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April 30, 2015

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street, First Floor
Kekuanaoa Building
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2014-0135 – GEMS Program Quarterly Report

The Hawaii Green Infrastructure Authority respectfully submits this Green Energy Market Securitization Program Quarterly Report for the period of January 1, 2015 - March 31, 2015. This report fulfills the requirement for Quarterly Reports as specified in Decision and Order No. 32318, filed on September 30, 2014 in Docket No. 2014-0135.

Sincerely,

Cyd M. Miyashiro
Acting Executive Director

Attachment

c: Service List

FILED
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PUBLIC UTILITIES
COMMISSION

SERVICE LIST

Two copies of the foregoing letter Subject: Docket No. 2014-0135 GEMS Program Quarterly Report, together with this Certificate of Service have been served to the following and at the following addresses:

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Dated: Honolulu, Hawaii, April 30, 2015.



State of Hawaii

Department of Business, Economic Development & Tourism

Hawaii Green Infrastructure Authority

GREEN ENERGY MARKET SECURITIZATION PROGRAM

QUARTERLY REPORT:

January 1, 2015 – March 31, 2015

REPORT TO THE
STATE OF HAWAII
PUBLIC UTILITIES COMMISSION
Pursuant to

Decision and Order No. 32318 filed in Docket No. 2014-0135

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1 Introduction and Context

The Green Infrastructure Loan Program (a.k.a. the “Green Energy Market Securitization Program” or “GEMS Program”) employs a high-impact strategy to deploy clean energy infrastructure that will contribute towards Hawaii’s pursuit of its statutory 70% clean energy goals by 2030 and to help consumers lower their energy costs. The GEMS Program is the result of Act 211, Session Laws of Hawaii 2013 (“Act 211”), which created the framework for establishing the GEMS Program, including its oversight, governance, and reporting processes. The Program is governed by the Hawaii Green Infrastructure Authority which consists of five members: The Director of Business, Economic Development and Tourism, the Director of Finance, the Energy Program Administrator and two members appointed by the Governor, with the advice and consent of the Hawaii State Senate.

1.1 Procedural History and Reporting Requirements

The State of Hawaii Public Utilities Commission (“Commission” or “PUC”) issued Decision and Order No. 32318¹ (the “Program Order”), which approved the “Application of the Department of Business, Economic Development, and Tourism for an Order Approving the Green Infrastructure Loan Program,”² (“Application”) by the Hawaii Green Infrastructure Authority (“Applicant”, “Authority”, “HGIA”).³ The Application requested, and the Program Order approved, the use of funds deposited in the Green Infrastructure Special Fund to establish and institute the GEMS Program, subject to the modifications described within the Program Order.⁴ In addition to complying with reporting requirements mandated by Act 211, the Authority proposed providing the Commission with Quarterly Reports which offer a snapshot of program activities as a part of the Application.⁵ The Commission approved the quarterly reporting proposal made by the Authority, adding additional requirements that arose during the docket process, including one from the Consumer Advocate⁶ that included requirements concerning the financing of utility-scale projects, when applicable.⁷

The Commission’s approval of Quarterly Report process, with modifications, stated that Quarterly Reports must provide information on the progress of the GEMS Program development and include, at a minimum:

¹ Filed on September 30, 2014 in Docket No. 2014-0135

² Filed on June 6, 2014 in Docket No. 2014-0135

³ HRS §196-63 provides that until the Authority is duly constituted, the Department of Business, Economic Development, and Tourism of the State of Hawaii (DBEDT) may exercise all powers reserved to the Authority pursuant to HRS §196-64, and shall perform all responsibilities of the Authority. As the Authority has now been duly constituted, the Authority assumes in its own right, pursuant to statute, all of the functions, powers, and obligations, including responsive or informational submissions in this Docket, which had heretofore been assigned to DBEDT.

⁴ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 1.

⁵ See “Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service,” filed in Docket No. 2014-0135 on June 6, 2014 at p. 17.

⁶ “Consumer Advocate” refers to the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

⁷ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 93.

- (1) All information proposed in [the] Application or as otherwise indicated by DBEDT in the course of this proceeding to be included in Quarterly Reports;
- (2) Summaries of all metrics approved pursuant to [the] Program Order, and as developed and approved through the metrics and data collection development process. . . ;
- (3) Accumulated year-to-date tallies of quantitative, and to the extent possible, non-quantitative metrics provided in preceding Quarterly Reports for the applicable annual reporting period;
- (4) Any additional information required by this Program Order to be included as part of one or more Quarterly Reports; and
- (5) Actuals to date as compared to the immediately preceding Annual Plan budget.⁸

In the Application, the Authority proposed Quarterly Reports include a snapshot of program activities, provide a financial summary, and address adjustments planned or made to the GEMS Program to accommodate market changes.⁹ The Authority indicated in the expected GEMS Program timeline that the Quarterly Report for quarter three of PY 2014-2015 would be submitted to the Commission in April 2015.¹⁰ More information about the procedural background for the GEMS Program can be found in the various filings in Docket No. 2014-0135 on the Commission's website: <http://dms.puc.hawaii.gov/dms/>.

2 Summary of Program Activities

The following is a summary of the activities that have occurred between January 1, 2015 and March 31, 2015.

2.1 Administration

The following activities pertain to the administration of the GEMS Program:

- The Authority held a meeting on February 26, 2015, at which it ratified the temporary assignment of Cyd Miyashiro to the Interim Executive Director position and approved the Interim Executive Director to enter into four agreements with Deployment Partners to allow for the launch of commercial (nonprofit and small business) and consumer products.
- Quarterly Report: October 1, 2014 – December 31, 2014 was filed on January 30, 2015 in Docket No. 2014-0135.
- Annual Plan Fiscal Year 2016: July 1, 2015 – June 30, 2016 was filed on March 31, 2015 in Docket No. 2014-0135.
- The Authority, through DBEDT, has been testifying on matters at the 28th Legislative Session, 2015 at the Hawaii State Capitol. In addition to the Governor's Messages mentioned herein, the Authority is/was actively monitoring: H.B. 500, H.B. 824, H.B. 927, H.B. 1123, H.B. 1509, S.B. 1096, and S.B. 1198.

⁸ See "Decision and Order No. 32318," filed in Docket No. 2014-0135 on September 30, 2014, at p. 97.

⁹ See "Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service," filed in Docket No. 2014-0135 on June 6, 2014 at p. 17.

¹⁰ See "Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service," filed in Docket No. 2014-0135 on June 6, 2014, Exhibit 1.

- Governor’s Message No. 504 nominated Luis Salaveria as the Director of DBEDT, who serves as the Chairperson of the Authority. Mr. Salaveria was confirmed by the Hawaii State Senate on March 19, 2015.
- Governor’s Message No. 519 nominated Wesley Machida as the Director of the Department of Budget and Finance, a statutorily named member of the Authority. Mr. Machida was confirmed by the Hawaii State Senate on February 25, 2015.
- Governor’s Message No. 620 nominated Jeffrey Mikulina to the Hawaii Green Infrastructure Authority for a term to end June 30, 2018. Mr. Mikulina was confirmed by the Hawaii State Senate on April 22, 2015.
- One Authority member position remains vacant.
- The Authority has begun its search for a permanent Executive Director.

2.2 Program Development and Implementation

- The Nonprofit PV Product officially opened to accept applications on March 27, 2015. Loan funds will not be disbursed until subsequent completion of the solar PV projects.
- HGIA’s operating budget for FY 2016 was submitted as part of DBEDT’s budget requests for the Legislature’s approval.¹¹ It requested approximately \$1,000,000 in appropriations for estimated administrative costs in FY 2016.
- The Authority has been taking the necessary steps to allow for on-bill repayment of GEMS Program obligations.
 - DBEDT filed a “Motion to Waive and/or Amend Qualifications to Qualified Source of Capital Requirements as specified in the Hawaii Energy Bill Saver Program: Program Manual”¹² (“Motion”) at the request of the Commission’s final Hawaii Energy Bill Saver Program: Program Manual (“Program Manual”) filing and the Program Order. The Consumer Advocate protested the Motion stating that it needed more time to review whether the requested waivers and amendments from QSC criteria are appropriate.
 - DBEDT filed a memo regarding the Consumer Advocate’s response to DBEDT’s Motion on February 27, 2015. The memo addressed the concerns raised in the Consumer Advocate’s protest.
 - The Commission responded to the Motion on April 15, 2015. See Additional Activities Section 2.4.
- The HECO Companies¹³ filed Transmittal No. 15-02, “For Approval to Establish Rule No. 21 Hawaii Energy Bill Saver Program, On-Bill Repayment Option” on January 21, 2015. The Commission issued Decision and Order No. 32684 approving Transmittal No. 15-02 subject to certain conditions described in the order. This tariff could be used by the GEMS Program for on-bill repayment of GEMS Program obligations.

¹¹ The Authority already received appropriations from the Legislature in FY 2015 for all funds to be deployed as loan capital in the GEMS Program.

¹² Filed in Docket No. 2014-0129 on January 26, 2015.

¹³ The HECO Companies are Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd.

- The Authority has been focused on securing partners for both the origination and servicing of the GEMS consumer loan product. In addition to developing the necessary lending channels for the products, the Authority has been focused on the servicing aspects of the repayments, installer approval process, and ensuring reporting requirements are met.
- The Authority, in conjunction with the State Energy Office, has continued to seek out participants who are unable to gain access to the PV market and work with Deployment Partners to develop products to meet their needs. The Authority and State Energy Office are also actively exploring the development of products for approved eligible technologies other than PV systems, specifically focusing on interconnection-related technologies and energy efficiency.
- Collaboration with the HECO Companies on utility system cost analysis strategies. See Section 5.3.

2.3 Program Performance

The GEMS Program has not released any capital to fund eligible technologies in the third quarter of Fiscal Year 2015. In future Quarterly Report filings, high-level and/or qualitative performance information will be summarized here, with more detailed, quantitative information found in Section 3, Program Metrics.

2.4 Additional Activities

The following are some of the activities that have occurred since the end of the quarter (March 31, 2015) and will be reported as activities in the next Quarterly Report.

- A Program Notification for PV-Related Technologies (technologies that are components of a PV system which may be more advanced than the standard PV system) was filed on April 2, 2015 in Docket No. 2014-0135.
- A Program Notification that provides additional information on the Small Business Loan Product and increased flexibility of the Nonprofit Loan Product and the Consumer Loan Product was filed on April 8, 2015 in Docket No. 2014-0135.
- The Commission filed Order No. 32778 “Granting the Department of Business, Economic Development, and Tourism’s Motion to Waive and/or Amend Qualifications to Qualified Source of Capital Requirements as Specified in the Hawaii Energy Bill Saver Program: Program Manual” on April 15, 2015 in Docket No. 2014.0129. Order No. 32778 granted the requests made by DBEDT in the Motion and encouraged the direct collaboration of the Hawaii Energy Bill Saver Program Entities and DBEDT, and confirmed that GEMS Program repayments that use the Commission’s on-bill mechanism are Green Infrastructure Charges within the meaning of HRS §196-61.
- The Authority and Hawaii Energy Bill Saver Program’s Finance Program Administrator have been engaged in QSC Agreement discussion and identification of additional steps to use the on-bill mechanism in the Commission’s Hawaii Energy Bill Saver Program as the result of Order No. 32778.

- The Authority and the Hawaii State Energy Office are currently in the process of procuring the services of a Financial Auditor for the GEMS Program.

3 Program Metrics

The Authority anticipates deploying funds in the first quarter of Fiscal Year 2016¹⁴ and therefore metrics will be reported in the applicable reporting period. On December 9, 2014, the Authority submitted its program metrics final draft with the Commission. The following metrics are in accordance with this filing and are provided here as an example for future reports.

3.1 Energy and Environment Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Clean Energy Production of Projects Financed			
Installed Capacity (Actual kW)			
Total Project Production to Date (Estimated kWh)			
Total Project Production Over Lifetime of Installed PV (Projected kWh)			
Petroleum Displaced by Clean Energy Projects			
Petroleum Displaced to Date (Estimated barrels)			
Petroleum Displaced Over Lifetime of Installed PV (Projected barrels)			
Greenhouse Gas Avoided			
Greenhouse Gas Avoided to Date (Estimated metric tons CO ₂)			
Greenhouse Gas Avoided Over Lifetime of Installed PV (Projected metric tons CO ₂)			

3.2 Economic Development Impact

Charts and graphs depicting:

- Total Capital Deployed,
- Total GEMS vs. Third-Party Capital Deployed,
- Total Capital Deployed By Market Segment,
- Total Capital Deployed By Technology Type,
- Allocation of GEMS Funds By Market Segment,
- Allocation of GEMS Funds by Technology Type,

¹⁴ See "Department of Business, Economic Development, and Tourism Hawaii Green Infrastructure Authority Annual Plan Fiscal Year 2016: July 1, 2015-June 30, 2016"; filed in Docket No. 2014-0135 on March 31, 2015, p. 11.

	This Quarter	Program Year-To-Date	Since Program Launch
GEMS Administrative Costs	\$455,648.15*	\$536,510.31	\$536,510.31

* The administrative costs recorded this quarter reflect payment for administrative costs incurred during the establishment of the GEMS Program since the passing of Act 211.

	This Quarter	Program Year-To-Date	Since Program Launch
Projects Financed According to Technology Type/Category			
Solar Photovoltaic Systems			
Energy Storage			
LED Upgrades			
Commercial Efficiency			
Energy/Water Nexus			
Other Projects			
Total Number of Projects			

	This Quarter	Program Year-To-Date	Since Program Launch
Indirect Economic Impact of Capital Deployed (\$)			
Indirect Economic Impact of Cost Savings To Date (Estimated \$)			
Indirect Economic Impact of Cost Savings over Project life (Projected \$)			

3.3 Market Expansion Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of GEMS Loans			
Total Number of Loans Serving Underserved Market			
Number of Loans on Oahu			
Number of Loans on Maui			
Number of Loans on Molokai			
Number of Loans on Lanai			
Number of Loans on Hawaii			

Profile of Customers	This Quarter	Program Year-To-Date	Since Program Launch
Number of Customers By Customer FICO Credit Score			
675-699			
650-674			
620-649			
600-619			
Number of Customers By Income Distribution (self-reported by customers)			
Under \$15,000			
\$15,000-\$24,999			
\$25,000-\$34,999			
\$35,000-\$49,999			
\$50,000-\$74,999			
\$75,000 and Above			
Number of Nonprofits Participating in GEMS			
Number of Rental Units Supported by GEMS			
Profile of Nonprofits by Type (may also be provided)			

3.4 Cost Savings

Charts, graphs or tables depicting:

- Average Estimated Electricity Cost Savings (\$)
- Percent Savings of Original Utility Costs (%)
- System Cost per Watt for All Consumers (\$)
- Average System Size for All Consumers (kW)
- System Cost per Watt for Underserved Consumers (\$)
- Average System Size for Underserved Consumers (kW)

3.5 Additional Metrics

Additional metrics will be determined and included as new technologies and products are added to the GEMS Program and approved by the Commission.

4 Financial Summary of Hawaii Green Infrastructure Authority

State of Hawaii
Hawaii Green Infrastructure Authority
Financial Summary
FY 2015

**STATEMENT OF NET POSITION
AS OF MARCH 31, 2015**

Current Assets	
Cash in Bank	\$ 143,251,318.64
Cash in Treasury	2,851,089.04
Non Current Assets	
Total Assets	<u>\$ 146,102,407.68</u>
Liabilities	
Total Liabilities	\$ -
Fund Balance	
Fund Balance - State Treasury	2,851,089.04
Fund Balance - GEMS Program	<u>143,251,318.64</u>
Total Liabilities & Fund Balance	<u>\$ 146,102,407.68</u>

**STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
PERIOD OF JANUARY 1, 2015 TO MARCH 31, 2015**

Revenues	
Investment Interest	\$ 5,964.69
Other Income	41,989.35
Expenditures	
Excess/(Deficiency) of Revenues Over(Under) Expenditures	<u>(455,648.15) *</u>
	<u>\$ (407,694.11)</u>
Other Financing Sources & Uses	
Bond Proceeds	\$ -
Net Change in Fund Balance	\$ (407,694.11)
Fund Balance, Beginning of Period	146,510,101.79
Fund Balance, Ending of Period	<u>\$ 146,102,407.68</u>

* The expenditures recorded this quarter reflect payment for administrative costs incurred during the establishment of the GEMS Program since the passing of Act 211 that were billed during this quarter.

5 Additional Reporting Requirements

5.1 Consumer Protection Policies

The Program Order directed the Authority to “provide full details of the GEMS Program consumer protection policies it develops to the [C]ommission with its quarterly reporting and Program Notifications”¹⁵ and to “report the details of any failure on the part of any Deployment Partner to comply with these consumer protection policies to the [C]ommission, including the number of complaints and the steps taken to address such complaints, as part of the GEMS Program’s quarterly reporting and Annual Plan submission process”.¹⁶

The GEMS Program is currently developing the full details of the GEMS Program consumer protection policies and reporting requirements for both installer and capital Deployment Partners. The Authority intends to provide the Commission with the Consumer Protection Policies it develops in a Program Notification before Fiscal Year 2016.

There have been no Deployment Partner complaints for the GEMS Deployment Partners.

5.2 Utility-Scale Project Financing

The Program Order instructed the Authority to summarize and report information about utility-scale project financing during periods where utility-scale project financing is initiated and the project is operated.¹⁷ The Authority has not been focusing any efforts on initiating utility-scale projects in this quarter and there are no utility-scale projects that have been financed or are currently being discussed.

5.3 Utility System Cost Information Update

The Program Order directed the Authority to “work with the HECO companies and the Consumer Advocate to determine the appropriate GEMS Program-related utility system cost information for reporting purposes, and to provide an update on the finalization of these utility system costs and impacts reporting requirements as part of DBEDT’s first Quarterly Report filing.”¹⁸ Though “utility system cost” was not defined in the Program Order, the Consumer Advocate refers to these costs as costs “incurred as result of [distributed generation] PV or other clean energy projects financed by the GEMS [P]rogram.”¹⁹ Since the Program Order was issued, the Authority has been actively meeting with the HECO Companies to identify ways to integrate data that is currently available with data that will be obtained through monitoring and other means to quantify and analyze potential utility system costs due to distributed generation. At the time of the first Quarterly Report, in January 2015, the Authority had

¹⁵ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹⁶ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹⁷ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 60.

¹⁸ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 95.

¹⁹ See “Division of Consumer Advocacy’s Statement of Position,” filed in Docket No. 2014-0135 on August 7, 2014, at p. 14.

not finalized any utility system costs and continues to discuss this issue with the utilities. The Authority will continue to update the Commission on utility system cost information as this discussion continues.