://energy.hawaii.gov/renewable-energy-project-permitting-in-the-state-of-hawaii>)
 - The *Guide* provides insight into developing large-scale projects in Hawaii by describing the siting challenges unique to Hawaii, including the Hawaii environmental review process (Chapter 343, Hawaii Revised Statutes), local cultural and archeological resources, endangered species and habitats in Hawaii, overlaying zoning districts, importance of community engagement, and more. HSEO is currently working with partner Tetra Tech to update this resource. The updated *Guide* will be published in December 2014.
 - *Permit Briefs (Briefs)* (<http://energy.hawaii.gov/renewable-energy-project-permitting-in-the-state-of-hawaii>)
 - Complementing the *Guide*, the *Briefs* provide processing and general information on over 160 individual county, state, and federal permits required for renewable energy projects in Hawaii; including permit process steps, estimated timelines and costs, agency contacts, relevant laws and references, and best practices to most effectively navigate the process. HSEO is currently working with partner Tetra Tech to update this resource. The initial public release of updated materials will be December 2014.
 - *Hawaii Department of Health e-Permitting Portal (e-Permitting)* (<https://eha-cloud.doh.hawaii.gov/epermit/>)
 - DOH is constantly working to improve the functionality and breadth of *e-Permitting*. Since its launch, 2,066 applications (\$726,916 in processing fees) have been received electronically. Of these, 1,713 applications have been

completed. According to DOH, e-Permitting also reduces staff time processing permits and has reduced average permit processing times.

- *Electronic Permitting*
 - DBEDT is currently in the process of partnering with the Hawaii Department of Land and Natural Resources (DLNR) to develop another electronic permitting and asset management tool for select DLNR Divisions involved in the regulation of renewable energy facilities in Hawaii. The Departments expect to kick-off this project in December 2014, and plan to have a functioning online tool deployed in June 2015.
- Self-Help Energy Suite (Suite)
 - *Renewable Energy Permitting Wizard (Permitting Wizard)*
(<http://wizard.hawaiiicleanenergyinitiative.org/>)
 - The *Permitting Wizard* helps those proposing renewable energy projects in Hawaii identify and understand the county, state, and federal permits required for their individual project regardless of technology type (wind, solar, geothermal, wave, bioenergy, waste-to-energy, etc). HSEO is currently working with partner Tetra Tech to update this resource. The initial public release of updated materials will be December 2014.
 - *Renewable EnerGIS Mapping Tool (EnerGIS)*
(<http://energy.hawaii.gov/resources/renewable-energis-map>)
 - *EnerGIS* provides renewable energy resource and site information for specific Hawaii locations, enabling developers to conduct high level site due diligence remotely and instantly. *EnerGIS* allows a lay user to identify the important attributes related to siting and permitting – such as zoning, critical habitat, slope, and rainfall – for specific land parcels throughout the State of Hawaii. HSEO and the Hawaii Office of Planning (OP) are currently negotiating a contract to expand the functionality and breadth of information provided by *EnerGIS*, with final product expected to be released in June 2015.
 - *Hawaii Renewable Energy Projects Directory (Directory)*
(<https://energy.ehawaii.gov/epd/public/energy-projects-map.html>)
 - The interactive *Directory* is an online listing to find and learn about existing and proposed renewable energy projects in Hawaii. The *Directory* lists projects statewide, showcasing the variety of renewable energy resources that are being harnessed to move us closer to reaching our overall clean energy goal. The *Directory* is updated periodically by HSEO based on publically available information from a variety of sources on each identified renewable energy project.
- Programmatic Environmental Review (<http://hawaiiicleanenergypeis.com/>)
 - On December 14, 2010, the U.S. Department of Energy (USDOE) issued a Notice of Intent (NOI) to prepare a *Programmatic Environmental Impact Statement (PEIS)*, with the State of Hawaii (represented by the Hawaii State Energy Office) as a joint lead, on the wind phase of the Hawai'i Interisland Renewable Energy Program (HIREP) (75 FR 77859). In response to public scoping comments, as well as regulatory and policy developments since the scoping meetings, USDOE and HSEO decided to broaden the scope of the *PEIS* to include a wider range of clean energy activities and technologies with the potential for near-term development or application in Hawaii. After responses are prepared to the comments, the *PEIS* will be released in final form in late 2014 or early 2015.

- Individual Project Facilitation
 - As discussed previously, since 2009 HSEO has assisted the permitting and siting of installed facilities (see below chart) with capacity to produce over 125 megawatts (MW) of local renewable energy and two pilot projects with promising biofuel and synthetic natural gas potential. HSEO's directive is to focus its resources on high impact projects and solutions that meet a balance of technical, economic, environmental, and cultural considerations.
- Assistance to Government Agencies (Various)
 - HSEO provides technical expertise and assistance to other state and federal departments considering the use of land assets for renewable energy development. HSEO has provided guidance and recommendations to the following agencies considering the use of their land assets for renewable energy development: DLNR, Hawaii Department of Hawaiian Home Lands, Hawaii Department of Agriculture, Hawaii Foreign-Trade Zone, and the United States Department of Defense (USDOD).

Analysis of the Renewable Energy Facility Siting Process (Chapter 201N, Hawaii Revised Statutes)

In 2014, HSEO retained Tetra Tech, Inc., a firm with experience siting and developing renewable energy projects in Hawaii, to analyze the Renewable Energy Facility Siting Process (REFSP) and assess its potential for meaningful impact on the development of renewable energy in Hawaii. Given Tetra Tech's analysis of REFSP, HSEO concluded the REFSP as written does not meet its intent to streamline the permitting of renewable energy projects due to its inherent limitations, lack of clarity, and implementation challenges.

Significant modification could make the REFSP a more attractive method of facilitation for developers and regulatory agencies. However, DBEDT believes such modification is not necessary nor recommended as DBEDT is already granted the authority to facilitate the permitting of renewable energy projects under other laws: HRS §196 (Energy Resources), HRS §201-12.5 (Renewable energy facilitator), and HRS 201, Part IV (Facilitation of permit processing). Furthermore, the benefits of significantly modifying the REFSP (i.e., establishing a workable process for DBEDT to facilitate permits for renewable energy projects) do not outweigh the processes' inherent potential risks, including: (a) potential to create a process that in practice does not shorten permitting timelines; (b) permitting agency reluctance to participate; (c) DBEDT liability where permits are incorrectly identified or approved; and, (d) lack of DBEDT staff expertise to administer the program.

While DBEDT contemplated keeping HRS §201N as is, it deemed this to only be an appropriate interim solution until HRS §201N can be properly repealed/amended through legislative action due to the potential liability to DBEDT and poor agency practice of not fully executing a legislative mandate.

HSEO believes the appropriate path forward is to repeal HRS §201N and focus on other high impact solutions HSEO can implement and/or is currently administering to facilitate the development of renewable energy projects in Hawaii. One exception may be to retain the subdivision exemption process under HRS 201N-13 and -14, which is not tied to the REFSP and may be in use, or under consideration for use, by renewable energy developers. If this is retained, its implementation by the counties is required for this exemption to be effective. The analysis leading to these conclusions is described below.

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LEGISLATIVE HISTORY

In 2008, recognizing the complexity of permitting large-scale renewable energy projects and the need to streamline the permitting process to provide predictability and encourage capital investment in Hawaii's renewable energy industry, the Hawaii State Legislature established a full-time, temporary Renewable Energy Facilitator position within the Hawaii State Department of Business, Economic Development and Tourism (DBEDT) (Act 208, Session Laws of Hawaii, 2008). At the same time, the 2008 Legislature established the Renewable Energy Facility Siting Process (REFSP) (Act 207, Session Laws of Hawaii, 2008) to encourage the timely development of renewable energy projects that utilize Hawaii's indigenous renewable energy resources for the health, safety, and welfare of Hawaii's residents.

In 2009, the Hawaii State Legislature passed Act 155, which expanded the Facilitator's duties to include the permitting of land and equipment needed for renewable energy facilities. Act 155, Session Laws of Hawaii, 2009, also expanded the REFSP to make eligible projects between 5 MW and 200 MW, and biofuel production facilities with capacity to produce one million gallons or more annually. Act 155 also further refined existing REFSP procedures.

The 2009 Hawaii State Legislature also passed Act 173, which amended the REFSP by adding two sections (Chapters 201N-13 and 201N-14, Hawaii Revised Statutes) exempting renewable energy projects from standard subdivision procedures. Act 173, Session Laws of Hawaii, 2009, recognized renewable energy projects may require site acreage or configurations that do not coincide with existing, already subdivided boundaries, and that subdivision laws and ordinances generally prohibited the transfer of an interest in land that is not an entire subdivided lot. Act 173 facilitates the financing and development of renewable energy projects by allowing leases and easements for renewable energy projects on portions of parcels to be exempt from formal subdivision approval. In 2011, the Hawaii State Legislature also passed Act 201, which extended the sunset date for the subdivision exemption process from July 1, 2013, to July 1, 2020. Act 201, Session Laws of Hawaii, 2011, also clarified that wind energy facilities are eligible for this subdivision exemption process.

In 2011, the Hawaii State Legislature again amended the REFSP by passing Act 199, which makes biofuel infrastructure eligible for REFSP participation and decreases the size of eligible biofuel processing facilities to those with capacity to produce 100,000 gallons of biofuel or more annually (previously eligible facilities required capacity of 1,000,000 gallons per year or more). Act 199, Session Laws of Hawaii, 2011, enables DBEDT, via the REFSP, to facilitate the permitting of pilot-scale biofuel processing facilities and biofuel infrastructure.

In 2013, the Hawaii State Legislature passed Act 262, its most recent amendment to the REFSP, requiring any wind facilities under the REFSP to set aside adequate funds to decommission the wind farm after its useful lifetime. Act 262, Session Laws of Hawaii, 2013, requires the wind farm developer to provide DBEDT evidence of such funds as a condition to REFSP participation. Act 262 helps to ensure that wind farms under the REFSP are not abandoned or left to pose a risk to public health, safety, and welfare.

DBEDT Renewable Energy Facilitation Duties

Per Act 208 (2008) and Act 155 (2009), the duties of the Facilitator are to:

1. Facilitate the efficient permitting of renewable energy projects, including: (a) the land parcel on which the facility is situated; (b) any renewable energy production structure or equipment; (c) any energy transmission line from the facility to the public utility's electrical system; and, (d) any on-site infrastructure necessary for the production of electricity or biofuel from the renewable energy site;
2. Initiate the implementation of key renewable energy projects by permitting various efficiency improvement strategies identified by DBEDT;
3. Administer the day-to-day coordination of renewable energy projects on behalf of DBEDT and the day-to-day operations of the Renewable Energy Facility Siting Process (REFSP); and,
4. Submit periodic reports to the Legislature on renewable energy facilitation activities and the progress of the REFSP.

Per Act 208, the Facilitator position is to be funded by the Energy Security Special Fund (Barrel Tax).

DBEDT Renewable Energy Facility Siting Process Duties

Act 207 (2008) sets forth the REFSP procedures and directs the Energy Resources Coordinator (DBEDT Director), with assistance from the Facilitator, to:

1. Consult appropriate state and county agencies to develop and establish a permit plan application format and procedure designed to ensure a timely review to obtain required permits and approvals for renewable energy facilities;
2. Receive a permit plan application, in a form prescribed by the Energy Resources Coordinator (ERC), from an applicant for the approval of the siting, development, construction, and operation of the renewable energy facility, with an appropriate initial application fee determined by the ERC;
3. Establish fees for ERC services, staff, contractor, and relevant state/county agencies;
4. Identify all state and county permits necessary for approval of the renewable energy facility;
5. Assist in the permit plan application process by coordinating permitting processes, giving technical assistance, overseeing the creation of the permit plan, and providing general oversight to facilitate the timely review and permitting of the siting of a renewable energy facility;
6. Gather relevant permitting information from an applicant necessary to review and process a permit plan application by the federal, state, and county agencies;
7. Coordinate public meetings on the island where the renewable energy facility is proposed to be developed to: (a) allow members of the affected communities to provide input regarding the development of the facility; (b) promote public awareness of the plan for the renewable energy facility in the proposed area; and, (c) allow the ERC, the applicant, and any agency to gain public sentiment and input regarding the proposed development of the renewable energy facility, and incorporate public input into the planning of the proposed renewable energy facility; and,
8. Work with federal, state, and county agencies and the applicant to determine the terms and conditions of the permit plan and permits that are necessary to effectuate this chapter and to protect the public health and safety and promote the general welfare.

As provided under Act 207 (2008), Interim Hawaii Administrative Rules (HAR) were adopted by DBEDT in June 2010 – Renewable Energy Facility Siting Process Rules, Title 15, Chapter 36.

Progress on High Impact Renewable Energy Facilitation Activities

The following provides a brief description of DBEDT's renewable energy facilitation resources, including the targeted resource audience and how each resource is used, the challenges and issues each one seeks to address, and the beneficial impacts of each.

- HSEO Guidance and Interactive Self-Help Resources
 - *Developer & Investor Center (Center)* (<http://energy.hawaii.gov/developer-investor>)

The *Center* is a dynamic resource that offers guidance on key phases of project development: permitting, local utility interconnection, regulation, Hawaii business registration, project financing and local incentives, local consultants, and site acquisition in Hawaii. It links to Project Permitting Assistance and Resources, which hosts the Guide to Renewable Energy Facility Permits in Hawaii, Permit Briefs, a list of consultants with permitting experience in Hawaii, the Hawaii Department of Health (DOH) e-Permitting Portal, Hawaii Business Express Online Business Registration website, and the Self-Help Energy Suite, created and maintained by HSEO to advance high impact, clean energy alternatives.

 - Tool Usage: This tool has a wide ranging audience and applicability, including: sophisticated developers who need information or need to apply for one particular permit or process; start-up companies who need to know all aspects of doing business in Hawaii; homeowners who need information on their solar installations. Additionally, users from the following countries have accessed the *Center*, demonstrating a global interest in the Hawaii renewable energy industry: U.S., India, Germany, Australia, Canada, France, Japan, South Korea, Czech Republic, China, Spain, Sweden, Switzerland, and the United Kingdom.
 - Challenges/Issues Addressed: Developing or installing a renewable energy project in Hawaii requires approvals from multiple public and private entities. The *Center* is the only “one-stop shop” resource in Hawaii that provides valuable information across all phases of project development, including: state policies, regulatory compliance, grid interconnection, project siting, incentives, developing a project team, and registering a business in Hawaii.
 - Impact: The *Center's* resources are designed to reduce project due diligence costs and timelines by providing a comprehensive central repository of information. The *Center* has recorded 3,649 webpage views since its launch in October 2012, with over 890 webpage views from January 1, 2014, to November 3, 2014, not including hits to the individual resource links within the Center.
 - *Project Permitting Assistance and Resources* (<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>)

HSEO's *Project Permitting Assistance and Resources* website detailed information on obtaining individual permits from numerous county, state, and federal permitting agencies in Hawaii; reducing project due diligence costs and timelines by providing a comprehensive central repository of project permitting and siting information.

project in December 2014, and plan to have a functioning online tool deployed in June 2015.

- Self-Help Energy Suite (Suite)

- *Renewable Energy Permitting Wizard (Permitting Wizard)*

(<http://wizard.hawaiicleanenergyinitiative.org/>)

The *Permitting Wizard* helps those proposing renewable energy projects in Hawaii identify the federal, state, and county permits required for individual, site-specific projects.

- Tool Usage: This tool has a wide ranging audience and applicability, including: sophisticated developers who need information on the permits required for their projects; start-up companies who need to know all permits required for a project without retaining a consultant; homeowners who need information on their solar installation permits; permitting agencies who are interested in other agency processes; policymakers and citizens who want a better understanding of cross-jurisdictional permitting regimes.
- Challenges/Issues Addressed: Project impacts are most effectively and efficiently mitigated during the project siting and design phase. The *Permitting Wizard* supports smart project design location by enabling users to immediately and remotely identify the permits required for specific projects. Users can also compare the permitting requirements for the same project at different sites.
- Impact: In 2014, 36 users registered and created an account for the *Permitting Wizard* from various renewable energy sectors – developers, investors, regulatory agencies, and consultants. This does not account for all the non-registered users. Starting in November 2014, HSEO will be able to track the number of visits to the upgraded *Permitting Wizard* website. The *Permitting Wizard* has garnered positive feedback from the United States Department of Defense (USDOD), local permitting agencies, local consultants, and other users.

- *Renewable EnerGIS Mapping Tool (EnerGIS)*

(<http://energy.hawaii.gov/resources/renewable-energis-map>)

EnerGIS allows a lay user to create maps to show certain resources, such as solar irradiance and wind power density, statewide, allowing the user to refine his or her search to areas with high resource potential. Although this mapping application has functionality which is similar to applications launched by other agencies for other purposes, *EnerGIS* is the only mapping application focused on presenting information about renewable energy resources development in Hawaii. A product of the partnership between HSEO, the Hawaii Office of Planning (OP), *EnerGIS* was awarded a 2013 Excellence in Technology Award from the State of Hawaii Office of Information Management and Technology under the “Fast Track Solutions” category.

- Tool Usage: This tool has a wide ranging audience and applicability, including: - large scale renewable energy developers can remotely find and assess suitable sites for their projects; landowners can gauge the potential for renewable energy developments on their lands; policy makers can better understand the geographic distribution and potential of renewable resources; and, the general public can obtain information relating to clean energy project siting.
- Challenges/Issues Addressed: *EnerGIS* helps to address the challenge of finding a site with suitable attributes – island, terrain, resource potential – for a given renewable energy project and technology. It also supports individual site

- Individual Project Facilitation
 - As discussed previously, since 2009 HSEO has assisted the permitting and siting of installed facilities (see below chart) with capacity to produce over 125 megawatts (MW) of local renewable energy and two pilot projects with promising biofuel and synthetic natural gas potential. HSEO's directive is to focus its resources on high impact projects and solutions that meet a balance of technical, economic, environmental, and cultural considerations.

- Assistance to Government Agencies (Various)
 - HSEO provides technical expertise and assistance to other state and federal departments considering the use of land assets for renewable energy development. HSEO has provided guidance and recommendations to the following agencies considering the use of their land assets for renewable energy development: DLNR, Hawaii Department of Hawaiian Home Lands, Hawaii Department of Agriculture, Hawaii Foreign-Trade Zone, and the United States Department of Defense (USDOD).

ANALYSIS OF THE RENEWABLE ENERGY FACILITY SITING PROCESS

Description of the Renewable Energy Facility Siting Process (REFSP)

The REFSP provides a process in which the developer of qualified renewable energy project pays a fee to DBEDT for services in developing a permit plan for that specific project and for shepherding the project through the various county, state, and federal permitting processes. Projects 200 MW and larger are automatically eligible for REFSP participation, whereas projects between 5 MW and 200 MW, and biofuel production facilities or distribution infrastructure with capacity to produce or distribute at least 100,000 gallons per year are admitted into the REFSP at DBEDT's discretion.

REFSP requires DBEDT to determine and calculate the appropriate fees to facilitate a given project based on the permits required and permit complexity, and to enter into a cost reimbursement agreement with the REFSP applicant. The fees are to be deposited into and withdrawn from the Renewable Energy Facility Siting Special Fund has been established per Act 207 (2008), wherein REFSP fees are to be deposited and withdrawn. The REFSP currently has a \$0.00 balance, with an appropriation ceiling of \$750,000. In addition to the fees for DBEDT's services, the cost reimbursement agreement would include estimates from state and county permitting agencies for their services in processing the requisite permits for the project. The fees in the REFSP are intended to provide permitting agencies resources to dedicate towards a specific REFSP project and to provide the applicant assurances that a decision on a given permit (to approve or deny) will be issued within a prescribed timeline. Predictability on the timing and certainty on the process for issuing project permits often dictates whether or not a given project will be financed.

DBEDT, via the Facilitator within the Hawaii State Energy Office (HSEO), would develop and finalize the permit plan for a specific project by coordinating the relevant county, state, and federal permitting agencies; identifying the permits required for a specific REFSP project and a plan (sequence) to obtain them. While the REFSP does not provide for DBEDT to transfer funds to federal agencies, it does require coordination with federal agencies to ensure the timely processing of federal permits. The goal of the REFSP is for all permits to be denied or approved within twelve (12) months from acceptance of the Final Environmental Impact Statement (EIS) under HRS §343. An EIS must be completed by the applicant and accepted by DBEDT before DBEDT can accept a permit plan application.

The REFSP also serves to inform impacted communities of projects proposed in their area and provide them the opportunity for meaningful involvement during the project design phase. Upon acceptance of a permit plan application for a given project, DBEDT must conduct a public meeting on the island on which the renewable energy facility will be built. The purpose of this meeting is to promote awareness of the project and provide affected community members the opportunity to provide input regarding the development and construction of the renewable energy facility and execution of the permit plan.

The Hawaii Public Utilities Commission is given authority under HRS §269-27.2(b) to assist DBEDT in effectuating the purposes of the REFSP by developing reasonable guidelines and timetables for the creation and implementation of power purchase agreements.

Finally, Act 262, Session Laws of Hawaii, 2013, requires wind farms assisted under the REFSP to provide DBEDT evidence of financial ability to decommission the facility at the end of their useful lives.

REFSP Analysis

Given the complexities and businesslike components of the REFSP, HSEO has recognized the need for definitive structure and guidelines before any further implementation of the REFSP is considered. As stated in the 2013 Periodic Report to the Legislature on the “Renewable Energy Facilitation Activities and The Renewable Energy Facility Siting Process,” in late 2013 to early 2014, HSEO focused on developing operational guidelines for the REFSP. In May 2014, HSEO retained Tetra Tech, Inc. to help develop a ‘REFSP Action Plan’ and assist the development of these operational guidelines, starting with a thorough review of the REFSP and an assessment of its effectiveness based on Tetra Tech’s extensive experience obtaining permits for renewable energy (and other) projects from federal, state, and county permitting agencies in Hawaii.

Tetra Tech’s initial feedback indicated numerous issues with the breadth and efficacy of the REFSP. Therefore, HSEO decided more effort should go into analysis of the REFSP before continuing any further program implementation or development of its operational guidelines. HSEO directed Tetra Tech to develop a REFSP Action Plan providing a description of 201N’s benefits, challenges and limitations as well as identification of 201N components that are likely impracticable or of little value to renewable energy. Furthermore, HSEO directed Tetra Tech to analyze three options for moving forward with 201N: (1) implement in its current form; (2) significantly amend to address the issues identified; or, (3) repeal HRS §201N. HSEO also asked Tetra Tech to identify other high impact solutions HSEO can implement, apart from the REFSP, which would add value to the permitting and siting of renewable energy projects in Hawaii. To supplement its own review, Tetra Tech and HSEO sought to obtain feedback from nearly forty (40) federal, state, and county agencies in Hawaii responsible for permitting renewable energy projects, and input from Hawaiian Electric Company (HECO) and Kauai Island Utility Cooperative (KIUC). Tetra Tech’s report is contained herein as Appendix 8.

This thorough evaluation leads HSEO to conclude the REFSP in its current state is very limited in scope and practical effectiveness, may increase the administrative burden of regulatory agencies, may actually slow permit processing timelines, and would require significant modification in order to be considered an attractive method of facilitation for developers and regulatory agencies.

HSEO believes the appropriate path forward is to repeal HRS §201N and focus on other high impact solutions HSEO can implement and/or is currently administering in order to facilitate the development of renewable energy projects in Hawaii. One exception may be to retain the subdivision exemption process under HRS 201N-13 and -14, which is not tied to the REFSP and may be in use, or under consideration for use, by renewable energy developers. If this is retained, county buy-in and administration of this exemption is required. The analysis leading to these conclusions is described below.

Agency Feedback

Over the course of nearly forty (40) meetings in the latter half of 2014, HSEO and Tetra Tech received feedback from select federal, state, and county agencies that play a role in the regulation of renewable energy projects. The purpose of these meetings was to obtain feedback from the agencies on how HSEO can support the various permitting processes, and to gain their insights on the REFSP, discuss potential issues, and gauge their interest in participating in the program. Agency feedback was overall positive of the REFSP concept in which HSEO serves as a central coordinating agency for individual renewable

energy projects and the developer pays a fee for additional permit processing resources. However, agency feedback on actual implementation of the REFSP identified numerous concerns with the program:

- Administrative burden of determining cost estimates and exchanging funds:
 - Given the unpredictable nature of project permitting, estimating agency needs for a given permit requires ongoing diligence and accounting on the part of the agency.
 - The transfer of funds between agencies generally requires an interagency agreement (Memorandum of Agreement or Understanding) and may require county council approval if transferring funds to a county agency when additional funds impact an agency's approved budget.
 - Some agencies feared the funds would be deposited into a department-wide account and may not reach the actual office or division processing the permits.
- Working with HSEO as a potentially unnecessary "middleman" could slow the process.
- No need for the REFSP as agencies typically process and issue decisions on permits under the timelines mandated by the REFSP.
- Many permits are at the discretion of boards, commissions, and/or federal agencies outside the jurisdiction of the REFSP or a given agency.
- Agencies are reluctant to commit in writing to permit processing deadlines given the issues that can arise during the permitting processes and limitations on staff resources.
- While the REFSP does provide for the use of contractors to assist agencies in processing permits and approvals for an REFSP project, state procurement requirements can complicate this process, making it a less feasible and timely option.
- Counties do not have processes or procedures in place to ensure parcels subdivided under HRS §201N-13 and -14 comply with standard zoning requirements, as provided under standard subdivision processes. Another potential issue is determining the proper, legal method of recording the "subdivided" lots that still share the same tax map key number so project lenders will be comfortable that a given parcel is legally recognized for property tax and recording purposes by the county. Some counties (Maui and Kauai) do have exemptions in place for leases of portions of parcels or projects under the jurisdiction of the Hawaii Public Utilities Commission.

Additional REFSP Issues

The following issues with the REFSP were also identified by Tetra Tech and HSEO (for more detail, see Appendix -- Renewable Energy Facility Siting Process Action Plan):

- REFSP benefits a narrow class of renewable energy projects. The REFSP primarily benefits large renewable energy projects that involve complex and lengthy permit processes (≥ 200 MW). Smaller projects can utilize the REFSP, but many of these projects will likely find the REFSP does not provide noticeable advantages on permit approval timing.
- Ambiguity and limitation of permits covered in the REFSP. Under HRS §201N-1, Definitions, the term "permit" is defined as including only eight specific types of permits or approvals – power

purchase agreement decisions by the Public Utilities Commission (PUC) and federally delegated environmental permits (e.g., most Department of Health permits) are not under the REFSP authority. In addition, there is ambiguity in the current definition as to whether the other county and state permits not listed would be eligible to be included in the REFSP, many of which may be required for renewable energy projects in Hawaii.

- Limited advantage in timing of permit issuance. In general, the REFSP would take approximately 14-16 months after the Final Environmental Impact Statement (FEIS) is accepted before permits would be issued by state and county agencies. For the majority of renewable energy projects, the REFSP would not provide a schedule advantage compared to simply seeking permits outside of the REFSP.
- Language is unclear whether specific decision-making bodies are subject to the 201N Permit Plan and associated permit deadlines. Many permits need discretionary approval from a county or state board, commission, or council. It is unclear if these decision making bodies are included in the jurisdiction of the REFSP.
- Timing of public meetings is out of sync with Chapter 343 process. The REFSP requires DBEDT to hold a public meeting after acceptance of the permit plan to gain public and community sentiment regarding the proposed development and incorporate this sentiment into the planning of the facility. This means the REFSP requires an additional public meeting after the FEIS is accepted; a point in which further design changes to the project would be difficult to incorporate.
- Timing of inter-agency meetings is out of sync with Chapter 343 process. This facilitation could be a useful tool for streamlining permits; however, per the current HAR, the timing of these efforts would not occur until after the permit plan is accepted, which occurs after the FEIS is accepted. Facilitation and coordination with various permitting agencies would be most valuable earlier in the permitting process prior to or concurrent with the development of the Draft EIS.
- No direct trigger for Chapter 343. The REFSP requires an Environmental Impact Statement (EIS) to be completed as a condition of REFSP participation, but HRS §343-5(a) doesn't call out "renewable energy facility" as a trigger, it is unclear if a renewable energy facility that is participating in the REFSP is a "trigger" for HRS §343. When an EA or EIS is prepared without a clear HRS §343 trigger, the document may be considered an 'environmental disclosure document' outside of the HRS §343 authority, rather than an EA or EIS.
- Adds additional costs and risks to permit process. Permit applicants may be hesitant to take on additional permitting costs if the REFSP cannot guarantee a benefit to the project such as permit approval timeframes and if the REFSP creates possible risks for delay in permit issuance and/or legal challenges.
- The REFSP needs clarification in several areas. The permit plan process as described in the REFSP HRS and HAR requires clarification in many areas.
- Responsibility associated with permit approvals issued under HRS 201N. Under the REFSP, DBEDT can deem a state or county permit approved if the permitting agency fails to approve or deny a permit within 18 months following the approval of a completed Permit Plan Application

(and following the FEIS acceptance). If DBEDT utilizes this authority, DBEDT would be accepting responsibility for that permit approval. The REFSP does not explicitly require DBEDT to evaluate whether the permit application is compliant with all state or county permit requirements before issuing the permit on behalf of the appropriate agency, nor does it address enforcement of permit conditions.

- Agency Reluctance or Unwillingness to Participate in the REFSP. Feedback from agencies demonstrates reluctance to participate in the REFSP due to: (a) the lack of need for 201N permit facilitation given that typical permit processing times outside of 201N are can be shorter than the permit processing time required under 201N; (b) the potential conflict between 201N and other agency laws or policies; and/or, (c) the increased administrative burden placed on agencies to implement 201N (including, but not limited to, the preparation of costs estimates, collection and processing of 201N permit fees, and coordination with other agencies including DBEDT).
- Issues with Implementation of the Subdivision Exemption. This provision is potentially problematic in that early outreach indicated some counties did not have processes in place to recognize the exempted subdivided parcels, legally record them, or ensure the exempted subdivided parcels were otherwise in conformance with county land use laws. Some counties have process in place to allow for the lease of portions of an unsubdivided parcel, or an exemption for projects under the jurisdiction of the Hawaii Public Utilities Commission (PUC).

Beneficial Components of the REFSP

Without discounting the challenges and issues previously discussed, the REFSP includes concepts that can add value to renewable energy project development, including permit agency coordination, wind farm decommissioning, and community involvement. However, these areas do not need to be within the REFSP to add value to the process of permitting renewable energy projects and in fact, in some instances, are already provided to DBEDT under other existing statute as explained further below.

- Agency coordination. Feedback from both agencies and developers has reinforced the value of HSEO serving as a coordinating body for the permitting of specific projects or discussion of issues impacting project permitting and siting. The REFSP mandates DBEDT to serve in this capacity, however, DBEDT is also granted this authority under the broader Energy Resources statute, Chapter 196, Hawaii Revised Statutes. Under this authority, HSEO has developed resources and services in place that help coordinate different agencies on individual renewable energy projects and issues. In addition to various task forces, working groups, and meetings coordinated by HSEO, HSEO serves as a central organizing figure concerning all energy matters impacting the state. Finally, in partnership with many stakeholders, HSEO has developed permit guidance resources that discuss inter-agency coordination.
- Wind farm decommissioning. HSEO recognizes the blight abandoned wind infrastructure can have on a landscape and the risk such facilities pose to humans and other species. DBEDT supported the passage of Part II of the REFSP, “Decommissioning of Wind Energy Facilities,” which ensured that all wind projects participating in the REFSP set aside funds for their decommissioning at the end of the wind farms’ productive life. However, research into the matter leads DBEDT to conclude that setting aside funds and requiring the decommissioning of wind farms after their useful life is now standard industry practice in Hawaii in the form of permit (zoning, land use) conditions requiring the set aside of funding for project

decommissioning in permits, leases of public lands, grants, and other mechanisms with authority over a project. Decommissioning has also been discussed by Hawaiian Electric Company in at least one project's PUC filings.

- Community involvement. Notwithstanding the timing later into the process, the REFSP attempts to require meaningful community engagement during project development. Aside from the REFSP, HSEO makes considerable effort to notify and engage communities in its everyday operations. Examples include its website of proposed renewable energy projects, the PEIS and multiple scoping meetings, public appearances, events, media releases, and its responsiveness to those who contact us directly. HSEO recognizes the level of public interest and sophistication is high concerning energy policies and projects, and seeks to engage meaningful discussions with the public.

REFSP Options: Repeal, Amend, or Leave in Place

In light of the issues with the REFSP discussed herein, DBEDT directed Tetra Tech to analyze three options for HRS §201N: repeal, amend, or leave as is. Discussion of these options, and their risks and benefits, follows.

Repeal HRS §201N

Considering the issues and challenges inherent in the REFSP and its associated administrative rules, DBEDT may consider recommending repeal of 201N in its entirety, except for the §201N-13 to 14 exemption from subdivision requirements, during a future legislative session. This option has several benefits and risks:

Benefits: The principle benefit of repeal would be to relieve DBEDT from risks associated with attempting to implement the law as written, or alternatively, risks associated with failing to implement a law with issues identified herein which remain in the HRS (see discussion in 'Leave 201N in Place' below). Also, DBEDT would save time and resources that would be spent maintain and reporting on the Renewable Energy Facility Siting Special Fund. DBEDT can continue to offer permit facilitation and assistance tools (as described in Table 1, Section 5), as these services and tools are authorized under HRS §196-4,² §201-12.5, and §201-61 through 65.³

Risks: Repealing 201N may create a public perception that DBEDT is not supporting renewable energy development. For this reason, it would be important for DBEDT to engage with renewable energy stakeholders in advance to educate them on the reasons for the repeal of 201N and the resources still available through DBEDT.

DBEDT may consider recommending repeal of 201N in its entirety, except for the subdivision exemption requirements under HRS §201N-13 and -14. Repeal of §201N-13 and -14 may be considered a loss of statutory authority as this exemption is not provided elsewhere in the HRS. Also noteworthy: HRS §201N-13 contains a sunset provision that repeals the law on June 30, 2020, but provides that any lease or easement that received subdivision exemptions under this law may continue to be effective.

² HRS §196-4 describes the powers and duties of the DBEDT energy resources coordinator.

³ HRS §201-61 through 65 describes DBEDT's facilitation of permit processing.

Benefits of this Exemption: §201N-14 is beneficial in that it allows leases and easements on portions of parcels to be exempt from formal subdivision requirements and conditions or exactions (such as mandatory infrastructure improvements like roadways, sewer and water that may not be needed for renewable energy projects), thereby facilitating the financing and development of renewable energy projects. If §201N-13 and -14 are repealed, there may be some risk for projects that have already received approvals under the subdivision exemption. For example, if a project has received approval under 201N-13 and -14 and these statutes were repealed, the legality of the lease or easement that was granted on land that was subdivided per this exemption could be called into question as the safeguard provision in §201N-13 would also be gone, leaving the project vulnerable to becoming an existing non-conforming development. If a repeal of 201N is pursued, DBEDT could consider moving §201N-13 and 14 to another statute in the HRS other than 201N (e.g., HRS §46-4 (County zoning)), thus preserving the subdivision exemption for renewable energy facilities outside of the 201N statute. It is also DBEDT's understanding that some counties (Maui and Kauai) have adopted exemptions from standard subdivision requirements for leases of portions of parcels and for projects under the jurisdiction of the Hawaii PUC, which could indicate this exemption is redundant.

Risks of this Exemption: §201N-13 and §201N-14 are potentially problematic in that early outreach indicated some counties did not have processes in place to recognize the exempted subdivided parcels, legally record them, or ensure the exempted subdivided parcels were otherwise in conformance with county land use laws.

HSEO believes the repeal of HRS §201N, in light of the issues discussed in this Report, would not inhibit HSEO's ability to support the permitting and siting of renewable energy projects in Hawaii. HSEO believes it can continue to make an impact on the development of renewable energy facilities that seek to balance technical, economic, environmental, and cultural considerations through other HSEO solutions currently available and under development.

Amend HRS §201N

Should amendment to the REFSP be determined to be the most beneficial and effective move forward, HSEO and Tetra Tech have identified the following areas for consideration of possible amendment, all of which carry potential benefits and risks:

- Delete the references to the permit plan process and retain and amend specific sections of the statute. Under this approach, the majority of the 201N statute could be struck and only select sections would be amended and retained, for example:
 - **§201N-1 Definitions.** Clarify which permits and processes (regulatory bodies) are covered under the REFSP.
 - **§201N-4 Permit plan application; coordinator; fee; pre- application conference.** Remove the portion of the statute that requires fees and cost reimbursement to the permitting agencies. Also add language addressing which agency has authority to enforce permit conditions and address violations.
 - **§201N-5 Approval of state permits.** Keep this section.
 - **§201N-6 Approval of county permits.** Keep this section.
 - **§201N-8 Environmental impact review process; applicability.** Adjust the required timing of permit plan acceptance to occur simultaneous to the publishing of the Draft EIS so that the Chapter 343 process and the permit plan process can work concurrently.
 - **§201N-10 Public participation; public meetings.** Change the public meeting requirement to be fulfilled by meetings required as part of Chapter 343.

- **§201N-13 to 14 Exemption from subdivision requirements.** Consult the counties on how best to implement and administer the subdivision exemptions allowed under §201N-13 and §201N-14 and encourage them to make any needed amendments to county code. DBEDT should also gain a full understanding of the processes in place within the various counties to exempt certain projects from full subdivision requirements.
- **§201N-31 to 33 Decommissioning of wind energy facilities.** Clarify this provision applies only to wind projects participating in REFSP. While the Legislative intent was clear in that this provision applies to projects in the REFSP, DBEDT recommends this provision would need clarification if maintained.
- **HAR §15-36-09 Action on permit plan application.** Amend HAR §15-36-09 part (b) to remove language that references the post-conference report from the pre-application meeting as satisfying the requirement for a written report that explains any deficiencies in the applicant's Permit Plan Application. This change could address the issues described under item 9b under Section 3.2 "Potential Issues and Challenges."

The benefits and risks of amending the REFSP HRS and HAR are:

Benefits: If 201N were amended to address the issues and challenges described in this Report, the benefit would be a renewable energy facility siting process that may be more appealing to developers as it could apply to a broader number of permits and could potentially streamline the overall permit process for renewable energy projects.

Risks: It will be difficult to amend 201N to address the issues and challenges described herein. As with any legislative effort to introduce and pass a bill, there is an inherent risk that the final form of the proposed amendments may not achieve the original intent of the bill. This risk could result in changes to 201N that DBEDT did not anticipate. Also, there will likely be challenges from both agencies and private parties to any proposed amendments to 201N. For example, if 201N were amended to broaden the definition of "permit" to include more than just the permits currently listed in §201N-1, DBEDT may receive objections from agencies responsible for permits proposed to be added to the definition.

Also, if 201N were amended and the provision under §201N-4(g) were retained that allows for permits to be processed and issued within a specific timeframe, DBEDT would be accepting responsibility for permits approved under 201N. If an amendment were added to 201N that required DBEDT to evaluate whether the permit application is compliant with the applicable agency's permit requirements before issuing the permit on behalf of the agency, risks may be reduced but not eliminated, as DBEDT would still be usurping the authority of the state or county decision-making bodies to issue discretionary approval of permits. This authority may be a politically unpopular measure due to home rule concerns. Also, if the permit plan were retained, DBEDT would need to provide staff with the expertise to review permits and make judgments about permit compliance. Staff expertise would need to be broad enough to evaluate all permits that would be included in 201N under the amended definition of "permit".

Leave the REFSP in Place

The third option is to leave HRS §201N as written. This approach would require DBEDT to: (a) respond to interest from possible applicants on a case-by-case basis, including projects larger and smaller than the 200 MW threshold; and, (b) fulfill reporting requirements (i.e., 201N Special Fund reports). This option has both benefits and potential risks:

Benefits: By not repealing 201N, DBEDT would avoid potential negative public perception or concerns associated with the repeal of a law intended to promote renewable energy. Also, it leaves the REFSP in place so that amendments can be made in the future to address the operational, logistical, and legal challenges.

Risks: Given the challenges and limitations pertaining to the REFSP as outlined in this Report, a potential risk associated with leaving HRS §201N as written is the requirement to expend public resources to sustain the program when doing so may not be an efficient way to achieve DBEDT's operational goals for permit facilitation. Another possible risk is DBEDT having to automatically accept 200 MW or greater projects into the 201N program should a Permit Plan Application be submitted. However, given currently known built or proposed projects,⁴ it is unlikely that a 200 MW project would be proposed in the near term; hence, the associated risk is minimal. Furthermore, it is highly unlikely that a developer would pursue entry into the REFSP upon understanding the challenges and limitations as well as additional costs of the existing 201N statute. However, if an application were submitted, DBEDT would need a reason to decline the application in good faith, and there would be some responsibility to explain why DBEDT denied the application. And finally, the lack of clarity between §201N-32 and 33 could pose a challenge to DBEDT as §201N-33 could be interpreted as applying to all wind energy facilities. DBEDT has no mechanism to implement decommissioning financial security requirements.

Recommendation: Repeal of HRS §201N is the Appropriate Path Forward

HSEO concludes that the REFSP in its current state is very limited in scope and practical effectiveness, may increase the administrative burden of regulatory agencies, may actually slow permit processing timelines, and while not absolving DBEDT of significant liabilities, would require significant modification in order to be considered an attractive method of facilitation for developers and regulatory agencies. Therefore, HSEO believes the appropriate path forward is to repeal HRS §201N, except for perhaps the subdivision exemption process under HRS 201N-13 and -14. Instead, HSEO should focus on high-impact renewable energy permitting facilitation solutions that it can implement and/or is currently administering in order to facilitate the development of renewable energy projects in Hawaii.

⁴ DBEDT's Hawaii Clean Energy Leaders List (<https://energy.ehawaii.gov/epd/public/re-projects-home.html>) currently shows no proposed or existing renewable energy projects over 200 MW.

RECOMMENDATIONS & CONCLUSION

With the exception of the subdivision exemption process under HRS 201N-13 and -14, HSEO recommends the repeal of HRS 201N in the 2016 Legislative Session or beyond. This time would provide DBEDT the opportunity to engage all stakeholders in order to further examine the potential issues and challenges associated with HRS §201N Renewable Energy Facility Siting Process, identify all potential impacts from a repeal, and evaluate any other necessary legislative actions needed to support the siting of renewable energy projects in Hawaii.

HSEO recommends that the Hawaii State Legislature continue to provide funding for permitting technical assistance to help HSEO continue to develop and implement the renewable energy facilitation activities described herein.

HSEO has demonstrated the ability to develop high impact online permitting and siting resources since 2008, and has shown the aggressive progression in this area in the last few years. Additional funding towards online self-help tools and resources would allow DBEDT to develop new online tools and resources. It would also allow HSEO to partner with other state and county agencies considering online permit processing, with input from the Hawaii Office of Information Management and Technology. Online tools maximize and leverage public resources as they can assist a high volume of users with less need for direct staff interaction. Furthermore, electronic document management can improve agency ability to administer its many permitting duties and functions.

APPENDIX