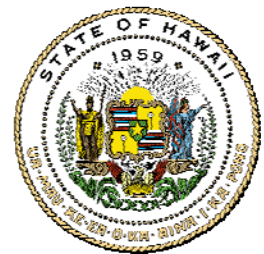




Auwahi Wind Farm, Sempra Generation (Ulupalakua Ranch, Maui)

**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**



STATE OF HAWAII
Department of Business,
Economic Development, and Tourism

Hawaii State Energy Office

December 2013

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 first Periodic Report to the Hawaii State Legislature on these activities.

In 2008, 9.4% of Hawaii's electricity was generated by renewable energy sources (2008 Renewable Portfolio Standards Status Reports). In 2012, 13.7% of Hawaii's electricity was generated by renewable energy sources (2012 Renewable Portfolio Standards Status Reports). Today, Hawaii's utilities are on track to exceed our goal of 15% renewable energy generation by 2015. This commendable progress over the last five 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.

The Hawaii State Energy Office (HSEO) within DBEDT has played a key role in this progress by assisting the permitting and siting of installed facilities (see below chart) with capacity to produce over 120 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
Kawaiiloa 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
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

In addition, HSEO has provided ancillary support for many other existing and proposed renewable energy projects in various stages of development.

Methods of Renewable Energy Facilitation

HSEO facilitates the development of renewable energy in Hawaii in two major ways, discussed infra:

1. Guidance and Interactive Self-Help Resources
2. Project-Specific Facilitation

Guidance and Interactive Self-Help Resources

HSEO provides all stakeholders tools and resources to help them navigate through the numerous regulatory processes and conduct the necessary due diligence required to design and construct renewable energy projects in Hawaii's communities and diverse, environmentally sensitive ecosystems. Examples include: online permitting and siting tools, permit guidance materials, policy development, programmatic environmental review, and providing information on facility siting, project finance, energy statistics, Hawaii business registration, utility interconnection, industry publications, and renewable energy projects in existence or proposed for development.

The following resources created by HSEO and its partners facilitate the development of renewable energy projects in Hawaii. They can be found at the HSEO online *Developer & Investor Center* (<http://energy.hawaii.gov/developer-investor>), a one-stop central forum that provides useful information to all renewable energy developers and stakeholders:

- *Renewable Energy Permitting Wizard*
- *Renewable EnerGIS Mapping Tool*
- *Hawaii Renewable Energy Projects Directory*
- *Hawaii Department of Health e-Permitting Portal*
- *Guide to Renewable Energy Facility Permits in the State of Hawaii*
- 160+ *Permit Packets* describing processes to obtain various federal, state, and county permits
- Information on Financing and Incentives for Renewable Energy Projects, Land Resources for Renewable Energy Projects, Utilities Resources, and Developer and Investor Opportunities

Project-Specific Facilitation

Project-specific facilitation focuses HSEO efforts on individual projects or entities in need of assistance. Examples include: providing guidance to developers conducting due diligence on specific projects, assisting government projects and initiatives, facilitating individual project permits as needed, and assisting projects via the Renewable Energy Facility Siting Process.

Initial Report to the Hawaii State Legislature on Renewable Energy Facilitation Activities

This Report describes the renewable energy facilitation activities conducted by DBEDT since 2008 and sets forth DBEDT's plan to continue such facilitation activities in order to achieve and surpass Hawaii's clean energy goals.

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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 (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 Renewable Energy Facility Siting Process (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.

STATUS OF RENEWABLE ENERGY FACILITY FACILITATION ACTIVITIES

This section discusses the actions taken by DBEDT since 2008 to facilitate the permitting and siting of renewable energy facilities in Hawaii.

GUIDANCE AND INTERACTIVE SELF-HELP RESOURCES

The Hawaii State Energy Office (HSEO) has been focused on developing self-help tools and resources to assist a high volume of projects and developers with little or no need for direct HSEO interaction. While these resources were created to facilitate renewable energy development, they can be used for any project requiring multiple permits and approvals from various county, state, and federal agencies in Hawaii. To stay current with applicable county, state, and federal permitting requirements, all tools and resources discussed herein require regular upkeep and maintenance from HSEO staff.

Developer & Investor Center (“Center”) (<http://energy.hawaii.gov/developer-investor>)

HSEO’s online *Developer & Investor Center* provides developers and investors with important technical assistance, permitting tools and local connections to accelerate a project’s journey to the marketplace, where the rewards will be felt statewide. The *Center* is a dynamic resource that informs users of contemporary issues impacting renewable energy development in Hawaii. The *Center* provides guidance on project permitting, local utility interconnection, Hawaii business registration, project financing and local incentives, local permitting 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* (discussed infra) which provides information on obtaining permits in Hawaii and *Permit Briefs for* over 160 federal, state, and county permits potentially required for renewable energy development in Hawaii. These *Permit Packets* include the process steps, estimated timelines and costs, agency contacts, and relevant laws and references. The *Center* also links to the Hawaii Department of Health (DOH) *e-Permitting Portal* (discussed infra), which provides online processing of DOH permits and approvals protecting Hawaii’s air, water, ground, and other environments. Finally, the *Center* connects users to the *Hawaii Business Express Online Business Registration* website to allow users to create and register a new business in Hawaii online.

The Center also hosts the *Self-Help Energy Suite*.

Self-Help Energy Suite (Online Permitting Tools and Resources) (<http://energy.hawaii.gov/developer-investor>)

HSEO created the *Self-Help Energy Suite* of tools to advance high impact, clean energy alternatives. The *Suite* hosts:

- **Renewable Energy Permitting Wizard (“Permitting Wizard”)** (<http://wizard.hawaiienergyinitiative.org/>)
The *Permitting Wizard* was developed in partnership with Parsons Brinkerhoff (a.k.a. PB Americas) to help those proposing renewable energy projects in Hawaii identify and understand the county, state, and federal permits that may be required for their individual project. This easy to use tool works for projects ranging in size from residential installations to large utility-

scale facilities, and requires little knowledge of local permitting requirements. Users are asked a series of questions relating to their project(s) and their answers prompt the *Permitting Wizard* to identify the permits required. To HSEO's knowledge, the *Permitting Wizard* is the only existing online tool in any jurisdiction that identifies the federal, state, and county permits required for a specific renewable energy project of any technology type (wind, solar, geothermal, wave, bioenergy, waste-to-energy, etc). Users can run numerous scenarios to determine how project design or location changes impact the permits required. The *Permitting Wizard* is an original permitting tool that has garnered positive feedback from the United States Department of Defense (USDOD) and other users. It serves as a model for a similar "wizard" currently being developed by the National Renewable Energy Laboratory (NREL) and is considered a case study in effective means of permit facilitation by the National Association of State Energy Officials (NASEO). The *Permitting Wizard* was awarded a 2013 Excellence in Technology Award from the State of Hawaii Office of Information Management and Technology under the "Cross-Boundary Collaboration and Partnerships" category.

In partnership with Hawaii Information Consortium (eHawaii.gov), the *Permitting Wizard* is currently being upgraded to reflect current permitting requirements, improve user functions, and be available in an open source software environment. Including ongoing upgrades, HSEO will spend \$134,000 in U.S. Department of Energy funds, and no state funds, to develop the *Permitting Wizard*. NREL also provided just under \$40,000 in federal funding for *Permitting Wizard* enhancements and for HSEO to conduct two informational briefings for regulatory agencies and industry professionals in 2011 to present the *Permitting Wizard* and obtain feedback to improve its usability.

- **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. It allows a lay user to identify the renewable energy resources and important attributes related to siting and permitting – such as zoning, critical habitat, slope, and rainfall – for specific land parcels throughout the State of Hawaii. Maps can also be created 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. No special software or user training is needed. Using *EnerGIS*, landowners can assess their properties' renewable energy potential, developers can identify promising locations for renewable power plants, 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. 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), and developer BEI Consulting, *EnerGIS* uses existing geographic information systems (GIS) data and system operations managed by OP. *EnerGIS* and its corresponding software and server upgrades were funded by \$109,000 from the state Energy Security Special Fund (ESSF). *EnerGIS* has already saved HSEO and OP considerable time, as HSEO specialists can quickly create customized maps to review the attributes of proposed projects without relying on OP's GIS technicians' expertise and availability. *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.

- **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. Identifying existing and proposed projects helps local regulatory agencies better understand the cumulative landscape of renewable energy projects in Hawaii, and informs local communities of projects planned in their area to facilitate community involvement prior to project construction. It also demonstrates Hawaii’s market potential to prospective investors and developers. The *Directory* is updated periodically by HSEO based on publically available information from a variety of sources on each identified renewable energy project.

Hawaii Department of Health e-Permitting Portal (“e-Permitting”) (<https://eha-cloud.doh.hawaii.gov/epermit/View/default.aspx>)

e-Permitting is an online permitting platform launched by DOH in the spring of 2012 that enables the electronic submission and processing of DOH Environmental Health Administration (EHA) permits. In May 2010, DBEDT and DOH executed a Memorandum of Agreement to develop an online permitting tool, wherein DBEDT agreed to provide \$375,000 in federal American Recovery and Reinvestment Act (ARRA) funds and DOH agreed to develop the tool. In May 2011, DBEDT supplemented this funding by providing DOH an additional \$150,000 from the state Energy Security Special Fund (ESSF). This partnership allowed DOH to retain software developer Windsor Solutions to develop an online permit processing tool that empowers DOH staff and provides the regulated community sought-after transparency into the processing of their individual permits. DOH can now electronically develop, control, and manage many administrative and permitting forms issued by DOH-EHA, including the necessary permit (application) modifications in response to changing state and federal requirements. Permit applicants can now track their application through to issuance, and instantaneously and directly interact with DOH staff processing their permit(s).

Since *e-Permitting* went live in the spring of 2012 to October 2013, DOH reports *e-Permitting* has processed \$83,665 in online payments, with online permit applications totaling \$502,865 in fees (the majority of payments were made to DOH via check). In the same time period, 1,019 permit applications have been submitted online, and 1,875 draft applications have been created and saved by applicants for possible future online submission to DOH.

Given the numerous permits under DOH-EHA jurisdiction required for renewable energy facilities in Hawaii, enhancing DOH-EHA’s ability to process and manage a high volume of permits will facilitate renewable energy development in Hawaii for years to come. *e-Permitting* has been implemented in other states and can serve as a model for other Hawaii agencies considering electronic permit filing and management. *e-Permitting* was awarded a 2013 Excellence in Technology Award from the State of Hawaii Office of Information Management and Technology under the “Digital Government: Government to Business” category. HSEO is engaging other agencies key to renewable energy regulation and permitting to implement online permitting tools under a similar arrangement.

Project Permitting Assistance and Resources (<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>)

HSEO’s *Project Permitting Assistance and Resources* 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. HSEO intends these resources to be useful for all stakeholders,

including homeowners, large-scale developers, permitting agencies, policymakers, investors, and the general public. The *Project Permitting Assistance and Resources* website has had over 3,800 page views since its launch in October 2012.

The *Project Permitting Assistance and Resources* website provides:

- **Guide to Renewable Energy Facility Permits in the State of Hawaii (“Guide”)**
The *Guide* was developed to help those proposing renewable energy projects in Hawaii understand the county, state, and federal permits that may be required for their individual project. It also 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. This *Guide* was funded by ARRA funds granted to DBEDT by the U.S. Department of Energy (USDOE).
- **Permit Briefs (“Briefs”)**
The *Briefs* provide processing and general information on county, state, and federal permits required for renewable energy projects in Hawaii. HSEO currently provides over 160 individual *Briefs*, and is currently generating new *Briefs* based on revised agency processes, previously unidentified permits, and changes to relevant laws. HSEO has worked with the relevant county, state, and federal agencies to make the *Briefs* consistent with agency practices, policies, and procedures.

HSEO is in the process of upgrading these resources with funding from the USDOE. Final products will be published in 2014.

Policy Development

Like other state departments, HSEO plays a key role in the policymaking process. One of HSEO’s primary legislative functions is to provide information and analysis on a variety of issues concerning renewable energy permitting and siting in Hawaii to support informed decision-making. Numerous legislative proposals impacting the permitting and siting of renewable energy projects have been introduced every session since 2008.

Having developed expertise on renewable energy technologies and the associated environmental impacts, HSEO also works with local, county, state, and federal permitting agencies to resolve ambiguities in existing permitting processes or laws. In some cases, HSEO assists agencies in developing public guidelines for the permitting of a given renewable energy technology (see City and County of Honolulu, *Solar Farm Guidelines and Solar Farm Self-Certification Form*). HSEO also provides technical guidance to agencies on given renewable energy technologies so the agencies can develop more appropriate restrictions and require effective mitigation actions. Given the uniqueness of renewable energy technologies and facility siting, all permitting agencies and jurisdiction are developing regulatory expertise on the matter together as each new renewable energy project is proposed and developed.

Programmatic Environmental Review

The State of Hawaii currently serves as a cooperating agency with U.S. Department of Energy (USDOE) in the preparation of the *Hawaii Clean Energy Programmatic Environmental Impact Statement (PEIS)* under

the National Environmental Policy Act (NEPA). The *PEIS* is being developed to guide future USDOE funding decisions and other actions to support Hawaii in achieving our clean energy goals.

The *PEIS* will analyze the potential statewide environmental impacts of activities in the following categories: (1) Energy Efficiency; (2) Distributed Renewables; (3) Utility-Scale Renewables; (4) Alternative Transportation Fuels and Modes; and, (5) Electrical Transmission and Distribution.

HSEO serves as the coordinating representative on behalf of the State of Hawaii with the duty to distribute the *PEIS* and its draft contents to other agencies and stakeholders in Hawaii for review and comment. HSEO also keeps USDOE informed on important issues impacting Hawaii's environment, citizens, and renewable energy industry to help USDOE develop the *PEIS* so it is most specific and relevant to Hawaii.

The *PEIS* is high level and does not discuss any particular project, but it does provide useful information on Hawaii's sensitive environments, typical impacts from a wide variety of renewable energy and energy efficiency technologies, best management practices, and references to existing studies and reports. When final, the *PEIS* will provide valuable guidance for any energy-related project being developed in Hawaii.

USDOE anticipates the *Draft PEIS* will be ready for public review and comment in 2014.

Planned Initiatives

HSEO plans to maintain its focus on developing high impact solutions and tools to facilitate the permitting of multiple renewable energy projects in Hawaii.

Specific near-term projects in HSEO's permit facilitation plan include:

- Implement electronic/online permitting systems in another targeted state or county agency
 - HSEO has identified specific state agencies key to renewable energy project permitting in Hawaii (e.g., Department of Land and Natural Resources) and is in the process of preparing a formal request to discuss the development of an online permitting platform using DBEDT funds.
- Revise the *Guide to Renewable Energy Facility Permits in the State of Hawaii*
 - Revisions will include lessons learned permitting and siting different types of renewable energy technologies in Hawaii, challenges and issues specific to renewable energy development in Hawaii, updated information on individual permits and agency processes, additional permits not included in Version 1, updated agency contact information, and recommendations on best practices to develop energy projects in Hawaii.
- Revise the *Permit Briefs* (includes adding new *Briefs*)
 - Revisions will include updated information on individual permits and agency processes, permit prerequisite approvals, additional permits, removal of irrelevant processes, and updated agency contact information.
- Complete upgrades to the *Renewable Energy Permitting Wizard*
 - Upgrades will include hosting the *Permitting Wizard* in an open source software environment, improved security features, improved functionality (e.g., users can now make notes during evaluations), updated permit process and agency content, additional administrative features (e.g., HSEO can add evaluation subquestions), and improved look and feel.

- Upgrade the *Renewable EnerGIS Mapping Tool*
 - Upgrades will include more accurate and detailed resource (wind, solar) data, additional search capabilities (e.g., ask *EnerGIS* to locate all parcels with desired attributes entered by the user), additional data layers, ability to display resource data over time or in different manners, adding interactive assistance, and making *EnerGIS* mobile-friendly.
- Upgrade the *Developer & Investor Center*
 - HSEO will expand the *Center's* content to include more detail on individual issues (e.g., Feed-In Tariff program, utility interconnection for residences, funding opportunities, tax incentives). HSEO will rely on experience from the private sector when outlining the content of the upgraded *Center* to ensure it provides relevant and useful information.
- Update the *Hawaii Renewable Energy Projects Directory*
 - HSEO updates this *Directory* periodically to capture the progress of each renewable energy project in Hawaii. As the *Directory* is based on publically available information only, HSEO attempts to confirm projects statuses with the relevant developers prior to publication.
- Distribute the *Draft PEIS* to Hawaii stakeholders for meaningful opportunity to review and comment; support USDOE to publish the *Final PEIS*.
- Continue policy development and assistance to Developers and Stakeholder in permit process activities.

PROJECT-SPECIFIC FACILITATION

HSEO fields requests for assistance and guidance from renewable energy developers in Hawaii, ranging from guidance on general project proposals to discussion of specific permitting and siting issues. HSEO also provides prospective developers information on key agencies and stakeholders (e.g., community groups, neighborhood boards). As part of this process, HSEO actively encourages prospective developers to consult stakeholders early in the project development phase and work collaboratively to identify and address project challenges. On a case-by-case basis, HSEO also helps facilitate meetings between developers and various county, state, and federal permitting agencies that often have overlapping jurisdictions in the overall review and permitting of proposed projects.

This section discusses three primary methods of project-specific facilitation provided by HSEO: the Renewable Energy Facility Siting Process, individual project facilitation, and assistance to government agencies.

Renewable Energy Facility Siting Process (REFSP)

The Renewable Energy Facility Siting Process (REFSP), codified by H.R.S. §201N, 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 200 MW and 5 MW, and biofuel production facilities or distribution infrastructure with capacity to produce or distribute 100,000 gallons or more annually, are admitted into the REFSP at DBEDT discretion.

The REFSP requires DBEDT to determine and calculate the appropriate fees to facilitate a given project based on the permits required and permit complexity, and enter into a cost reimbursement agreement with the REFSP applicant. In addition to the fees for DBEDT 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 provide the applicant assurances that a decision on a given permit (to approve or deny) will be issued within a known 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 in 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 H.R.S. §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 H.R.S. §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. DBEDT and PUC have yet to develop these guidelines for REFSP projects, as identified under the proposed REFSP initiatives moving forward.

Finally, DBEDT supported the passage of Act 262, Session Laws of Hawaii, 2013, which 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. This is a good example of the type of responsible facilitation that DBEDT seeks to provide.

Current Status of the REFSP

HSEO continues to improve and refine the REFSP in anticipation of renewable energy projects to be developed in response to recent utility announcements and upcoming utility solicitations. As provided under H.R.S. §201N-12 (Act 207, Session Laws of Hawaii, 2008), HSEO adopted Interim Hawaii Administrative Rules to guide REFSP administration: H.A.R. §15-36. To date, HSEO has draft documents which are planned to be available online at www.hawaiienergy.gov during Fiscal Year 2014 in support of these rules:

- Permit Plan Application;
- Interagency agreement template to enable the transfer of funds;
- Cost Reimbursement Agreement template;
- Permit Plan template; and
- A process flowchart to illustrate the REFSP process.

HSEO has also consulted select state and county agencies on the REFSP to gain their insights into the process, discuss potential issues, and gauge their willingness to participate.

For any future collaboration, 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.

Projects Entered or Expressing Interest in the REFSP

While HSEO has fielded many inquiries into the REFSP, to date only one project has utilized it: the Kawaiiloa Wind Farm on the North Shore of Oahu. The project developer, First Wind, approached HSEO about using a provision of H.R.S. §201N (201N-8) which provides for DBEDT to serve as the accepting authority for a project Environmental Impact Statement (EIS) pursuant to H.R.S. §343. First Wind was unable to find any other clear trigger for an EIS for the project under H.R.S. §343, but understood the need to conduct an EIS given the magnitude and impacts of the project. DBEDT accepted the Final EIS for the project, but did not accept fees or a permit plan application, develop a permit plan, or formally engage any permitting agencies as provided under H.R.S. §201N.

REFSP Challenges

Implementation of the REFSP is largely dependent on obtaining commitments from state or county agencies to process a given permit within a given timeframe. Many permits are at the discretion of boards, commissions, and/or federal agencies outside the jurisdiction of the REFSP or a given agency. For example, the county planning departments cannot ensure the planning commission and/or county council will approve or deny a given permit within a given timeframe, or the Hawaii Department of Health cannot ensure the U.S. Environmental Protection Agency will approve or deny a permit within a given timeframe, or divisions within the Hawaii Department of Land and Natural Resources cannot guarantee the Board of Land and Natural Resources will act on a permit within a given timeframe. In addition, 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. Without assurances from the agencies on permit process timing, potential REFSP applicants are reticent to provide fees and enter into the REFSP program.

Another significant challenge is the accounting and transfer of funds between agencies. The cost estimates required prior to permit processing take time to develop and can impact an agency's operational budget as the flow of funds can be sporadic and unpredictable. The REFSP requires "detailed" descriptions of reimbursable agency activities in facilitating permits and methods for calculating reasonable agency costs and expenses. Given the unpredictable nature of project permitting, estimating agency needs for a given permit requires ongoing diligence on the part of the agency. In addition, the transfer of funds between agencies generally requires an interagency agreement (Memorandum of Agreement or Understanding or MOU) and may require county council approval if transferring funds to a county agency when additional funds impact an agency's approved budget. Some agencies have told DBEDT they prefer to process permits under normal methods rather than the REFSP due to the additional workload to develop estimates, track staff time, and enter into an agreement with DBEDT.

The application of the subdivision exemption under H.R.S. §201N-13 and §201N-14 has also proved to be challenging. This exemption requires county approval, yet some counties do not have processes or procedures in place to ensure parcels subdivided under H.R.S. §201N comply with standard zoning requirements, as provided under standard subdivision processes. Therefore, some counties are not comfortable with approving this exemption process. 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. HSEO will investigate whether a portion of a parcel can be sufficiently recorded using property boundaries, meets and bounds, and/or maps.

Finally, intermittent funding for the Renewable Energy Facilitator has caused instability in the position. Although it has been proposed in biennium budget, since 2008, the Facilitator position has only been funded two years; in 2009 and 2012.

Planned Initiatives for the REFSP

Notwithstanding the challenges previously discussed, HSEO considers the REFSP a valuable tool to facilitate responsible renewable energy development in Hawaii, particularly the permit agency coordination, environmental review, wind farm decommissioning, and community involvement aspects. DBEDT anticipates agency and developer comfort with the REFSP will grow when DBEDT establishes its operational guidelines and projects are successfully assisted through the REFSP.

HSEO is now developing REFSP operational guidelines, which will set forth REFSP procedures, conditions, requirements, obligations, and other aspects of the program. These guidelines will provide clarity to the public and potential candidates on REFSP program administration and participation, including day-to-day operations, project eligibility criteria, resource (fund) management, and the forms necessary for participation.

Given the complications involving the interagency transfer of funds, one of HSEO’s primary objectives is to finalize HSEO’s ability to collect fees, develop a permit plan, and coordinate permits without reimbursing other agencies. This would still require DBEDT to coordinate with the other county, state, and federal agencies on the processing of the permits for a given REFSP project, as agency coordination is the cornerstone of the REFSP. Reimbursement of fees to state and county agencies for their services in facilitating permits under the REFSP is optional, but preferred. Without fees provided by the private sector, agencies would be unable to retain supporting staff or contractors to facilitate a given REFSP project, and will need to adjust current staff workloads to provide priority processing for REFSP projects.

HSEO will continue discussions with local county, state, and federal agencies to obtain feedback for the purpose of ultimately entering into agreements with these agencies to execute the MOU as described above and facilitate projects under the REFSP. HSEO believes a master agreement between DBEDT and each state and county permitting agency will allow for project-by-project facilitation without need for subsequent interagency agreements; provided the master agreements give the authority to transfer fees from DBEDT to the agency in exchange for REFSP facilitation on a project-by-project basis. DBEDT will need to enter into separate cost reimbursement agreements with each individual REFSP applicant.

DBEDT will also evaluate potential modifications to the REFSP process to address the agencies’ reluctance and inability to commit to a timeframe when decision-making is out of their control. For example, amending the REFSP to provide a timeframe/deadline for agency processing of a permit, but not the decision-making by another authority (council, board, commission), could address this concern

while still providing applicants some assurance a permit will get processed by the agency within a known timeframe.

There would still be no guarantee a decision-making authority will act on a permit within a given timeframe, but having some assurance the agency will complete its review within a known timeframe has value. Under this method, a processing timeframe/deadline would be established in the DBEDT-agency agreement for a given REFSP project, but there would be no deadline for permit issuance where an authority other than the processing agency is the ultimate decision maker.

To establish the REFSP and address the challenges discussed infra, HSEO requests that the Renewable Energy Facilitator position be funded and \$50,000 be allocated to HSEO in 2015 fiscal year by the Legislature to help carry-out the following activities:

1. Develop and publish the REFSP program operational guidelines;
2. Develop a list of reimbursable actions under the REFSP and cost estimates for each, including the methodology to determine staff time reimbursement costs (with consideration that similar methods or costs can be used by other agencies);
3. Finalize the REFSP project eligibility criteria, including taking into consideration a balance of technical, economic, environmental, and cultural project impacts;
4. Finalize and publish the REFSP permit plan application;
5. Finalize the post-conference report template (required after initial meeting between applicant and DBEDT);
6. Finalize the REFSP process flowchart;
7. Finalize the cost reimbursement agreement template, including a supplemental cost reimbursement template for cases where original agreement is insufficient or needs modification;
8. Finalize the acceptance memo notifying applicant of acceptance into the REFSP;
9. Finalize the internal mechanism for DBEDT to deposit fees into, and withdraw funds from, the Renewable Energy Facility Siting Special Fund;
10. Finalize the permit plan template;
11. Finalize the process to conduct a public meeting on REFSP projects (securing venues, publishing notice, getting travel approvals, developing a meeting agenda template, etc.);
12. Create and publish informational materials on the REFSP for potential applicants and the general public;
13. For wind farms, determine what will satisfy requirement to show evidence of financial ability to decommission the facility after its lifetime;
14. Finalize the interagency agreement template, addressing the challenges of needing external approvals and the mechanisms to transfer funds;
15. Work with the four (4) counties to resolve subdivision exemption issues where possible, including proper means of parcel recording, assessment, and taxation; and,
16. Work with the Public Utilities Commission to develop reasonable guidelines and timetables for the creation and implementation of power purchase agreements for projects entered into the REFSP.

Individual Project Facilitation

HSEO staff spends considerable time assisting individual renewable energy projects and developers currently doing business in Hawaii or interested in doing business in Hawaii. Given the strong interest in Hawaii's energy market, developers from around the world seek HSEO guidance.

Depending on the needs of the project or developer, typical facilitation provided by HSEO includes:

- Identifying county, state, and federal permitting requirements for individual projects;
- Sharing lessons learned from the development of similar projects in similar areas;
- Identifying key county, state, and federal agencies;
- Connecting agencies to developers;
- Identifying environmental, cultural, and zoning issues presented by certain renewable energy facilities and technologies, particularly the impacts to Hawaii's sensitive environments;
- Relaying community sentiments regarding the development of projects in their areas;
- Coordinating meetings with permitting agencies and other stakeholders to discuss specific projects or issues;
- Recommending public and private stakeholders to consult during project due diligence;
- Engaging and supporting permitting agencies on the processing of project permits; and,
- Providing prospective developers information on similar facilities and/or permitting processes.

HSEO is selective on its assistance, focusing on high impact projects and solutions that meet a balance of technical, economic, environmental, and cultural considerations. HSEO has a questionnaire on its website for developers to complete prior to meetings with HSEO staff so HSEO can direct them to the proper resource(s), provide them information via email response, or determine a meeting is worthwhile for both HSEO and the developer.

Assistance to Government Agencies

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: Hawaii Department of Land and Natural Resources, Hawaii Department of Hawaiian Home Lands, Hawaii Department of Agriculture, Hawaii Foreign-Trade Zone, and the United States Department of Defense (USDOD). HSEO assists these departments by providing assessments of a proposed project's technical and economic viability, and by providing guidance on the permitting and siting challenges of proposed renewable energy projects based on its potential impacts.

DBEDT also provides assistance as provided under H.R.S. §171-95.3 (Renewable energy producers; lease of public lands without public auction.), which provides for DBEDT to assist the negotiation of public lands for renewable energy development, through public auction or direct lease negotiation.

In addition, HSEO has been working with various entities within the USDOD to ensure Hawaii's energy and biofuel industries meet Hawaii residents and USDOD needs. Given the limited land area in Hawaii, careful planning is needed to determine the type of projects and technologies that should be pursued in the best long-term interests of all Hawaii residents. HSEO is also supporting USDOD initiatives to develop renewable energy projects on USDOD lands by providing guidance on permitting, utility interconnection, and potential environmental, cultural, social impacts of proposed projects. DBEDT intends to continue these important public initiatives and develop its role as advisor on energy matters to its government partners.

RECOMMENDATIONS

HSEO recommends that the Hawaii State Legislature continue to provide funding for the Renewable Energy Facilitator position along with an Administration Fiscal Year 2015 operating budget request of \$75,000 for permitting technical assistance to help HSEO implement the renewable energy facilitation activities described herein. This funding will also permit for HSEO to provide the requisite technical assistance and contractor support to other agencies planning to implement online permitting and/or form management tools. As demonstrated by DOH, online permitting can maximize staff resources and speed government permitting and regulation. It is also important to note the REFSP may require additional legislative and/or administrative modifications to address some of the identified challenges.

HSEO has demonstrated the ability to develop high impact online permitting and siting resources since the creation of the Renewable Energy Facilitator position. 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 Technology. Online tools maximize and leverage public resources as they can assist a high volume of users with less need for direct staff interaction. In general, electronic document management can, in some cases significantly, improve agency ability to administer its many permitting duties and functions.

DBEDT, with the support outlined above, will develop a demonstration project with other state Departments considering the use of renewable energy development on their land or building assets. This may include providing funds for additional staff and/or contracting work for these agencies to retain in-house experts to help them make informed decisions on the development of renewable energy projects on their assets.

With the results of such a demonstration, HSEO will develop further recommendations to the Legislature to either allow DBEDT to implement the Renewable Energy Facility Siting Process in its entirety and/or seek modifications to the REFSP to address the challenges discussed in this Report.

CONCLUSION

HSEO has done much in the last five (5) years to facilitate the development of renewable energy projects and policies in Hawaii, both systemically and on an individual project basis. Since 2008, HSEO has been a key part of the nearly 5% increase in renewable energy production in Hawaii.

Regarding the permitting and siting of renewable energy facilities, HSEO serves as a valuable resource to a wide range of public and private stakeholders.

Much work is still needed for Hawaii to reach and ultimately surpass our goal of 40% renewable energy generation by 2030.

HSEO has specific initiatives to continue and improve upon the support provided to Hawaii's renewable energy industry through the development of permit facilitation tools and policies. Continued support from the Hawaii State Legislature is needed to maintain and build upon this service.

HSEO will continue to develop the Renewable Energy Facility Siting Process in its entirety and if necessary will identify recommendations for modification.

HSEO's directive concerning renewable energy project facilitation is to balance technical, economic, environmental, and cultural considerations in order to make the best use of Hawaii's precious land and resources.