

APPENDIX I  
SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT

This Schedule FIT Tier 1 and Tier 2 Agreement ("Agreement") is made on \_\_\_\_\_, and entered into by and between \_\_\_\_\_ ("Seller") and \_\_\_\_\_ ("Company"), sometimes also referred to herein jointly as "Parties" or individually as "Party." This Agreement is applicable only to sellers who own and/or operate a Facility as set forth in the Company's Schedule FIT relating to Feed-in Tariff purchases from Tier 1 and Tier 2 eligible renewable electric energy generating facilities ("Schedule FIT"), and only to the Facility described and installed at the following location \_\_\_\_\_ . This Agreement provides for (1) Seller's interconnection and operation of the Facility in parallel with the Company System, and (2) the Company's purchase of electrical energy produced by the Facility and delivered to the Point of Interconnection with the Company System.

For Federal Government Entities, this Agreement is incorporated by reference into Contract No. \_\_\_\_\_ and modifications thereto \_\_\_\_\_.

In consideration of the premises and the respective promises herein, the Company and the Seller hereby agree as follows:

1. Parallel Operation: The Company agrees to allow the Seller to interconnect and operate in parallel with the Company System in accordance with the terms and conditions of this Agreement.
2. Purchase of Electric Energy by the Company; Billing and Payment:
  - (a) The Company agrees to purchase electric energy from the Seller pursuant to the terms and conditions of the applicable electric energy payment rate schedule set forth in the Schedule FIT and Appendix C (Purchase of Electric Energy By Company) attached hereto commencing on the In-Service Date. The Company will not reimburse the Seller for any taxes or fees imposed on the Seller including, but not limited to, State of Hawaii general excise tax.
  - (b) The Seller agrees to sell all electric energy, above any electric energy produced for self consumption, to the Company for the entire FIT Term. The Seller shall not sell electric energy to third parties or attempt to renegotiate the terms and conditions of this Agreement during the FIT Term.
  - (c) A statement for electric energy purchased will be rendered and payment will be made for such electric energy in accordance with the applicable Company provisions and processes which the Company will advise the Seller of at the time of execution of this Agreement.
  - (d) A bill for the energy delivered to the Seller by the Company shall be delivered separately from the payment for energy purchased from the Seller by the Company. The Company shall determine the amount of energy purchased by the Company and shall provide a statement along with payment for energy purchased from the Seller by the Company within thirty (30) days of the end of the billing period.

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- (e) In the event adjustments are required to correct inaccuracies in an invoice after payment, the Party requesting adjustment shall recompute and include in the Party's request the amounts due during the period of the inaccuracy. The difference between the amount paid and that recomputed for the invoice shall either be (i) paid to Seller, or set-off by the Company against the next invoice payment to Seller, as appropriate, together with interest from the date that such invoice was payable until the date that such recomputed amount is paid at the average daily prime rate at the Bank of Hawaii for the period, or (ii) objected to by the Party responsible for such payment within thirty (30) days following its receipt of such request. All claims for adjustments by either Party shall be waived for any deliveries of electricity made more than thirty-six (36) months preceding the date of any such request.
- (f) The Seller, after giving reasonable advance written notice to the Company, shall have the right to review all billing, metering and related records relating to the Facility during normal working hours on working days. The Company shall maintain such records for a period of not less than thirty-six (36) months from the date of creation of such records.
- (g) This Agreement shall not be construed to constitute a "take or pay" contract and the Company shall have no obligation to pay for any electric energy that has not actually been generated by the Facility, measured by the Company's installed metering, and delivered to the Company at the Point of Interconnection as designated herein.

3. Sale of Electric Energy by the Company to the Seller: Sales of electric energy by the Company to the Seller shall be governed by the applicable rate schedule and the Company's rules filed with the Hawaii Public Utilities Commission ("Commission") and not by this Agreement.

4. Seller's Obligations:

(a) Interconnection. Sellers seeking to interconnect and operate a Facility in parallel with the Company System shall comply at all times with Appendix B (Interconnection Requirements) of this Agreement and the provisions of Appendix I to Company Tariff, Rule 14, Section H (Distributed Generating Facility Interconnection Standards and Technical Requirements) prior to operating the Facility in parallel with the Company System. Nothing in this Agreement shall affect the Company's right to refuse or discontinue service as provided in the Company Tariff, Rules 7.A.1 and Rule 7.A.2. Seller requests to interconnect and operate a Facility in parallel with the Company System under the Schedule FIT will be processed in accordance with the procedures for queuing and interconnection approved by the Commission.

(b) Good Engineering and Operating Practices. Without limiting the foregoing, Seller shall install, operate, repair and maintain its Facility and perform all obligations required to be performed under this Agreement in accordance with Good Engineering and Operating Practices in the electric industry and all applicable laws, rules, regulations, orders, tariffs and construction and safety codes.

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(c) Permits and Licenses. The Seller shall obtain, at its expense, any and all authorizations, approvals, permits, and licenses required for the construction and operation of the Facility and the interconnection with the Company System, including but not limited to environmental permits, building permits, rights-of-way, or easements. The Facility shall be inspected and approved by the local authority having jurisdiction and all permits shall be closed before the Company will allow interconnection with the Company System.

5. Personnel and Company System Safety: Notwithstanding any other provisions of this Agreement, the Company may disconnect the Facility from the Company System, without prior notice to the Seller, (a) to eliminate conditions that constitute a potential hazard to the Company's personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Company System; (c) if a hazardous condition relating to the Facility is observed by the Company's inspection; (d) if the Facility interferes with the Company's equipment or equipment belonging to other customers of the Company (including non-utility generating equipment); or (e) if the Seller of the Facility has tampered with any protective device. The Facility shall remain disconnected until such time as the Company is satisfied that the endangering condition(s) as listed above has been corrected, and the Company shall not be obligated to allow parallel operation of the Facility during such period. If the Company disconnects the Facility under this Section 5, it shall as soon as practicable notify the Seller in person, by telephone, by electronic mail, or by facsimile and provide the reason(s) why the Facility was disconnected from the Company System. Following the rectification of the endangering conditions, the Company shall provide, within fifteen (15) business days or such other period as is mutually agreed upon in writing by the Company and the Seller, written documentation of the occurrence of the endangering conditions, and of the disconnection of the Facility. The disconnection of a Facility shall not be subject to standby service charges provided that the disconnection was caused by the Company or the Company's equipment. The procedure for determining the applicability of standby charges to a disconnection event shall be specified in the Company's Schedule SS Standby Service tariff.

6. Continuity of Service: This Section 6 (Continuity of Service) shall apply to all Facilities with a Design Capacity above the trigger for Supervisory Control and Data Acquisition ("SCADA") set forth in the Company Tariff, Rule 14, Section H, and to all other Facilities, regardless of size, where it is deemed, at the Company's sole discretion, that an alternate means of curtailment is technically feasible.

- (a) The Company may require the Seller to temporarily curtail, interrupt or reduce deliveries of energy when necessary in order for the Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or any part of the Company System including, but not limited to, accommodating the installation and/or testing of non-utility owned facilities to the Company System; or if the Company determines that such curtailment, interruption or reduction is necessary because of a system emergency, forced outage, operating conditions on its system; or the inability to accept deliveries of energy due to excess energy conditions; or if either the Facility does not operate in compliance with Good Engineering and Operating Practices or acceptance of energy from the Seller by the

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Company would require the Company to operate the Company System outside of Good Engineering and Operating Practices which in this case shall include, but not be limited to, excessive system frequency fluctuations or excessive voltage deviations, and any situation that the Company System Operator determines, at his or her sole discretion, could place in jeopardy system reliability. In the event that the Company temporarily curtails, interrupts, or reduces deliveries of energy pursuant to this Section 6(a), the Company shall not be obligated to accept or pay for any energy from the Seller except for such energy that the Company notifies the Seller that it is able to take during this period due to the aforesaid circumstances.

- (b) The Company shall not be required to purchase energy during any period during which, due to operational circumstances, purchases from the Seller will result in costs greater than those which the Company would incur if it did not make those purchases, but instead generated an equivalent amount of energy itself. The Company shall provide the Seller with at least twenty-four (24) hours advance oral or written notice of any such period to allow the Seller to cease the delivery of energy to the Company. The Company and the Seller will work to develop a mutually acceptable format for this notice, including, but not limited to, a listing of typical parameters that define anticipated constraints in purchases from the Seller. If the Company fails to provide such notice, it will pay the same rate for such purchase of energy as would be required had the period not occurred. Without limiting the foregoing, conditions when curtailment of energy delivery by the Seller may be implemented by the Company may include when, during excess energy conditions, the Company would have to (i) cycle off-line any Base Load Unit, or (ii) remove one or more components of a combined cycle unit (such as shutting off one combustion turbine or one combustion turbine and the steam turbine of a dual-train combined cycle unit (consisting of two combustion turbines and one steam turbine)) in order to purchase energy from the Seller. The Company shall not curtail pursuant to this Section 6(b) of the Agreement solely as a consequence of the Company's filed Avoided Energy Cost Data being lower than the applicable energy payment rate paid to the Seller under this Agreement.
- (c) Section 6 (Continuity of Service) of this Agreement is not intended to permit the Company to require the Seller to curtail, interrupt or reduce deliveries of energy based on the Company's economic dispatch (for example, as a consequence of the Company's filed Avoided Energy Cost Data being lower than the applicable energy payment rate paid to the Seller under this Agreement, or to make purchases of less expensive energy from a Qualifying Facility or other facility).
- (d) Pursuant to Section 6 (Continuity of Service), and Section 5 (Personnel and System Safety), of this Agreement, Company may at times have limited ability to integrate energy produced by Seller into the Company System for engineering and/or operating reasons and may be required to curtail energy deliveries by Seller. When a curtailment control signal is received

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by the Facility through the Curtailment Control Interface or an alternative form of curtailment notification is received by the Facility, the corresponding action (e.g., decrease in the Facility's output) shall be initiated without delay. Further curtailment may be implemented if conditions warrant and the Company System Operator deems it necessary. As conditions warrant, Company shall end or reduce the curtailment when Company reasonably determines that the reason for the curtailment is no longer in existence. The Company System Operator shall end or reduce the curtailment through the Curtailment Control Interface. Seller may request that the Facility be restored no sooner than one hour after Company has curtailed the Facility.

- (e) When the Company determines that curtailment of energy becomes necessary for reasons other than those directly attributable to the Seller's Facility, curtailments shall be made to the extent possible in reverse chronological order of the chronological seniority dates determined by Company for its power purchase agreements for as-available energy, including Schedule FIT Agreements, with deliveries under such agreements with the most recent chronological seniority date being the first curtailed, and deliveries under such agreements with the earliest chronological seniority date being the last curtailed. The chronological seniority date for this Agreement shall be the Execution Date. When the Company determines that curtailment of energy becomes necessary for engineering and/or operating reasons that are directly attributable to the Seller's Facility, reverse chronological curtailment order may not apply.
- (f) The Company shall not be liable to the Seller for any such curtailments unless they were in violation of Section 6 (Continuity of Service) or Section 5 (Personnel and System Safety) of this Agreement. Seller shall not override Company's curtailment, nor shall Seller install any equipment or software at the Facility that has the capability of overriding the Company's curtailment.
- (g) If the Curtailment Control Interface is unavailable, due to loss of communication link, RTU failure, or other event resulting in the loss of the remote control by Company, provision must be made for Seller to be able to institute, within 30 minutes or such other period as Company accepts in writing, local curtailment raise and lower control and change in voltage regulation target via the local controls upon verbal request by the Company System Operator.

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7. Metering:

- (a) Meters - The Company shall purchase and own meters suitable for measuring the net energy output of the Facility sold to the Company in kilowatts (“kW”) and kilowatthours (“kWh”) on a time-of-day basis and of reactive power flow in kilovars and true root mean square kilovarhours (“VARh”). The metering point shall be at the Point of Interconnection. The Seller shall supply, at no expense to the Company, a mutually agreeable location and mounting structure for meters and associated equipment. The Company will calibrate these devices in accordance with the latest edition of the American National Standards Institute (ANSI) Code for Electricity Metering. All meters shall be ratcheted to prevent reversal. The Company shall install, maintain and periodically test such meters as the Company deems appropriate and shall be reimbursed by Seller for all reasonably incurred costs for such installation, maintenance and testing work.
- (b) Meter Testing - The Company shall provide at least twenty-four (24) hours notice to Seller prior to any test it may perform on the metering or telemetering equipment. The Seller shall have the right to have a representative present during each such test. Seller may request, and the Company shall perform if requested, tests in addition to the periodic test in Section 7(a) (Meters) above and Seller shall pay the cost of such test. If any of the metering equipment is found to be inaccurate at any time, as determined by testing in accordance with this Section 7(b) (Meter Testing), the Company shall promptly cause such equipment to be made accurate, and the period of inaccuracy, as well as an estimate for correct meter readings, shall be determined in accordance with Section 7(c) (Corrections).
- (c) Corrections - If any test of metering equipment conducted by the Company indicates that the meter readings are in error by one percent (1%) or more, the meter readings shall be corrected as follows: (i) determine the error by testing the meter at approximately ten percent (10%) of the rated current (test amperes) specified for the meter; (ii) determine the error by testing the meter at approximately one hundred percent (100%) of the rated current (test amperes) specified for the meter; and (iii) the average meter error shall then be computed as the sum of one-fifth (1/5) the error determined in (i) and four-fifths (4/5) the error determined in (ii). The average meter error shall be used to adjust the bills for the amount of electric energy supplied to the Company from Facility for a time period to be determined in accordance with Company Tariff, Rule 11, unless records of the Company conclusively establish that such error existed for a greater or lesser period, in which case the correction shall cover such actual period of error.

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8. Specifications, Determinations and Approvals.

(a) Wherever in this Agreement, including the Appendices, the Company has the right to give specifications, determinations or approvals, such specifications, determinations or approvals shall be given in accordance with the Company's standard practices, policies and procedures, which may include the Company's Electric Service Installation Manual, the Company's Engineering Standard Practice Manual and Institute of Electrical and Electronics Engineers ("IEEE") guides and standards for protective relaying systems.

(b) The Company's review and authorization to allow the Facility to interconnect and operate in parallel with the Company System shall not be construed as confirming or endorsing the Facility's design or as warranting the Facility's safety, durability or reliability. The Company shall not, by reason of such review or lack of review, be responsible for the equipment, including but not limited to, the safety, strength, adequacy, durability, reliability, performance, or capacity of such equipment.

9. Term: Except as otherwise provided herein, this Agreement shall become effective upon the date of execution by both the Seller and the Company ("Execution Date") and shall remain in effect for a term of twenty years from the In-Service Date ("FIT Term"). Upon the expiration of the FIT Term, Seller shall offer to sell its electric energy to the Company on an annual basis at the modified FIT electric energy payment rate to be determined and approved by the Commission. The Company does not have an obligation to purchase electric energy from Seller after the FIT Term, however, if the Company does, in its sole discretion, exercise its option to purchase electric energy, it will notify Seller no less than six months prior to the expiration of the FIT Term.

10. Termination Rights:

(a) If any of the following conditions occur during the FIT Term, then the Company shall have the right to terminate this Agreement:

(i) The Seller, by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Agreement, and fails to cure such breach or default within thirty (30) Days after written notice of such breach or default from the Company, unless such breach or default cannot be cured within thirty (30) Days and the Seller is making diligent efforts to cure such breach or default, provided, however, that if such breach or default is not cured within one hundred eighty (180) Days of such notice, the Company may terminate this Agreement;

(ii) The Seller makes a general assignment for the benefit of its creditors;

(iii) The Seller files bankruptcy, has a petition for involuntary bankruptcy filed against it, or has a receiver appointed because of insolvency;

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- (iv) The Seller's dissolution or liquidation;
- (v) The Seller's actual fraud, waste, tampering with Company owned facilities, theft of Company property or other material intentional misrepresentation or misconduct in connection with this Agreement and/or the operation of the Facility;
- (vi) The Seller's abandonment of construction or operation of the Facility;
- (vii) The Seller's failure to maintain required interconnection equipment in accordance with Section 4 (Seller's Obligations); or
- (viii) If due to a Force Majeure event Seller is prevented from performing any material obligation under this Agreement for one hundred eighty (180) Days or longer.
- (ix) The Seller fails to meet any Facility Development Milestone set forth in paragraph 11(a) below
- (x) The Seller fails to achieve the In-Service Date by the Guaranteed In-Service Date.

(b) Before terminating this Agreement for cause under Paragraph 10(a)(i) through (viii), the Company shall give written notice to the Seller of the existence of one or more of the above conditions allowing termination for cause and of the Company's intention to exercise its termination rights if the condition is not corrected to the satisfaction of Company. Upon receipt of the Company's notice of intent to terminate for cause, the Seller shall have thirty (30) Days in which to correct the noted condition to the satisfaction of the Company. Termination of this Agreement for cause under Paragraph 10(a)(ix) and (x) shall be governed by the process set forth in Company's Schedule FIT Tier 1 And 2 Tariff, which is hereby incorporated by reference.

(c) The Seller may terminate the Agreement if the Company, (i) by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Agreement, and fails to cure such breach or default within thirty (30) Days after written notice of such breach or default from the Seller, unless such breach or default cannot be cured within thirty (30) Days and the Company is making diligent efforts to cure such breach or default, provided, however, that if such breach or default is not cured within one hundred eighty (180) Days of such notice, the Seller may terminate this Agreement or (ii) due to a Force Majeure event is prevented from performing any material obligation under this Agreement for one hundred eighty (180) Days or longer.

(d) A Tier 2 Seller shall provide Company a minimum of three (3) months written notice prior to ceasing operations at the Facility for reasons other than Force Majeure events or such Seller shall be subject to liquidated damages equal to the highest three months of revenues received under this Agreement during the last twelve months prior to terminating operation, due and payable to the Company upon receipt of billing from the Company, and such other penalties as may be determined by the Commission.

11. Facility Development Milestones:

(a) Seller agrees to develop the Facility in an expeditious manner to enable the Company to achieve its renewable energy and Feed-in Tariff program objectives. The project must meet all project development milestones set forth below:



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FACILITY DEVELOPMENT MILESTONE	SCHEDULE (*BD = Business Day)
Company Executes FIT Agreement and Notifies Applicant	START DATE
Posts hard copy building permit to establish that the appropriate agency has reviewed the permit application and issued a valid building permit for the project	START DATE + 10 BD
Applicant posts P.O. from supplier for Appendix B-1 Equipment or other documentation demonstrating that the equipment for the project has been purchased	START DATE + 30 BD
Applicant Posts photographic proof that development is progressing along with a sworn affidavit verifying the date and contents of such photographs.	START DATE + 3 months START DATE + 6 months START DATE + 9 months
Guaranteed Commercial Operation Date for Tier 1 and Tier 2 Projects	START DATE + 12/18 months, as applicable

To assure reasonable performance by the Seller in developing the Facility in a timely manner, the Seller shall pay a reservation fee for a space in the Queue to the Company, based on the Design Capacity of the Facility. In addition, the Seller will provide appropriate security deposits, in amounts to be determined by the Company with the concurrence of the Independent Observer, in order to proceed through defined stages in the project development process. If Seller achieves Commercial Operations by the Guaranteed In-Service Date, the reservation fee and security deposits will be returned to the Seller with the initial FIT electric energy payment made by the Company.

- (b) When extraordinary circumstances exist that may cause an applicant to miss a Facility Development Milestone or delays Commercial Operations beyond the Guaranteed In-Service Date, Seller may request an extension of the applicable deadline. All requests for extensions must be made at the time of the event that necessitated the need for an extension. The Company and the Independent Observer may each unilaterally approve a request for an extension. A request for an extension may only be rejected by the joint approval of the Company and Independent Observer. To the extent that any delays are caused by the Company, a day-for-day extension of time for the period of the delay shall be granted to the project to comply with the applicable deadline. Within ten (10) Days of receiving written notification of an extension of the Guaranteed In-Service Date, the Seller shall pay the Company an additional reservation fee in the same amount as that initially paid, and subject to the same refund and forfeiture provisions. In order to ensure only viable projects remain in the Queue, in no case shall the allowed deadline be extended for more than 180 Days.

12. Indemnification:

- (a) Seller's Indemnification Obligations. The Seller shall indemnify, defend and hold harmless the Company and its directors, officers, employees and agents (including but not limited to affiliates and contractors and their employees) from and against any and all liabilities, damages, losses, penalties, claims, demands, suits, costs, expenses (including attorneys' fees), and proceedings of every kind, including those for damage to the property or real property of any person or entity (including the Seller) and/or for injury to or death of any person (including the Seller's employees

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and agents)(collectively "Injury or Damage"), directly or indirectly arising out of or attributable to or in any manner connected with the engineering, design, location, construction, maintenance, interconnection, or parallel operation of the Facility with the Company System, including land restoration costs for which the Seller is responsible, if any, and/or directly or indirectly arising out of or attributable to or in any manner connected with the breach of any of Seller's representations or warranties herein, except to the extent that such Injury or Damage is attributable to the gross negligence or willful misconduct of the Company.

- (a) Company's Indemnification Obligations. The Company shall indemnify, defend and hold harmless the Seller and its directors, officers, employees and agents (including but not limited to affiliates and contractors and their employees) from and against any and all liabilities, damages, losses, penalties, claims, demands, suits, costs, expenses (including attorneys' fees), and proceedings of every kind, including those for damage to the property or real property of any person or entity (including the Company) and/or for injury to or death of any person (including the Company's employees and agents)(collectively "Injury or Damage"), directly or indirectly arising out of or attributable to or in any manner connected with the engineering, design, location, construction, maintenance, interconnection, or parallel operation of the Company System with the Facility, and/or directly or indirectly arising out of or attributable to or in any manner connected with the breach of any of the Company's representations or warranties herein, except to the extent that such Injury or Damage is attributable to the gross negligence or willful misconduct of the Seller.
- (c) No Duty to Third Parties. Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.
- (d) Seller's Compliance with Law. Any fines or other penalties incurred by Seller for noncompliance with any Laws shall not be reimbursed by Company but shall be the sole responsibility of Seller. Seller shall indemnify, defend and hold harmless Company from and against any and all liabilities, damages, losses, penalties, claims, demands, suits, costs, expenses, disbursements (including attorney's fees) and proceedings of any nature whatsoever suffered or incurred because of the failure of Seller to comply with any Laws.
- (e) Seller As an Agency of the State.
- (i) Notwithstanding the foregoing, where the Seller is an agency of the State of Hawaii (the "State"), the State shall be responsible for damages or injury caused by the State's agents, officers, and employees in the course of their employment to the extent that the State's liability for such damage or injury has been determined by a court or otherwise agreed to by the State. The State shall pay for such damage and injury to the extent permitted by law. The State shall use reasonable good faith efforts to pursue any approvals from the Legislature and the Governor that may be required to obtain the funding necessary to enable the State to perform its obligations or cover its liabilities hereunder. The State shall not request the Company to indemnify the State for, or hold the State harmless from, any claims for such damages or injury.
- (ii) The Company shall be responsible for damages or injury caused by the Company, Company's agents, officers, and employees in the course of their employment to the extent that the Company's liability for such damage or injury has been determined by a court or otherwise agreed to by the Company, and the Company shall pay for such damage and injury to the extent permitted by law. The Company shall not request the State to indemnify the Company for, or hold the Company harmless from, any claims for such damages or injury.

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(f) Seller As an Agency of The Department of Defense (The "DOD").

Notwithstanding the foregoing, where the Seller is an agency of the DOD, neither Party hereto shall be responsible for loss or damage to the property of the other Party or property of others, or for death or for personal injuries to the other Party's officers, agents, servants, or employees, or to other persons, arising from or related to (i) the Company's initiation of a service interruption under this Agreement and /or (ii) the DOD's electric service being disconnected or reconnected by the Company and /or DOD pursuant to this Agreement and/or (iii) the parallel operation of the systems of the Parties hereto or incident to the use, operation, or maintenance with respect to the furnishing of service hereunder, except for such loss, damage, death or injuries caused by the DOD for which it may be liable under the Federal Tort Claims Act and in the case of the Company as may be caused by the negligence, wrongful act or omission of the Company, its agents, servants or employees; nor, except for matters for which it may be liable under the Federal Tort Claims Act, shall the DOD be responsible in any way for any damage or loss of profit suffered by the Company arising from or incident to such use, operation or maintenance.

13. Insurance:

- (a) Minimum Insurance Requirements. The Seller shall, at its own expense and during the FIT Term and any other time that the Facility is interconnected with the Company System, maintain in effect with a responsible insurance company authorized to do insurance business in Hawaii, the following insurance that will protect the Seller and the Company with respect to the Facility, the Seller's operations, and the Seller's interconnection with the Company System:
- (i) Tier 1: A general liability policy covering bodily injury and property damage combined single limit of at least FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for any occurrence.
  - (ii) Tier 2: A general liability policy covering bodily injury and property damage combined single limit of at least TWO MILLION DOLLARS (\$2,000,000) for any occurrence.
- (b) Higher Limits. The Seller has responsibility to determine if higher limits are desired and purchased.
- (c) Self-Insured Seller. If the Seller is considered to be self-insured it shall not be required to maintain any separate policy of insurance under this section of the Agreement. Notwithstanding the above, this shall in no event waive or otherwise release or limit the Seller's liabilities undertaken pursuant to this Agreement.
- (d) Other Insurance Requirements. Seller's insurance shall name the Company as an additional insured, shall include contractual liability coverage for written contracts and agreements

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including this Agreement, and shall be non-cancelable and non-alterable without thirty (30) Days' prior written notice to the Company. "Claims made" policies are not acceptable. The adequacy of the coverage afforded by the required insurance shall be subject to review by the Company from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Seller shall make such increase to that extent and any increased costs shall be borne by the Seller. The insurance required hereunder shall provide that it is primary with respect to the Seller and the Company. The Seller shall provide evidence of such insurance, including insurer's acknowledgement that coverage applies with respect to this Agreement, by providing certificates of insurance, or the Declaration page of a homeowners' insurance policy (for residential FIT facilities), to the Company within 30 Days of any change. Initially, certificates of insurance must be provided to the Company prior to executing this Agreement and any parallel interconnection. The Seller's indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of the Seller.

- (e) Notification. The Parties to this Agreement agree to promptly notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

14. Financial Compliance:

- (a) Seller shall provide or cause to be provided to Company on a timely basis, as reasonably determined by Company, all information, including but not limited to information that may be obtained in any audit referred to below (the "Information"), reasonably requested by Company for purposes of permitting Company and Hawaiian Electric Industries, Inc. ("HEI") to comply with the requirements (initial and on-going) of (i) identifying variable interest entities and determining primary beneficiaries under the accounting principles of Financial Accounting Standards Board ("FASB") Accounting Standards Codification 810, Consolidation ("FASB ASC 810"), (ii) Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX 404") and (iii) all clarifications, interpretations and revisions of and regulations implementing FASB ASC 810 and SOX 404 issued by the FASB, Securities and Exchange Commission, the Public Company Accounting Oversight Board, Emerging Issues Task Force or other governing agencies. In addition, if required by Company in order to meet its compliance obligations, Seller shall allow Company or its independent auditor, to audit, to the extent reasonably required, Seller's financial records, including its system of internal controls over financial reporting; provided that Company shall be responsible for all costs associated with the foregoing, including but not limited to Seller's reasonable internal costs. Company shall limit access to such Information to persons involved with such compliance matters and restrict persons involved in Company's monitoring, dispatch or scheduling of Seller and/or Facility, or the administration of the Agreement, from having access to such Information(unless approved in writing in advance, by Seller).

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

- (b) If there is a change in circumstances during the term of the Agreement that would trigger consolidation of Seller's finances on to Company's balance sheet, and such consolidation is not attributable to Company's fault, then the Parties will take all commercially reasonable steps, including modification of the Agreement, to eliminate the consolidation, while preserving the economic "benefit of the bargain" to both Parties.
- (c) Company shall, and shall cause HEI to, maintain the confidentiality of the Information as provided in this Section 14 (Financial Compliance). Company may share the Information on a confidential basis with HEI and the independent auditors and attorneys for HEI and Company. (Company, HEI, and their respective independent auditors and attorneys are collectively referred to in this Section 14 (Financial Compliance) as "Recipient."") If either Company, or HEI, in the exercise of their respective reasonable judgments, concludes that consolidation or financial reporting with respect to Seller and/or this Agreement is necessary, Company, and HEI each shall have the right to disclose such of the Information as Company or HEI, as applicable, reasonably determines is necessary to satisfy applicable disclosure and reporting or other requirements and give Seller prompt written notice thereof (in advance to the extent practicable under the circumstances). If Company or HEI disclose Information pursuant to the preceding sentence, Company and HEI shall, without limitation to the generality of the preceding sentence, have the right to disclose Information to the Commission and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii ("Consumer Advocate") in connection with the Commission's rate making activities for Company and other HEI affiliated entities, provided that, if the scope or content of the Information to be disclosed to the Commission exceeds or is more detailed than that disclosed pursuant to the preceding sentence, such Information will not be disclosed until the Commission first issues a protective order to protect the confidentiality of such Information. Neither Company nor HEI shall use the Information for any purpose other than as permitted under this Section 14 (Financial Compliance).
- (d) In circumstances other than those addressed in the immediately preceding paragraph, if any Recipient becomes legally compelled under applicable law or by legal process (e.g., deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process) to disclose all or a portion of the Information, such Recipient shall undertake reasonable efforts to provide Seller with prompt notice of such legal requirement prior to disclosure so that Seller may seek a protective order or other appropriate remedy and/or waive compliance with the terms of this Section 14 (Financial Compliance). If such protective order or other remedy is not obtained, or if Seller waives compliance with the provisions at this Section 14 (Financial Compliance), Recipient shall furnish only that portion of the Information which it is legally required to so furnish and to use reasonable efforts to obtain assurance that confidential treatment will be accorded to any disclosed material.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

(e) Section 14 (Financial Compliance) shall not extend to any portion(s) of the Information which (i) was known to such Recipient prior to receipt, or (ii) without the fault of such Recipient is available or becomes available to the general public, or (iii) is received by such Recipient from a third party not bound by an obligation or duty of confidentiality.

15. Assignment: This Agreement may not be assigned by either the Company or the Seller absent the written consent of the other Party. Such consent shall not be unreasonably withheld. The Parties agree that any assignment in contravention of this Section 15 (Assignment) is hereby deemed null and void.

16. Hawaii Public Utilities Commission: This Agreement shall, at all times, be subject to such changes or modifications by the Commission as said Commission, may, from time to time, direct in the exercise of its jurisdiction.

17. Force Majeure: (a) If either Party shall be wholly or partially prevented from performing any of its obligations under this Agreement by reason of or through strikes, lightning, rain, earthquake, wind, riots, fire, flood, invasion, insurrection, lava flow or volcanic activity, tidal wave, civil commotion, the order of any court, judge or civil authority, war, any act of God or the public enemy, or any other similar cause reasonably beyond its exclusive control and not attributable to its neglect ("Force Majeure"), then and in any such event, either Party shall be excused from whatever performance is prevented by such event to the extent so prevented, and either Party shall not be liable for any damage or loss resulting therefrom.

(b) "Force Majeure" does not include:

- (i) any acts or omissions of any third party, including, without limitation, any vendor, materialman, customer, or supplier of Seller, unless such acts or omissions are themselves excused by reason of Force Majeure;
- (ii) any full or partial curtailment in the electric output of the Facility that is caused by or arises from a mechanical or equipment breakdown or other mishap or events or conditions attributable to normal wear and tear or flaws, unless such mishap is caused by Force Majeure;
- (iii) Seller's inability to obtain Permits or approvals of any type for the construction, operation, or maintenance of Facility;
- (iv) litigation or administrative or judicial action pertaining to this Agreement, the Site the Facility, the acquisition, maintenance or renewal of financing or any Permits, or the design, construction, maintenance or operation of the Facility or the Company System; or
- (v) any full or partial curtailment in the delivery of the output of the Seller or of the ability of the Company to accept output from the Seller which is caused by any third party including, without limitation, any vendor or supplier of the Seller or the Company, except to the extent due to Force Majeure.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

18. Representations and Warranties:

(a) The Seller represents and warrants as follows:

- (i) The Seller has all necessary right, power and authority to execute, deliver and perform this Agreement; and
- (ii) The execution, delivery and performance of this Agreement by the Seller will not result in a willful violation of any law or regulation of any governmental authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which the Seller is a party or by which it is bound.

(b) The Company represents and warrants as follows:

- (i) The Company has all necessary right, power and authority to execute, deliver and perform this Agreement; and
- (ii) The execution, delivery and performance of this Agreement by the Company will not result in a willful violation of any law or regulation of any governmental authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which the Company is a party or by which it is bound.

19. Dispute Resolution:

- (a) Management Meeting. Before submitting any claims, controversies or disputes (“Dispute(s)”) under this Agreement to the Dispute Resolution Procedure set forth herein, the presidents, vice presidents, or authorized delegates from both Seller and Company having full authority to settle the Dispute(s), shall personally meet in Hawaii and attempt in good faith to resolve the Dispute(s) (the “Management Meeting”).
- (b) Arbitration. If any Disputes remain unresolved after such Management Meeting concludes, the Parties agree to submit any such Dispute(s) to binding arbitration in Honolulu, Hawaii pursuant to the administration by, and in accordance with the Arbitration Rules, Procedures, and Protocols of, Dispute Prevention & Resolution, Inc. then in effect (“Arbitration Rules”). Capitalized and otherwise undefined terms in this Section 19 (Dispute Resolution) shall have the meanings set forth in the Arbitration Rules. The award of the arbitrator(s) is binding upon the Parties and judgment upon the award rendered may be entered in any court of competent jurisdiction. In the event that Dispute Prevention & Resolution, Inc. or its successor is unable or unwilling to administer the arbitration at the time the dispute is submitted for binding arbitration, the Parties agree to submit any such Dispute(s) to binding arbitration in Honolulu, Hawaii pursuant to the administration by, and in accordance with the Commercial Arbitration Rules of the American Arbitration Association. All references herein to the “Arbitration Rules” shall then be deemed to be references to the Commercial Arbitration Rules or the provisions thereof most similar to the referenced provision of the Arbitration Rules.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

- (c) Procedures for Appointing Arbitrator(s). The Parties hereby agree that arbitrator(s) shall be appointed according to the following procedure, notwithstanding any contrary or inconsistent provision of the Arbitration Rules.
- (i) Single Arbitrator. Within 20 Days of the initiation of arbitration and the receipt by Respondent of the Demand for Arbitration, the Parties shall attempt to agree on a single arbitrator.
- (ii) Three-Arbitrator Panel. Should the Parties fail to agree on a single arbitrator within that 20-Day period, each Party may appoint one arbitrator within 14 Days thereafter pursuant to the Arbitration Rules. If any Party does not appoint an arbitrator within that 14-Day period, Dispute Prevention & Resolution, Inc. shall appoint one or both of the arbitrator(s), as appropriate. Within 20 Days of the appointment of the second arbitrator, the two appointed arbitrators shall attempt to agree upon the appointment of a third arbitrator. If the two appointed arbitrators fail to agree upon the appointment of the third arbitrator within this 20-Day period, Dispute Prevention & Resolution, Inc. shall appoint the third arbitrator.
- (d) Authority of the Arbitrator(s). Notwithstanding anything herein or in the Arbitration Rules to the contrary, all documents shall be produced and all depositions shall be taken in Honolulu, Hawaii, and that any deposition fees and travel expenses of all hearing witnesses and deponents named by, affiliated with or formerly affiliated with a Party or any of its affiliates, or its affiliate's affiliate, shall be borne by that Party. The Parties warrant they shall cause such documents, witnesses and deponents to appear in Honolulu, Hawaii notwithstanding any objection as to the jurisdiction of the arbitration panel, the location of the arbitration, or lack of privity with a party or that the witness is not a party to the Agreement or to the arbitration, and the arbitrator(s) shall have no power to order to the contrary. Notwithstanding anything herein or in the Arbitration Rules to the contrary, the authority of the arbitrator(s) in rendering the award is limited to the interpretation and/or application of the terms of this Agreement and to ordering any remedy allowed by this Agreement. The arbitrator(s) shall have no power to change any term or condition of this Agreement, deprive any Party of a remedy expressly provided hereunder, or provide any right or remedy that has been excluded hereunder. Notwithstanding anything herein or in the Arbitration Rules to the contrary, any Party who contends that the award was in excess of the authority of the arbitrator(s) as set forth herein may seek judicial relief in the Circuit Court of the State of Hawaii for the circuit in which the arbitration hearing was held, provided that such judicial proceeding is initiated within 30 Days of the award and not otherwise.
- (e) No Punitive or Exemplary Damages. Notwithstanding anything herein or in the Arbitration Rules to the contrary, and pursuant to Hawaii Revised Statutes § 658A-4, the Parties hereby waive any and all claims for punitive or exemplary damages with respect to any and all Dispute(s).

HAWAIIAN ELECTRIC COMPANY, INC.



SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

20. Regulatory Compliance:

- (a) Tier 2 Sellers shall file in Docket No. 2008-0273, subject to protective order, the following information for each Facility, within thirty (30) days of the In-Service Date and annually thereafter.
- (i) The cost of design, permitting, and construction costs, including labor and materials costs of the Facility;
  - (ii) Financing or capital cost;
  - (iii) Land cost or actual cost of Site acquisition;
  - (iv) Interconnection and metering costs incurred by the Seller;
  - (v) Other project costs incurred in developing and constructing the Facility;
  - (vi) Tax credits, rebates, incentives received and applied to the project development cost;
  - (vii) Maintenance and operation labor and non-labor costs;
  - (viii) Fuel supply costs (for biomass and biogas projects);
  - (ix) Monthly land or leases costs for the Site; and
  - (x) Other operations and maintenance costs.
- (b) Additionally, Tier 2 Sellers shall file an annual report with the Commission in Docket No. 2008-0273, no later than January 31, of each year, which contains the following information: (i) annual electric energy production in kWh; and (ii) annual operating costs, including operations and maintenance costs, lease expenses, insurance, and property taxes.

21. Miscellaneous:

- (a) Amendments. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the Parties. Any waiver hereunder shall not be valid unless in writing and signed by the Party against whom waiver is asserted.
- (b) Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- (c) Notices. Any written notice provided hereunder shall be delivered personally or sent by registered or certified first class mail, with postage prepaid, to the other Party at the following address:

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

Company:

1) By Mail:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_

2) Delivered:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_

3) By facsimile:

\_\_\_\_\_  
(808) \_\_\_\_ - \_\_\_\_\_

Seller:

1) By Mail:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_

2) Delivered:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_

3) By facsimile:

\_\_\_\_\_  
(808) \_\_\_\_ - \_\_\_\_\_

HAWAIIAN ELECTRIC COMPANY, INC.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth Day after the date of mailing, whichever is earlier. Any Party hereto may change its address for written notice by giving written notice of such change to the other Party hereto.

Any notice delivered by facsimile must be followed by personal or mail delivery and the effective date of such notice shall be the date of personal delivery or, if by mail, the earlier of the actual date of delivery or the expiration of the fifth day after the date of mailing.

- (d) Effect of Section and Appendix Headings. The headings or titles of the several sections and appendices hereof are for convenience of reference and shall not affect the construction or interpretation of any provision of this Agreement.
- (e) Non-Waiver. No delay or forbearance of the Company or the Seller in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or right.
- (f) Relationship of the Parties. Nothing in this Agreement shall be deemed to constitute either Party hereto as partner, agent or representative of the other Party or to create any fiduciary relationship between the Parties. The Seller does not hereby dedicate any part of the Facility to serve the Company, the Company's customers or the public.
- (g) Entire Agreement. This Agreement, including all Appendices, constitutes the entire understanding and agreement between the Parties.
- (h) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Hawaii applicable to contracts wholly made and to be performed within the State of Hawaii without giving effect to the principles thereof with respect to conflicts of law. Each Party irrevocably submits to the sole and exclusive jurisdiction of the state and federal courts of the State of Hawaii, situated in the judicial circuit in which the Facility is located. Each Party irrevocably consents to the exercise of personal jurisdiction over each of the Parties by such courts and waives any right to plead, claim or allege that Hawaii is an inconvenient forum.
- (i) Limitations. Nothing in this Agreement shall limit the Company's ability to exercise its rights as specified in the Company Tariff as filed with the Commission, or as specified in General Order No. 7 of the Commission's Standards for Electric Utility Service in the State of Hawaii, as either may be amended from time to time.
- (j) Further Assurances. Each of the Parties shall from time to time and at all times do such further acts and deliver all such further documents and assurances as shall be reasonably necessary fully to perform and carry out this Agreement.

HAWAIIAN ELECTRIC COMPANY, INC.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

- (k) Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same agreement.
- (l) Definitions. Capitalized terms used in this Agreement not otherwise defined in the context in which they first appear are defined in Appendix A (Definitions) to this Agreement.
- (m) Severability. If any term or provision of this Agreement, or the application thereof to any person, entity or circumstances is to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, entities or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.
- (n) Settlement of Disputes. Except as otherwise expressly provided, any dispute or difference arising out of this Agreement or concerning the performance or the non-performance by either Party of its obligations under this Agreement shall be determined in accordance with the dispute resolution procedures set forth in Section 19 (Dispute Resolution) of this Agreement.
- (o) Environmental Credits. To the extent not prohibited by law, any Environmental Credit shall be the property of the Company; provided, however, that such Environmental Credits shall be to the benefit of the Company's ratepayers in that the value must be credited "above the line". Seller shall use all reasonable efforts to ensure such Environmental Credits are vested in the Company, and shall execute all documents, including, but not limited to, documents transferring such Environmental Credits, without further compensation; provided, however, that the Company agrees to pay for reasonable costs associated with such efforts and/or documentation.
- (p) Appendices. Each Appendix is an essential and necessary part of this Agreement.
- (q) Patents. Seller agrees that in fulfilling its responsibilities under this Agreement, it will not use any process, program, design, device or material that infringes on any United States patent. Seller agrees to indemnify, defend and hold harmless the Company from and against all losses, damages, claims, fees and costs, including but not limited to reasonable attorneys' fees and costs, arising from or incidental to any suit or proceeding brought against the Company for patent infringement arising out of Seller's performance under this Agreement.

SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT (Continued)

- (r) Notice of Revisions of Schedule FIT. The Company shall serve the Seller notice of any proposed revisions to its Schedule FIT that it files with the Commission within five (5) business days after the proposed revision is filed with the Commission.
  
- (s) Survival. The rights and obligations that are intended to survive a termination of this Agreement are all of those rights and obligations that arise from Seller's or Company's covenants, agreements, representations, and warranties applicable to, or to be performed, at or during any time prior to or as a result of the termination of this Agreement, including but not limited to Section 12 (Indemnification), Section 13 (Insurance), Section 18 (Representations and Warranties), Section 19 (Dispute Resolution), Section 21 (Miscellaneous).

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the latter of the two dates set forth below.

**SELLER**

**COMPANY**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

HAWAIIAN ELECTRIC COMPANY, INC.

**APPENDIX A**

DEFINITIONS

The following capitalized terms used in the Agreement shall have the meanings set forth below:

Agreement: Has the meaning set forth in the preamble.

Arbitration Rules: Has the meaning set forth in Section 19(b) (Arbitration).

Avoided Energy Cost Data: Data that is filed with the Commission pursuant to Subchapter 3, Rule 6-74-17(b) of the Commission's Standards, as may be amended from time to time or as may be superseded by applicable laws, rules or Commission orders.

Base Load Unit: A unit that is normally on-line twenty-four (24) hours a day. This includes any unit that is scheduled to be on-line continuously for a given day because a unit which is normally a Base Load Unit is on maintenance or otherwise temporarily out of service.

Commission: Has the meaning set forth in Section 3 (Sale of Electric Energy by the Company to the Seller).

Company: Has the meaning set forth in the preamble.

Company's Dispatch: The Company's sole and absolute right to control, from moment to moment, through supervisory equipment, or otherwise, and in accordance with Good Engineering and Operating Practices in the electric utility industry, the rate of delivery of energy offered by the Seller to the Company, subject to the operating constraints of Facility and as permitted under this Agreement.

Company System: The electric system owned and operated by the Company (to include any non-utility owned facilities) consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

Company System Operator: The authorized representative of the Company who is responsible for carrying out Company's Dispatch.

Company Tariff: The entire body of rates, charges, definitions and rules including those services contained in special contracts and supplemental tariffs adopted and filed by the Company as set forth herein and authorized by the Commission.

Commercial Operation: Shall mean all generating units are successfully installed at the Facility to meet the Design Capacity and Seller is ready to commence delivery of electric energy under this Agreement.

APPENDIX A DEFINITIONS (Continued)

Consumer Advocate: Has the meaning set forth in Section 14 (Financial Compliance)

Curtailed Facilities: Has the meaning set forth in Section 6 (g) of this Agreement.

Curtailed Control Interface: All equipment, computers and software associated with the control system necessary for real power control of the Facility.

Day: A calendar day.

Design Capacity: The capacity of the eligible renewable generator in kW as established by the manufacturer that is available for use at the Facility to meet customer load and/or exported to the Company System for sale to Company under the Schedule FIT. Company will use either the nameplate rating of the Facility if no inverter is used, or the inverter rating if the Facility is inverter based.

Dispute: Has the meaning set forth in Section 19(a) (Management Meeting).

DOD: Has the meaning set forth in Section 12 (Indemnification) of this Agreement.

Environmental Credits: Any environmental credit, offset, or other benefit allocated, assigned or otherwise awarded by any governmental or international agency to the Company or the Seller based in whole or in part on the fact that the Facility is a non-fossil fuel facility. Such Environmental Credits shall include, but not be limited to, emissions credits, including credits triggered because such Facility does not produce carbon dioxide when generating electric energy, or any renewable energy credit, but in all cases shall not mean tax credits.

Execution Date: Shall have the meaning set forth in Section 9 (Term) of this Agreement.

Facility: Seller's (1) renewable energy facility described in Appendix B-1 (Description of Facility) that is the subject of this Agreement and is classified as an eligible resource under Hawaii's Renewable Portfolio Standards Statute (codified as Hawaii Revised Statutes (HRS) 269-91 through 269-95 ("RPS Law")) and the provisions of the Commission's Decision and Order issued September 25, 2009 in Docket No. 2008-0273, (2) the Seller-Owned Interconnection Facilities, (3) the Site and (4) all equipment, devices, associated appurtenances owned, controlled, operated and managed by Seller in connection with, or to facilitate, the production, generation, transmission, delivery or furnishing of electric energy by Seller to Company and required to interconnect with the Company System.

FASB: Has the meaning set forth in Section 14 (Financial Compliance) of this Agreement.

FASB ASC 810: Has the meaning set forth in Section 14 (Financial Compliance) of this Agreement.

APPENDIX A DEFINITIONS (Continued)

Federal Government Entities: Is an entity in the Executive branch of government (by way of example and not limitation, Department of the Navy or Department of the Army).

Federal Tort Claims Act: 28 U.S.C. 2671 et seq.; administrative rules at 28 C.F.R. Part 14. The FTCA permits persons to sue the government of the United States in federal court for money damages, for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his employment.

FIT Block: Has the meaning set forth in Section 6 (g) of this Agreement.

FIT Block Release Date: Has the meaning set forth in Section 6 (g) of this Agreement.

FIT Term: Has the meaning set forth in Section 9 (Term) of this Agreement.

Force Majeure: Has the meaning set forth in Section 17 (Force Majeure) of this Agreement.

Good Engineering and Operating Practices: The practices, methods and acts engaged in or approved by a significant portion of the electric utility industry for similarly situated U.S. facilities that at a particular time, in the exercise of reasonable judgment in light of the facts known or that reasonably should be known at the time a decision is made, would be expected to accomplish the desired result in a manner consistent with law, regulation, reliability, safety, environmental protection, economy and expedition. With respect to the Facility, Good Engineering and Operating Practices include, but are not limited to, taking reasonable steps to ensure that:

- (1) Adequate materials, resources and supplies, including fuel, are available to meet the Facility's needs under normal conditions and reasonably anticipated abnormal conditions;
- (2) Sufficient operating personnel are available and are adequately experienced and trained to operate the Facility properly, efficiently and within manufacturer's guidelines and specifications and are capable of responding to emergency conditions;
- (3) Preventive, routine and non-routine maintenance and repairs are performed on a basis that ensures reliable long-term and safe operation, and are performed by knowledgeable, trained and experienced personnel utilizing proper equipment, tools, and procedures;
- (4) Appropriate monitoring and testing is done to ensure equipment is functioning as designed and to provide assurance that equipment will function properly under both normal and emergency conditions; and
- (5) Equipment is operated in a manner safe to workers, the general public and the environment and in accordance with equipment manufacturer's specifications, including, without limitation, defined limitations such as steam pressure, temperature, moisture content, chemical content, quality of make-up water, operating voltage, current, frequency, rotational speed, polarity, synchronization, control system limits, etc.



APPENDIX A DEFINITIONS (Continued)

Governmental Authorities: Any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power; or any court or governmental tribunal.

Governor: The Governor of the State of Hawaii.

Guaranteed In-Service Date: With respect to Tier 1 Facilities, the date that is 12 months from the Execution Date and with respect to Tier 2 Facilities, that date that is 18 months from the Execution Date.

HEI: Has the meaning set forth in Section 14 (Financial Compliance) of the Agreement.

Independent Observer: The independent third party retained by the Company and approved by the Commission to oversee the initial development and subsequent administration of the Company's queuing and interconnection procedures.

Injury or Damage: Has the meaning set forth in Section 12 (Indemnification) of this Agreement.

In-Service Date: The date that Seller achieves Commercial Operations.

Interconnection Standards: Has the meaning set forth in the Company Tariff, Rule 14, Section H, Appendix I.

Legislature: The Legislature of the State of Hawaii.

Management Meeting: Has the meaning set forth in Section 19(a) (Management Meeting).

Party or Parties: Has the meaning set forth in the preamble.

Permits: All permits, licenses, approvals, certificates, entitlements and other authorizations issued by Governmental Authorities required for the construction, ownership and operation of the Facility, and all amendments, modifications, supplements, general conditions and addenda thereto.

Point of Interconnection: The point of delivery of electric energy and/or capacity supplied by Seller to Company where the Facility interconnects with the Company System.

PUC (Public Utilities Commission): The Public Utilities Commission of the State of Hawaii.

PURPA: Public Utility Regulatory Policies Act of 1978 (P.L. 95-617) as amended from time to time and as applied in Hawaii by the Commission.

APPENDIX A DEFINITIONS (Continued)

Qualifying Facility: As defined under PURPA and the regulations issued thereunder.

Queue: The prioritized list of project applications for the Company's Feed-in Tariff program selected in accordance with procedures approved by the Commission.

Renewable Portfolio Standards ("RPS"): The Hawaii law that mandates that the Company and its subsidiaries generate or purchase certain amounts of their net electric energy sales over time from qualified renewable resources.

SCADA: Has the meaning set forth in Section 6 (g) of this Agreement.

Schedule FIT: Has the meaning set forth in the preamble.

Schedule FIT Agreement: The standard Schedule FIT agreement provided in Appendix I of the Schedule FIT Tariff.

Schedule FIT Phase: Has the meaning set forth in Section 6 (g) of this Agreement.

Seller: Has the meaning set forth in the preamble.

Seller-Owned Interconnection Facilities: Has the meaning set forth in Appendix B (Interconnection Requirements).

Site: The parcel of real property on which the Facility will be constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the Facility.

SOX 404: Has the meaning set forth in Section 14 (Financial Compliance) of this Agreement.

State: Has the meaning set forth in Section 12(e) (Seller As An Agency of the State).

Third Party: Any person or entity other than the Company or the Seller, and includes, but is not limited to, any subsidiary or affiliate of the Seller.

Tier 1: Has the meaning set forth in the Commission's Decision and Order issued on September 25, 2009 in Docket No. 2008-0273.

Tier 2: Has the meaning set forth in the Commission's Decision and Order issued on September 25, 2009 in Docket No. 2008-0273.

**APPENDIX B**

**INTERCONNECTION REQUIREMENTS**

1. Company-Owned Interconnection Facilities:

a. General. The Company agrees to furnish, install, operate and maintain such interconnection facilities on its side of the point of interconnection with the Facility as required for parallel operation with the Facility and as more fully described in Appendix B-2 (“Company-Owned Interconnection Facilities”). All Company-Owned Interconnection Facilities shall be the property of the Company. Where portions of the Company-Owned Interconnection Facilities are located on the Seller’s premises, the Seller shall provide, at no expense to the Company, a suitable location for and access to all such equipment. If a 120/240 Volt power source or sources are required, the Seller shall provide these at no expense to the Company.

b. Seller Payments for Company-Owned Interconnection Facilities:

(i) The Seller agrees to pay to the Company a reasonable non-refundable contribution for the Company's investment in the Company-Owned Interconnection Facilities described in Appendix B-2 (Company-Owned Interconnection Facilities), subject to the terms and conditions included in Appendix B-2 (Company-Owned Interconnection Facilities), and to pay for other reasonable interconnection costs as determined by the Company. The interconnection costs will not include the cost of an initial technical screening of the impact of the Facility on the Company System, but will include the actual cost (or such lesser amount as the Company may specify to facilitate the processing of interconnection requests for similarly situated facilities) of additional technical study for the Facility, if additional technical study is conducted.

(ii) For Seller That Is an Agency of The DOD.

The following provision applies only to a Seller that is an agency of the DOD. Notwithstanding the foregoing, the DOD shall pay for all costs associated with the Company's investment in the Company-Owned Interconnection Facilities and other reasonable interconnection costs by means of a modification to the existing electric service contract. The contract modification shall be executed prior to effectuating this Agreement.

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

2. Seller-Owned Interconnection Facilities.
  - a. The Seller shall furnish, install, operate and maintain interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes) designated by or acceptable to the Company as suitable for parallel operation of the Facility with the Company System (“Seller-Owned Interconnection Facilities”). Such Seller-Owned Interconnection Facilities shall be accessible at all times to authorized Company personnel.
  - b. The Seller shall comply with the Company’s Interconnection Standards as defined in this Agreement. If a conflict exists between the Interconnection Standards and this Agreement, this Agreement shall control.
  - c. Prior to executing this Agreement, a (i) single-line diagram, (ii) relay list, trip scheme and settings of the Facility, (iii) Facility Equipment List, and (iv) three-line diagram (if the Facility’s capacity is greater than or equal to 30 kW), which identify the circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes, shall, after having obtained prior consent from the Company, be attached to this Appendix B (Interconnection Requirements). The single-line diagram shall include pertinent information regarding operation, protection, synchronizing, control, monitoring and alarm requirements. The single-line diagram and three-line diagram shall expressly identify the point of interconnection of the Facility to the Company System. The relay list, trip scheme and settings shall include all protection, synchronizing and auxiliary relays that are required to operate the Facility in a safe and reliable manner. The three-line diagram shall show potential transformer and current transformer ratios, and details of the Facility’s configuration, including relays, meters, and test switches.
3. Approval of Design Drawings. If the Facility’s capacity is greater than or equal to 30 kW, Seller shall obtain the approval of a professional electrical engineer registered in the State of Hawaii for the single-line diagram, relay list, trip scheme and settings of the Facility, and three-line diagram prior to submitting such drawings and documents to the Company. Such approval shall be indicated by such electrical engineer’s professional seal on all drawings and documents.
4. Point of Interconnection. The Point of Interconnection is shown on the single-line diagram and three-line diagram (provided by the Seller and reviewed by the Company) which are attached to Appendix B-2 (Seller-Owned Interconnection Facilities) (provided that the three-line diagram is not required if the Facility’s capacity is less than 30 kW).

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

5. Testing, Records and Operating Procedures. The Seller agrees to test the Facility, to maintain operating records, and to follow such operating procedures, as may be specified by the Company to protect the Company System from damages resulting from the parallel operation of the Facility, including such testing, records and operating procedures as more fully described in below:
- a. The Company may require periodic reviews of the maintenance records, and available operating procedures and policies of the Facility.
  - b. The Seller must separate the Facility from the Company System whenever requested to do so by the Company System Operator pursuant to Section 5 (Personnel and Company System Safety) of the Agreement and Section 6 (Continuity of Service) of the Agreement, and Section 11 (Disconnection of Facility for Company Reasons) of this Appendix B (Interconnection Requirements). It is understood and agreed that at times it may not be possible for the Company to accept electric energy due to temporary operating conditions on the Company System, and these periods shall be specified by the Company System Operator. Notice shall be given in advance when these are scheduled operating conditions.
  - c. Logs shall be kept by the Seller for information on unit availability including reasons for planned and forced outages; circuit breaker trip operations, relay operations, including target initiation and other unusual events. The Company shall have the right to review these logs, especially in analyzing system disturbances.
6. Changes to the Facility, Operating Records, and Operating Procedures.
- a. The Seller agrees that no material changes or additions to the Facility as reflected in the single-line diagram, relay list, trip scheme and settings of the Facility, Facility Equipment List, and three-line diagram (if the Facility's capacity is greater than or equal to 30 kW), shall be made without having obtained prior written consent from the Company.
  - b. As a result of the observations and inspections of the Facility (including but not limited to relay list, trip scheme and settings) and the performance of the verification tests, if any changes in or additions to the Facility, operating records, and operating procedures and policies are required by the Company, the Company shall specify such changes or additions to the Seller in writing, and the Seller shall, as soon as practicable, but in no event later than thirty (30) Days after receipt of such changes or additions, respond in writing, either noting agreement and action to be taken or reasons for disagreement. If the Seller disagrees with the Company, it shall note alternatives it will take to accomplish the same intent, or provide the Company with a reasonable explanation as to why no action is required by Good Engineering and Operating Practices.

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

7. Verification Testing.

- a. Upon initial parallel operation of the Facility, or any time interface hardware or software is changed, a verification test of Seller-Owned Interconnection Facilities shall be performed by Seller. A qualified individual, hired or employed by the Seller, shall perform the verification testing in accordance with the manufacturer's published test procedure. Qualified individuals include professional engineers, factory trained and certified technicians, and licensed electricians with experience in testing protective equipment.
- b. Verification testing shall be performed every four years. All verification tests prescribed by the manufacturer shall be performed. If wires must be removed to perform certain tests, each wire and each terminal shall be clearly and permanently marked. The Seller shall maintain verification test reports for inspection by the Company. Additionally, all inverters shall be verified once per year as follows: the Seller shall operate the load break disconnect switch and verify the Facility automatically shuts down and does not reconnect with the Company System until the Company System continuous normal voltage and frequency have been maintained for a minimum of 5 minutes. The Seller shall maintain a log of these operations for inspection by the Company.
- c. Any system that depends upon a battery for trip power shall be checked once per month for proper voltage. Once every four (4) years the battery shall either be replaced or have a discharge test performed. The Seller shall maintain a log of these operations for inspection by the Company.
- d. Tests and battery replacements as specified in this Section 7 (Verification Testing) of Appendix B (Interconnection Requirements) shall be at the Seller's expense.

8. Company's Right to Inspect.

- a. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless otherwise agreed to by the Company and the Seller), observe the construction of the Facility (including but not limited to relay settings and trip schemes) and the equipment to be installed therein.
- b. Within fourteen Days after receiving a written request from the Seller to begin producing electric energy in parallel with the Company System, the Company may inspect the Facility (including but not limited to relay settings and trip schemes) and observe the performance of the verification testing. The Company may accept or reject the request to begin producing electric energy based upon the inspection or verification test results.

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

- c. If the Company does not perform an inspection of the Facility (including but not limited to relay settings and trip schemes) and observe the performance of verification testing within the fourteen-Day period, the Seller may begin to produce electric energy after certifying to the Company that the Facility has been tested in accordance with the verification testing requirements and has successfully completed such tests. After receiving the certification, the Company may conduct an inspection of the Facility (including but not limited to relay settings and trip schemes) and make reasonable inquiries of the Seller, but only for purposes of determining whether the verification tests were properly performed. The Seller shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.
  - d. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless an apparent safety or emergency situation exists which requires immediate inspection to resolve a known or suspected problem), inspect the Facility (including but not limited to relay settings and trip schemes) and its operations (including but not limited to the operation of control, synchronizing, and protection schemes) after the Facility commences operations.
9. Commencement of Producing Electric Energy in Parallel: After this Agreement is executed, and the Facility and the Company-Owned Interconnection Facilities are completed, the Facility may be operated in parallel with the Company System, provided that the Seller has satisfied the conditions in Section 8 (Company's Right to Inspect) of this Appendix B (Interconnection Requirements).
10. Disconnection of Facility for Company Reasons:
- (a) Upon providing reasonable notice (generally not to be less than ten (10) business days for scheduled work), the Company may require the Seller to temporarily disconnect the Facility from the Company System when necessary for the Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or other Sellers' equipment or any part of the Company System. If the Company determines that such disconnection is necessary because of an unexpected system emergency, forced outage, operating conditions on the Company Systems, or compliance with Good Engineering and Operating Practices as determined by the Company, the Company will immediately attempt to notify the Seller or the Seller's designated representatives in person, by telephone, by electronic mail, or by facsimile, of the need to disconnect the Facility. Unless the emergency condition requires immediate disconnection as determined by the Company, the Company shall allow sufficient time for the Seller to manually disconnect the Facility.

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

- (b) The Facility shall not energize a de-energized utility line under any circumstances, but may operate its Facility isolated from the Company System with an open tie point in accordance with Section 4.i of Appendix I to Company Tariff, Rule 14, Section H.
- (c) Following the completion of work and/or rectification of the emergency conditions by the Company, the Company shall provide authorization for the Seller to reset the Seller's service breaker, if open, as soon as practicable and shall provide, within fifteen (15) business days or such other period as is mutually agreed upon in writing by the Company and the Seller, written documentation of the occurrence and nature of the Company's work and/or emergency condition, and of the disconnection of the Facility.
- (d) The Company shall take reasonable steps to minimize the number and duration of such disconnections.
- (e) The disconnection of the Facility under this Section 10 (Disconnection of Facility for Company Reasons) shall not be subject to standby service charges under the Company's Schedule SS Standby Service tariff.
- (f) The Company may disconnect the Seller from the Company System for failure by the Seller to disconnect the Facility under this Section 10 (Disconnection of Facility for Company Reasons), until such time that the Company's work or the system condition has been corrected and the normal system condition has been restored.

11. Prevention of Interference:

- (a) The Seller shall not operate equipment that superimposes a voltage or current upon the Company System that interferes with the Company's operations, service to the Company's customers, or the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the Seller must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the Seller does not take timely corrective action, or continues to operate the equipment causing interference without restriction or limit, the Company may, without liability, disconnect the Seller's equipment from the Company System.
- (b) For Seller That Is An Agency Of The DOD.

This provision applies only to a Seller that is an agency of the DOD. The DOD shall not operate equipment that superimposes a voltage or current upon the Company System that interferes with the Company's operations, service to the Company's customers, or



APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the DOD must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the DOD does not take timely corrective action, or continues to operate the equipment causing interference without restriction or limit, the Company may disconnect the DOD's equipment from the Company System.

12. Avoidance of adverse system conditions.

The Facility shall be designed, installed, operated and maintained so as to prevent or protect against adverse conditions on the Company System that can cause electric service degradation, equipment damage, or harm to persons, such as:

- (a) Unintended islanding.
- (b) Inadvertent and unwanted re-energization of a Company dead line or bus.
- (c) Interconnection while out of synchronization.
- (d) Overcurrent.
- (e) Voltage imbalance.
- (f) Ground faults.
- (g) Generated alternating current frequency outside of permitted safe limits.
- (h) Voltage outside permitted limits.
- (i) Poor power factor or reactive power outside permitted limits.
- (j) Abnormal waveforms.

13. Specification of protection, synchronizing and control requirements. The Seller shall provide the design drawings, operating manuals, manufacturer's brochures/instruction manual and technical specifications, manufacturer's test reports, bill of material, protection and synchronizing relays and settings, and protection, synchronizing, and control schemes for the Facility to the Company for its review, and the Company shall have the right to specify the protection and synchronizing relays and settings, and protection, synchronizing and control schemes that affect the reliability and safety of operation and power quality of the Company System with which the Facility is interconnected ("Facility Protection Devices/Schemes"). After the implementation of the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, the Company may require changes in the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, when required by the Facility's or system operations, at the Seller's expense.

APPENDIX B INTERCONNECTION REQUIREMENTS (Continued)

14. Facility protection. The Seller is solely responsible for providing adequate protection for the Facility.

APPENDIX B-1

DESCRIPTION OF FACILITY

**Section 1. Applicant Information**

Seller

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone

(Daytime): \_\_\_\_\_ (Evening)  
Area Code Number : Area Code Number

E-mail: \_\_\_\_\_ Account Number: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Facility Location Tax Map Key Number: \_\_\_\_\_

**Section 2. Generator Qualifications**

Is Generator powered from a Nonfossil Fuel Source?  Yes  No

Type of Nonfossil Fuel Source:  PV  Wind  Hydro  
 CSP  Other

PV Array DC Rated Output: \_\_\_\_\_ kW PV Array AC Rated Output: \_\_\_\_\_ kW

Maximum Site Load without Generator Capability: \_\_\_\_\_ kW Maximum Generator Capability: \_\_\_\_\_ kW

APPENDIX B-1 DESCRIPTION OF FACILITY (Continued)

Minimum Site Load without  
Generation: \_\_\_\_\_ kW                      Maximum Export: \_\_\_\_\_ kW

Annual Energy Production of Generating Facility: \_\_\_\_\_ kWh

Annual Energy Exported through Point of Common Coupling: \_\_\_\_\_ kWh

**Section 3. Generator Technical Information**

Seller must not modify or add to the Generating Facility without notification and the prior written consent of the Company.

Type of Generator:     Synchronous     Induction     Inverter-Based Generating Facility

Generator (or solar collector) Manufacturer, Model Name & Number:

---

**(A copy of Generator Nameplate and Manufacturer's Specification Sheet must also be submitted)**

---

Operating Power Factor: \_\_\_\_\_                      Nameplate Rating in kW: \_\_\_\_\_

Fault Current Contribution of Generator: \_\_\_\_\_ Amps

Inverter Manufacturer, Model Name & Number (if used): \_\_\_\_\_  
**(A copy of Inverter Nameplate and Manufacturer's Specification Sheet must also be submitted)**

---

Operating Power Factor: \_\_\_\_\_                      Rating in kW: \_\_\_\_\_

Number of Starts Per Day: \_\_\_\_\_                      Maximum Starting kVA: \_\_\_\_\_

UF Trip Setting: \_\_\_\_\_                      UF Time Delay (Secs): \_\_\_\_\_

APPENDIX B-1 DESCRIPTION OF FACILITY (Continued)

Generator Grounding Method:

- Effectively Grounded       Resonant Grounded  
 Low-Inductance Grounded       High-Resistance Grounded  
 Low-Resistance Grounded       Ungrounded

Generator Characteristic Data (for rotating machines):

**(Not needed if Generator Nameplate and Manufacturer's Specification Sheet are provided)**

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.      Negative Sequence Reactance: \_\_\_\_\_ P.U.  
Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.      Zero Sequence Reactance: \_\_\_\_\_ P.U.  
Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.      KVA Base: \_\_\_\_\_  
Inertia Constant, H: \_\_\_\_\_ P.U.  
Excitation Response Ratio: \_\_\_\_\_

Direct Axis Open-Circuit Transient Time Constant,  $T'_{do}$ : \_\_\_\_\_ Seconds

Direct Axis Open-Circuit Subtransient Time Constant,  $T''_{do}$ : \_\_\_\_\_ Seconds

**Section 4. Interconnecting Equipment Technical Data (to the extent owned by Seller)**

Will an interposing transformer be used between the generator and the point of interconnection?       Yes       No

Transformer Data:

**(A copy of transformer Nameplate and Manufacturer's Test Report may be substituted)**

Size: \_\_\_\_\_ KVA.      Transformer Primary: \_\_\_\_\_ Volts       Delta       Wye       Wye Grounded  
Transformer Secondary: \_\_\_\_\_ Volts       Delta       Wye       Wye Grounded

APPENDIX B-1 DESCRIPTION OF FACILITY (Continued)

Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ KVA Base

Transformer Fuse Data:

**(Attach copy of fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves)**

At  Primary Voltage  Secondary Voltage

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Transformer Protection (if not fuse):

Please  
describe  
:

\_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

**(A copy of circuit breaker's Nameplate and Specification Sheet must also be submitted)**

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Continuous

Load Rating: \_\_\_\_\_ Interrupting Rating: \_\_\_\_\_ Trip Speed: \_\_\_\_\_  
(Amps) (Amps) (Cycles)

Circuit Breaker Protective Relays (if applicable):

**(Enclose copy of any proposed Time-Overcurrent Coordination Curves)**

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed  
Setting: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed  
Setting: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed  
Setting: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed  
Setting: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed  
Setting: \_\_\_\_\_

APPENDIX B-1 DESCRIPTION OF FACILITY (Continued)

Current Transformer Data (if applicable):

**(Enclose copy of Manufacturer's Excitation & Ratio Correction Curves)**

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio \_\_\_\_\_ /5  
Connection: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio \_\_\_\_\_ /5  
Connection: \_\_\_\_\_

Generator Disconnect Switch:

A generator disconnect device (isolation device) must be installed with features as described in the FIT Interconnection Standards And Technical Requirements.

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Catalog No.: \_\_\_\_\_ Rated Volts: \_\_\_\_\_ Rated Amps: \_\_\_\_\_

Single or 3 Phase: \_\_\_\_\_ Mounting Location: \_\_\_\_\_

**Section 5. General Technical Information**

Enclose copy of site single-line diagram showing configuration and interconnection of all equipment, current and potential circuits and protection and control schemes.

Is Single-Line Diagram Enclosed? Yes

Enclose copy of site relay list and trip scheme, which shall include all protection, synchronizing and auxiliary relays that are required to operate the Facility in a safe and reliable manner.

Are Relay List and Trip Scheme Enclosed? Yes

Enclose copy of site three-line diagram (if the Facility's capacity is greater than or equal to 30 kW) showing potential transformer and current transformer ratios, and details of the Facility's configuration, including relays, meters, and test switches.

Is Three-Line Diagram Enclosed? Yes

**Section 6. Installation Details**

Installing Electrical Contractor: \_\_\_\_\_ Firm: \_\_\_\_\_ License No.: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: Area Code: \_\_\_\_\_ Number: \_\_\_\_\_

Installation Date: \_\_\_\_\_ Interconnection Date: \_\_\_\_\_

HAWAIIAN ELECTRIC COMPANY, INC.

APPENDIX B-1 DESCRIPTION OF FACILITY (Continued)

Supply certification that the generating system has been installed and inspected in compliance with the local Building/Electrical code of the County of \_\_\_\_\_ .

Permit Number: \_\_\_\_\_

Signed  
(Inspector): \_\_\_\_\_ Date: \_\_\_\_\_

**In lieu of signature of Inspector, a copy of the final inspection certificate may be attached)**

**Section 7. Generator/Equipment Certification**

Generating systems that utilize inverter technology must be compliant with *Institute of Electrical and Electronics Engineers IEEE Std 1547* and *Underwriters Laboratories UL 1741* in effect at the time this Interconnection Agreement is executed. Generating systems that use a rotating machine must be compliant with applicable National Electrical Code, Underwriters Laboratories, and Institute of Electrical and Electronics Engineers standards and rules and orders of the Hawaii Public Utilities Commission in effect at the time this Interconnection Agreement is executed. **By signing below, the Applicant certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.**

Signed (Seller): \_\_\_\_\_ Date: \_\_\_\_\_

**Section 8. Insurance**

Insurance Carrier: \_\_\_\_\_



APPENDIX B-2

COMPANY-OWNED INTERCONNECTION FACILITIES

1. Description of Company-Owned Interconnection Facilities

(a) The Company will purchase, construct, own, operate and maintain all Company- Owned Interconnection Facilities required to interconnect the Company System with the Facility at \_\_\_\_\_ volts, up to the Point of Interconnection.

(b) The Company-Owned Interconnection Facilities, for which the Seller agrees to pay, include:

**[COMPANY TO SPECIFY THE INTERCONNECTION FACILITIES. IF NO INTERCONNECTION FACILITIES, STATE "NONE".]**

(c) All interconnection facilities not expressly identified in Appendix B-1 (Description of Facility) to this Agreement as owned by Seller are Company-Owned Interconnection Facilities.

2. Seller Payment to Company for Company-Owned Interconnection Facilities, Review of Facility, and Review of Verification Testing

(a) The Seller shall pay to the Company the total estimated interconnection cost to be incurred by the Company ("Total Estimated Interconnection Cost") for the Company-Owned Interconnection Facilities described in Section 1(b) above, which is comprised of (i) the estimated cost of the Company-Owned Interconnection Facilities, (ii) the estimated engineering costs associated with (A) developing the Company-Owned Interconnection Facilities and (B) reviewing and specifying those portions of the Facility which allow interconnected operations as such are described in Appendix B-1 (Description of Facility) and (iii) reviewing the verification testing. The following summarizes the Total Estimated Interconnection Cost:

<u>Description</u>	<u>Estimated Cost (\$)</u>
--------------------	----------------------------

**[COMPANY TO SPECIFY THE ESTIMATED INTERCONNECTION COST. IF NO COST, STATE "NONE".]**

**Total Estimated Interconnection Cost            \$**

APPENDIX B-2 COMPANY OWNED INTERCONNECTION FACILITIES (Continued)

- (b) The Total Estimated Interconnection Cost, which, except as otherwise provided herein, is non-refundable, shall be paid by the Seller fourteen (14) Days after receipt of an invoice from the Company, which shall be provided not less than thirty (30) Days prior to start of procurement of the Company-Owned Interconnection Facilities.
- (c) Within thirty (30) Days of receipt of an invoice, which shall be provided within fourteen (14) Days of the final accounting, which shall take place within sixty (60) Days of completion of construction of the Company-Owned Interconnection Facilities, the Seller shall remit to the Company the difference between the Total Estimated Interconnection Cost paid to date and the total actual interconnection cost (Total Actual Interconnection Cost). The Total Actual Interconnection Cost is comprised of (i) the total costs of the Company-Owned Interconnection Facilities, and (ii) the total engineering costs associated with (A) developing the Company-Owned Interconnection Facilities and (B) reviewing and specifying those portions of the Facility which allow interconnected operations, and (iii) reviewing the verification testing. If in fact the Total Actual Interconnection Cost is less than the payments received by the Company as the Total Estimated Interconnection Cost, the Company shall repay the difference to the Seller within thirty (30) Days of the final accounting.
- (d) If the Interconnection Agreement is terminated prior to the Seller's payment for the Total Actual Interconnection Cost (or the portion of this cost which has been incurred) or prior to the Company's repayment of the over-collected amount of the Total Estimated Interconnection Cost (or the portion of this cost which has been paid), such payments shall be made by the Seller or Company, as appropriate. If payment is due to the Company, the Seller shall pay within thirty (30) Days of receipt of an invoice, which shall be provided within fourteen (14) Days of the final accounting, which shall take place within sixty (60) Days of the date the Interconnection Agreement is terminated. If payment is due to the Seller, the Company shall pay within thirty (30) Days of the final accounting.
- (e) All Company-Owned Interconnection Facilities shall be the property of the Company.

3. Operation, Maintenance and Testing Costs

The Company will bill the Seller monthly and the Seller will, within 30 Days after the billing date, reimburse the Company for any costs incurred in operating, maintaining or testing the Company-Owned Interconnection Facilities, to the extent such costs are not included in or are not appropriate for inclusion in the Company's base rates. The Company's costs will be determined on the basis of outside service costs, direct labor costs, material costs, transportation costs, applicable overheads at time incurred and applicable taxes. Applicable overheads will include such costs as vacation, payroll taxes, non-productive wages, supervision, tools expense, employee benefits, engineering administration, corporate administration, and materials handling. Applicable taxes will include the Public Service Company Tax, and Public Utility Fee.

APPENDIX B-2 COMPANY OWNED INTERCONNECTION FACILITIES (Continued)

4. Seller Use of Company-Owned Interconnection Facilities Upon Termination

Notwithstanding that all Company-Owned Interconnection Facilities are the property of the Company, upon termination of the Interconnection Agreement, the Company shall identify any equipment paid for by the Seller that can feasibly be returned to the Seller. If Seller desires such equipment, Seller shall pay for the removal of the equipment and the restoration of the Company System to the Company's satisfaction.

**APPENDIX C**

PURCHASE OF ELECTRIC ENERGY BY COMPANY

1. Rate for Purchase of Electric Energy. Subject to the provisions of this Agreement, the Company shall accept and pay for electric energy generated by the Facility and delivered by Seller to the Company at the rate set forth in Table C-1 below beginning from the Commercial Operation Date.

[Table C-1 placeholder]

<u>Year</u>	<u>Rate</u>
Years 1-20	\$0.xxxx/kWh