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January 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 Quarterly Report

The Hawaii Green Infrastructure Authority respectfully submits its first GEMS Program Quarterly Report for the period of October 1, 2014-December 31, 2014. 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,

Richard C. Lim
Interim Executive Director

Attachment

c: Service List

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PUBLIC UTILITIES
COMMISSION

SERVICE LIST

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

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And by electronic transmission to

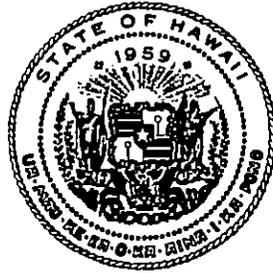
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Dated: Honolulu, Hawaii, December 30, 2015.



State of Hawaii

Department of Business, Economic Development & Tourism

Hawaii Green Infrastructure Authority

QUARTERLY REPORT:

OCTOBER 1, 2014 – DECEMBER 31, 2014

REPORT TO THE
STATE OF HAWAII
PUBLIC UTILITIES COMMISSION

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

JANUARY 2014

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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.

1.1 Procedural History and Reporting Requirements

The State of Hawaii Public Utilities Commission (“Commission” or “PUC”) issued Decision and Order No. 32318, filed on September 30, 2014 in Docket No. 2014-0135 (the “Program Order”) that approved the “Application of the Department of Business, Economic Development, and Tourism for an Order Approving the Green Infrastructure Loan Program,” filed on June 6, 2014 (“Application”) by the Hawaii Green Infrastructure Authority (“Applicant”, “Authority”, “HGIA”)¹ for 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.² 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.³

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 Advocate⁴ that included requirements concerning the financing of utility-scale projects, when applicable.⁵

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) All information proposed in [the] Application or as otherwise indicated by DBEDT in the course of this proceeding;
- (2) Summaries of all metrics approved pursuant to [the] Program Order, and as developed and approved through the metrics and data collection development process. . . ;

¹ 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.

² See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 1.

³ 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.

⁴ “Consumer Advocate” refers to the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

⁵ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 93.

- (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.⁶

In the Application, the Authority proposed Quarterly Reports include a snapshot of program activities, a financial summary, and address adjustments planned or made to the GEMS Program to accommodate market changes,⁷ and indicated in the expected GEMS Program timeline that the first Quarterly Report would be submitted to the Commission in January 2015.⁸ 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

2.1 Administration

- Bond Issuance – Though the proceedings to approve the bond issuance was a part of a separate PUC proceeding (Docket No. 2014-0134), the November 13, 2014 bond issuance of the Green Energy Market Securitization Series 2014-A Bonds provides the capital for the GEMS Program. This issuance by DBEDT has received national and international recognition through the following awards:
 - 2014 Council of Development Finance Agencies, Excellence in Energy Finance Award
 - 2014 International Financing Review, North America Structured Finance Issue Award
 - 2014 International Financing Review Americas, US Structured Finance Issue Award
- Establishment of Hawaii Green Infrastructure Authority and Board – The Authority 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. Jeffrey Mikulina and Wesley Machida were appointed by Governor Abercrombie to fill the two positions effective October 23, 2014. Since Governor Ige recently appointed Wesley Machida as the Director of Finance, one appointed position is currently vacant. There were two Authority board meetings held on October 23, 2014 and November 28, 2014 to constitute the Authority, select an Interim Executive Director, and begin search for the permanent Executive Director. With the exception of the Energy Program Administrator, the four other members of the Authority must receive confirmation from the Senate to be permanent members of the Authority.

⁶ See "Decision and Order No. 32318," filed in Docket No. 2014-0135 on September 30, 2014, at p. 97.

⁷ 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.

⁸ 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.

2.2 Program Development and Implementation

- Metrics Development – Pursuant to the directives within the Program Order,⁹ the HGIA submitted Proposed GEMS Program Metrics to the PUC on October 21, 2014. The Commission reviewed and approved HGIA to proceed with the next step – to collaborate and collect additional comments from stakeholders and intervenors in Docket No. 2014-0135 as part of the data collection process. From November 10 through 21, 2014, DBEDT met with various parties to gather comments and finalize the GEMS Program metrics. The final GEMS Program Metrics were submitted to the Commission on December 9, 2014 with supporting documentation. The Authority has also continually discussed methods for the accumulation and communication of applicable metrics data for the GEMS Program with the HECO Companies¹⁰ and potential Deployment Partners.
- Program Notification Filing – The first Program Notification provided the Commission with more information on a nonprofit loan product and a consumer loan product that allow for the financing of PV systems as approved in the Program Order. In addition to the product information, this first Program Notification addressed the grid integration consideration and discussion requirements specified in the Program Order.¹¹ This Program Notification was filed on December 31, 2014. The fifteen-day review period for the Program Notification ended on January 23, 2015. No objections or comments to the first Program Notification were filed.
- Development of the GEMS consumer loan product and GEMS nonprofit loan product – The Authority has been focused on securing partners for both the origination and servicing of the consumer and nonprofit loan products. In addition to developing the necessary lending channels for the products, the Authority has been focused on the creation of a prepaid PPA facility, development of an installer approval process, and ensuring reporting requirements are met.
- Additional Product Development Work – 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 begun any financing activities and therefore has not released any capital to fund eligible technologies. In future Quarterly Report filings, high-level and/or qualitative performance

⁹ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 90.

¹⁰ The HECO Companies are Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd.

¹¹ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 50.

information will be summarized here, with more detailed, quantitative information found in Section 3, Program Metrics.

3 Program Metrics

The Authority anticipates deploying funds in the first quarter of 2015 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,

	This Quarter	Program Year-To-Date	Since Program Launch
GEMS Administrative Costs	\$80,826.16		

	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
12/31/2014

NET POSITION

Current Assets	
Cash in Bank	\$ 143,250,000.00
Cash in Treasury	3,260,101.79
Non-current Assets	-
Total Assets	<u>\$ 146,510,101.79</u>
Liabilities	<u>\$ -</u>
Total Liabilities	-
Fund Balance	
Funds Balance-State Treasury	\$ 3,260,101.79
Funds Balance-GEMS Program	143,250,000.00
Total Liabilities & Fund Balance	<u>\$ 146,510,101.79</u>

CHANGES IN FUND BALANCE

Revenue	
Investment Interest	\$ 2.99
Miscellaneous Income	250,000.00
Expenditures	<u>(80,862.16)</u>
Excess/(Deficit)	\$ 169,140.83
Other Financing Sources & Uses	
Bond Proceeds	\$ 146,340,960.96
Net Change in Fund Balance	<u>\$ 146,510,101.79</u>

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”¹² 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”.¹³

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. In the next Quarterly Report, the Authority will provide the Commission the details and report on an ongoing basis the number of complaints and the steps taken to address such complaints.

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.¹⁴ 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.”¹⁵ 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.”¹⁶ 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. The Authority will continue to update the Commission on utility system cost information as this discussion continues.

¹² See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹³ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹⁴ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 60.

¹⁵ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 95.

¹⁶ See “Division of Consumer Advocacy’s Statement of Position,” filed in Docket No. 2014-0135 on August 7, 2014, at p. 14.