August 23, 2018

CERTIFIED MAIL 18-548E CAB
RETURN RECEIPT REQUESTED File No. 0452-11
(7017 0660 0001 0766 1154)

Mr. David Bissell
Chief Executive Officer
Kauai Island Utility Cooperative
4463 Pahee Street, Suite 1
Lihue, Hawaii 96766-2032

Dear Mr. Bissell:

SUBJECT: Amendment of Covered Source Permit (CSP) No. 0452-01-C
Application for Significant Modification No. 0452-11
Kauai Island Utility Cooperative
One (1) 27.5 MW Combustion Turbine Generator with Heat Recovery Steam Generator and One (1) 600 kW Black Start Diesel Engine Generator
Kapaia Power Station
Located At: 4941-K Maalo Road, Lihue, Kauai
Date of Expiration: June 14, 2012 (Expiration date to be revised upon issuance of CSP No. 0452-01-C renewal)

In accordance with Hawaii Administrative Rules (HAR), Chapter 11-60.1, and pursuant to your application for a Significant Modification dated December 3, 2016, with greenhouse gas (GHG) emission reduction plan dated September 27, 2016, the Department of Health, Clean Air Branch (herein after referred to as Department), hereby amends CSP No. 0452-01-C issued to Kauai Island Utility Cooperative (KIUC) for Kapaia Power Station on June 15, 2007, and amended on May 12, 2017.

In accordance with HAR Chapter 11-60.1, Subchapter 11, the amendment incorporates provisions for partnering between Kapaia Power Station and other plant(s) to combine emissions for flexibility in achieving GHG reductions. Individual and total combined GHG emission caps established in each facility's GHG emission reduction plan are incorporated in the amendment with associated provisions pursuant to HAR §11-60.1-204(d)(6)(C).

This amendment designates CSP No. 0097-01-C for Port Allen Generating Station as the main permit to specify the individual and total combined GHG emission caps for the partnering facilities. This will enable the modification of a single permit if the GHG emission caps need to be revised and reduce the burden of modifying all partnering permits had the caps been incorporated separately into each facility's permit.

The following enclosed Attachment II - GHG and monitoring report form are hereby added to CSP No. 0452-01-C issued on June 15, 2007, and amended on May 12, 2017, to incorporate the GHG permitting provisions:

Attachment II - GHG: Special Conditions – GHG Reduction Requirements
Monitoring Report Form: GHG Emissions

The following revised attachment and form supersede the corresponding attachment and form from the June 15, 2007, CSP, in their entirety:

Attachment III: Annual Fee Requirements
Compliance Certification Form

The following amended permit condition no. 28 in Attachment I supersedes the corresponding permit condition of CSP No. 0452-01-C issued on June 15, 2007:

28. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

State of Hawaii
Clean Air Branch
2827 Waimano Home Road #130
Pearl City, HI 96782

Upon request and as required by this permit, all correspondence to the State of Hawaii Department of Health associated with this CSP shall have duplicate copies forwarded to:

Manager
Enforcement Division, Air Section
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, ENF-2-1
San Francisco, CA 94105

All other permit conditions of CSP No. 0452-01-C issued on June 15, 2007, and amended on May 12, 2017, shall not be affected and shall remain valid.

If there are any questions regarding these matters, please contact Mr. Dale Hamamoto of the Clean Air Branch at (808) 586-4200.

Sincerely,

SINA PRUDER, P.E., ACTING CHIEF
Environmental Management Division

DH:rg

Enclosures

ATTACHMENT II - GHG: SPECIAL CONDITIONS
GHG REDUCTION REQUIREMENTS
COVERED SOURCE PERMIT NO. 0452-01-C

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date to be revised upon permit renewal)

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment II-GHG of this permit encompasses the following equipment and associated appurtenances:

Unit No.	Manufacturer	Model / Serial No.	Rated Capacity MW
1	General Electric Combustion Turbine Generator with Unfired Heat Recovery Steam Generator	LM2500/589-011	27.5
2	Caterpillar, Inc., Black Start Engine Generator	3412C (TTA)/BCW00520	0.6

(Auth.: HAR §11-60.1-3)

2. The equipment is subject to GHG emission reduction requirements of HAR, Chapter 11-60.1, Subchapter 11, and associated permit conditions based on information from the GHG emission reduction plan and permit application for significant modification. The GHG emission reduction plan shall become a part of the CSP application process for renewals and any required modifications pursuant to HAR Chapter 11-60.1, Subchapter 5. With each subsequent GHG reduction plan submittal, the permittee shall report:

   a. The GHG emission reduction status;
   b. Factors contributing to the emission changes;
   c. Any control measure updates; and
   d. Any new developments or changes that would affect the basis of the facility-wide GHG emissions cap.

   (Auth.: HAR §11-60.1-5, §11-60.1-204(g))

Section B. GHG Permit Conditions

1. Permit conditions specified in Attachment II - GHG, including provisions to limit maximum potential GHG emissions, are state-only enforceable requirements which are not federally enforceable under the federal Clean Air Act.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161; 40 CFR §70.6)[1]

2. The permittee shall comply with all applicable provisions of these conditions, including all emission limits, notification, testing, monitoring, and reporting requirements. The major requirements of these provisions are detailed in the special conditions of this attachment.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161)[1]

Section C. GHG Emission Limitations

1. GHG Emission Caps

   a. Kapaia Power Station shall not emit or cause to be emitted carbon dioxide equivalent (CO_2e) emissions in excess of its individual cap specified in Attachment II - GHG, Special Condition No. C.1.a of CSP No. 0097-01-C for Port Allen Generating Station, except as specified in Attachment II - GHG, Special Condition No. C.1.c.iv of this permit.
   b. Kapaia Power Station combined with all partnering facilities shall not emit or cause to be emitted total combined CO_2e emissions in excess of the combined limit specified in Attachment II - GHG, Special Condition No. C.1.b of CSP No. 0097-01-C for Port Allen Generating Station.
   c. For purposes of the CO_2e emission limits in Attachment II - GHG, Special Condition Nos. C.1.a and C.1.b of this permit:

      i. The CO_2e emissions shall have the same meaning as that specified in HAR §11-60.1-1;
      ii. In accordance with HAR §11-60.1-204(d)(6)(B), biogenic CO_2 emissions shall not be included when determining compliance with the emissions limit;
      iii. The permittee shall be in compliance with the emissions limits by the end of 2019 and each calendar year thereafter;
      iv. The permittee may exceed the emissions cap specified in Attachment II - GHG, Special Condition No. C.1.a, if the GHG emissions limit specified in Attachment II - GHG, Special Condition No. C.1.b, is met; and
      v. At no time shall the permittee exceed Attachment II - GHG, Special Condition Nos. C.1.a and C.1.b, simultaneously over a calendar year. For incidences when Attachment II - GHG, Special Condition Nos. C.1.a and C.1.b are exceeded simultaneously, emissions in excess of the total combined cap shall be allocated according to the following equation for compliance purposes:

$$X = XG \frac{(A - C)}{\sum_{A_i > C_i}(A_i - C_i)}$$

Where:

X = Adjusted portion in metric tons or tons of GHG emissions that are in excess of total combined cap specified in Special Condition No. C.1.b of CSP No. 0097-01-C for Port Allen Generating Station. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Special Condition Nos. C.1.a and C.1.b, respectively of CSP No. 0097-01-C for Port Allen Generating Station.

XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO_2 emissions.

A = Actual GHG emissions from the affected facility.

C = GHG emissions cap for the affected facility.

$\sum_{Ai>ci}(Ai - Ci)$ = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility-wide GHG emissions cap.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

2. GHG Emission Cap Revisions

   a. The facility-wide GHG emissions cap may be re-evaluated and revised by the Department in accordance with HAR §11-60.1-204(h).
   b. Any revision to the GHG emissions caps shall be considered a significant modification subject to the application and review requirements of HAR §11-60.1-104. For each GHG emission cap revision, the Department may impose additional emission limits or requirements, or limit the time-frame allowed for the revised GHG emissions cap.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

Section D. Monitoring and Record Keeping Requirements

1. GHG Emissions

   For calculating CO_2e emissions to assess fees and for determining compliance with the GHG emission caps, the permittee shall:

   a. Monitor mass emissions data for the stationary source combustion units listed in Attachment II - GHG, Special Condition No. A.1, with the appropriate methods specified in 40 Code of Federal Regulations (CFR) §98.34;
   b. Estimate missing data in accordance with the applicable procedures in 40 CFR §98.35;
   c. Determine the metric tons of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) in accordance with the appropriate calculation methodology in 40 CFR §98.33 based on company records of the fuel combusted as defined in 40 CFR §98.6;

d. Calculate the GHG emissions, expressed in metric tons of CO_2e, using Equation A-1 of 40 CFR §98.2;
e. Convert the metric tons of CO_2e emissions to tons (also referred to as short tons) for monitoring and annual emissions reporting as applicable. For the conversion, one metric ton is equal to 1.10231 tons; and
f. Obtain CO_2e emissions data from all other partnering facilities to report the total combined CO_2e emissions in accordance with Attachment II - GHG Special Condition No. E.4.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.2, §98.33, §98.34, §98.35, §98.6)

2. Records

All records, including support information, shall be maintained for **at least five (5) years** from the date of the monitoring sample, measurement, test, report, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and be made available to the Department or authorized representative(s) upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 17 and 24, respectively:

a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
b. Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, SIP §11-60-16)[2]

2. Deviations

The permittee shall report in writing **within five (5) working days** any deviations from permit requirements, including those attributed to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification

a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

   i. The identification of each term or condition of the permit that is the basis of the certification;
   ii. The compliance status;
   iii. Whether compliance was continuous or intermittent;
   iv. The methods used for determining the compliance status of the source currently and over the reporting period;
   v. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
   vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and which the excursion or exceedances as defined in 40 CFR 64 occurred; and
   vii. Any additional information as required by the Department, including information to determine compliance.

b. The compliance certification shall be submitted within **sixty (60) days after** the end of each calendar year and shall be signed and dated by a responsible official.
c. Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

4. By August 29, 2019, and within **sixty (60) days** following the end of each semi-annual calendar period (January 1 – June 30 and July 1 – December 31) thereafter, the permittee shall report semi-annually to the Department, the metric tons and short tons of CO_2e emitted by all partnering facilities, except that biogenic CO_2 shall be excluded from the total CO_2e emissions. The report shall be signed and dated by a responsible official.

   The following enclosed form, or equivalent form, shall be used for reporting:

   Monitoring Report Form: GHG Emissions

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section F. Agency Notification

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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[1]The citations to the CFR identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

[2]The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

MONITORING REPORT FORM
GHG EMISSIONS
COVERED SOURCE PERMIT NO. 0452-01-C
(PAGE 1 OF 2)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date to be revised upon permit renewal)

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Location: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

1. Report the CO_2e emitted by Kapaia Power Station during each reporting period for purposes of the facility's individual GHG emissions cap:

Emission Year Reporting For _____					
Reporting Period	Kapaia Power Station Emissions (Metric Tons of CO_2e)			Kapaia Power Station Emissions (Total CO_2e)	
	CO_2 (Non-Biogenic)	CH_4	N_2O	Metric Tons	Short Tons
January 1 – June 30 (1st Semi-Annual Period)					
July 1 – December 31 (2nd Semi-Annual Period)					
Total Emissions →					

Provide a copy of this completed form or equivalent to all other partnering facilities to report the CO_2e emitted by Kapaia Power Station during each reporting period for purposes of calculating the total combined GHG emissions.

MONITORING REPORT FORM
GHG EMISSIONS
COVERED SOURCE PERMIT NO. 0452-01-C
(CONTINUED, PAGE 2 OF 2)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date to be revised upon permit renewal)

(Reproduce this sheet as needed for each partnering facility)

2. Report the total combined CO_2e emitted by all partnering facilities during each reporting period for purposes of the total combined GHG emissions cap for these facilities:

Emission Year Reporting For_____					
Reporting Period	Total Combined Emissions from all partnering facilities (Metric Tons of CO_2e)			Total CO_2e Emissions	
	CO_2 (Non-Biogenic)	CH_4	N_2O	Metric Tons	Short Tons
January 1 – June 30 (1st Semi-Annual Period)					
July 1 – December 31 (2nd Semi-Annual Period)					
Total Emissions →					

3. For incidences when the individual cap for Kapaia Power Station and total combined cap for all partnering facilities is exceeded, report the emissions in excess of the total combined cap using the following equation:

$$X = XG \frac{(A-C)}{\sum_{A_i>C_i}(A_i-C_i)} = _____$$

Where:

X = Adjusted portion in metric tons of GHG emissions that are in excess of total combined cap specified in Attachment II - GHG Special Condition No.C.1.b of CSP No. 0097-01-C for Port Allen Generating Station. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Attachment II- GHG Special Condition Nos. C.1.a and C.1.b, respectively, of CSP No. 0097-01-C for Port Allen Generating Station.

XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO_2 emissions.

A = Actual GHG emissions from the affected facility.

C = GHG emissions cap for the affected facility.

$\sum_{Ai>ci}(Ai - Ci)$ = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility-wide GHG emissions cap.

ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0452-01-C

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date will be revised upon permit renewal)

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1, be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1:

1. Annual fees shall be paid in full:

   a. Within one hundred and twenty **(120) days** after the end of each calendar year; and
   b. Within **thirty (30) days** after the permanent discontinuance of the covered source.

2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.

3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department.

4. The annual fees and the emission data shall be mailed to:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road #130
Pearl City, HI 96782

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0452-01-C
(PAGE 1 OF ___)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date will be revised upon permit renewal)

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently, as requested by the Department:

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0452-01-C
(CONTINUED, PAGE 2 OF ___)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date will be revised upon permit renewal)

The purpose of this form is to evaluate whether or not the facility was in compliance with the permit terms and conditions during the covered period. If there were any deviations to the permit terms and conditions during the covered period, the deviation(s) shall be certified as *intermittent compliance* for the particular permit term(s) or condition(s). Deviations include failure to monitor, record, report, or collect the minimum data required by the permit to show compliance. In the absence of any deviation, the particular permit term(s) or condition(s) may be certified as *continuous compliance*.

Instructions:
Please certify Sections A, B, and C below for continuous or intermittent compliance. Sections A and B are to be certified as a group of permit conditions. Section C shall be certified individually for each operational and emissions limit condition as listed in the Special Conditions section of the permit (list all applicable equipment for each condition). Any deviations shall also be listed individually and described in Section D. The facility may substitute its own generated form in verbatim for Sections C and D.

A. Attachment I, Standard Conditions

Permit term/condition	Equipment	Compliance
All standard conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent

B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG

Permit term/condition	Equipment	Compliance
All monitoring conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
Permit term/condition All recordkeeping conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All reporting conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All testing conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All INSIG conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0452-01-C
(CONTINUED, PAGE____ OF ___)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date will be revised upon permit renewal)

C. Special Conditions - Operational and Emissions Limitations

Each permit term/condition shall be identified in chronological order using attachment and section numbers (e.g., Attachment II, B.1, Attachment IIA, Special Condition No. B.1.f, etc.). Each piece of equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

Permit term/condition	Equipment	Method	Compliance
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent

(Make Additional Copies if Needed)

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0452-01-C
(CONTINUED, PAGE____ OF ___)

Amended Date: August 23, 2018 **Expiration Date: June 14, 2012**
(Expiration date will be revised upon permit renewal)

D. Deviations

Permit Term/Condition	Equipment / Brief Summary of Deviation	Deviation Period time (am/pm) & date (mo/day/yr)	Date of Written Deviation Report to DOH (mo/day/yr)
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	

*Identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred.

(Make Additional Copies if Needed)