

Hawaiian Electric Companies Tier 3 Feed-In Tariff Power Purchase Agreement

SHEET NO. 88.1 Effective December 30, 2011

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APPENDIX I SCHEDULE FIT TIER 3 POWER PURCHASE AGREEMENT

THIS SCHEDU	ULE FIT TIER	3 POWER E	PURCHASE	AGREEMENT	
("Agreement") is	${ t s}$ made this ${ t oldsymbol oldsymb$	day c	of	, 20	(the
"Execution Date"	"), by and be	etween Hav	waii Elec	tric Light	Company,
Inc.(hereinafte	r called the	"Company"	') and		
(hereinafter cal	lled the " <u>Sel</u>	ler").			

WHEREAS, Company is an operating electric public utility, subject to the Hawaii Public Utilities Law (Hawaii Revised Statutes, Chapter 269) and the rules and regulations of the Hawaii Public Utilities Commission (hereinafter called the "PUC"); and

WHEREAS, the Company System is operated as an independent power grid and must both maximize system reliability for its customers by ensuring that sufficient generation is available and meet the requirements for voltage stability, frequency stability, and reliability standards; and

WHEREAS, Seller desires to build, own, and operate a renewable energy facility that is classified as an eligible resource under Hawaii's Renewable Portfolio Standards Statute (codified as Hawaii Revised Statutes (HRS) 269-91 through 269-95; and

WHEREAS, Seller understands the need to use all commercially reasonable efforts to maximize the overall reliability of the Company System; and

WHEREAS, Facility will be located at ______, State of Hawaii and is more fully described in <u>Attachment A</u> (Description of Generation and Conversion Facility) and <u>Attachment B</u> (Facility Owned by Seller) attached hereto and made a part hereof; and

WHEREAS, Seller desires to sell to Company electric energy generated by the Facility, and Company agrees to purchase such electric energy from Seller, pursuant to the Schedule FIT Tier 3 and upon the terms and conditions set forth herein.

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

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DEFINITIONS

For the purposes of this Agreement, the following capitalized terms shall have the meanings set forth below:

"Acceptance Test": A test conducted by Seller and, at Company's option, witnessed by Company, within thirty (30) Days of completion of all Interconnection Facilities and in accordance with criteria and test procedures determined by Company and Seller as set forth below as set forth in Section 1(J) (Acceptance Test Procedure) of Attachment G (Company-Owned Interconnection Facilities), to determine conformance with Article 3 (Facility Owned and/or Operated by Seller) and Attachment G (Company-Owned Interconnection Facilities) and Good Engineering and Operating Practices. Attachment N (Acceptance Test General Criteria) provides general criteria to be included in the written protocol for the Acceptance Test. Successful completion of the Acceptance Test shall be a condition precedent for the performance of the Control System Acceptance Test and the In-Service Date.

"Actual Output": The total quantity of electric energy (measured in kilowatt hours) produced by Facility over a given time period and delivered to the Point of Interconnection, as measured by the revenue meter.

"Agreement": Shall have the meaning set forth in the preamble to this Agreement.

"Allowed Capacity": Shall have the meaning set forth in <u>Section</u> 5.E of <u>Attachment A</u> (Description of Generation and Conversion Facility) to this Agreement.

"Annual Contract Energy": MWh for a Contract Year, which represents Seller's estimate of expected annual average electric energy deliveries to Company under this Agreement over the Initial Term.[TO BE COMPLETED BY SELLER PRIOR TO EXECUTION]

"Arbitration Rules": Shall have the meaning set forth in Section $28.2\,(\mathrm{B})$ (Arbitration).

"As-Available Energy": Electric energy provided to Company on an unscheduled basis as Seller determines it to be available from its Facility, in accordance with the terms and conditions of this Agreement, rather than at prearranged times and in prearranged amounts.

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- "Base Load Unit": A generating 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.
- "Base Rate": The primary index rate established from time to time by the Bank of Hawaii in the ordinary course of its business and published by intrabank circular letters or memoranda for the guidance of its loan officers in pricing all of its loans which float with the Base Rate. A change in the Base Rate shall take effect on the date upon which a change in the Base Rate is made effective by the Bank of Hawaii. In the event the Bank of Hawaii no longer establishes a Base Rate, the term "Base Rate" shall mean the primary index rate established by a leading Hawaii financial institution that is the most similar to the former Bank of Hawaii Base Rate.
- "Bill of Material": A list of equipment to be installed at the Facility including, but not necessarily limited to, items such as relays, breakers, and switches.
- "Business Day": Any calendar day that is not a Saturday, a Sunday, or a federal or Hawaii state holiday.
- "Claim": Any claim, suit, action, demand or proceeding.
- "Company": Shall have the meaning set forth in the preamble to this Agreement.
- "Company-Owned Interconnection Facilities": Shall have the meaning set forth in Section 1(A) (Description of Company-Owned Interconnection Facilities) of Attachment G (Company-Owned Interconnection Facilities).
- "Company Dispatch": Company's sole and absolute right, through supervisory equipment, or otherwise, to direct or control, from moment to moment, and in accordance with Good Engineering and Operating Practices, the rate of delivery of electric energy offered by Seller to Company, subject to the operating constraints of Facility and as permitted under this Agreement.
- "Company System": The electric system owned and operated by 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.

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- "Company System Operator": The authorized representative of Company who is responsible for carrying out Company Dispatch.
- "Competitive Bidding Framework": The Framework for Competitive Bidding contained in Decision and Order No. 23121 issued by the Public Utilities Commission on December 8, 2006 and any subsequent orders providing for modifications from those set forth in the order issued December 8, 2006.
- "Construction Milestones": The Reporting Milestones set forth in Attachment L (Reporting Milestones) and the Guaranteed Project Milestones set forth in Attachment K (Guaranteed Project Milestones).
- "Construction Start Date": The date on which continuous construction of permanent generation structures begins at the Site.
- "Consumer Advocate": Shall have the meaning set forth in Section 24.2 (Confidentiality).
- "Consumer Price Index": The Consumer Price Index for All Urban Consumers (CPI-U).
- "Contract Capacity": Shall have the meaning set forth in Section $\underline{5\,(B)}$ (Design and Capacity) of Attachment A (Description of Generation and Conversion Facility) to this Agreement.
- "Contract Price": The price that Company will pay Seller for electric energy delivered on a monthly basis as set forth in of Attachment J (Energy Purchases by Company) to this Agreement.
- "Contract Year": A twelve calendar month period which begins on the first Day of the month coincident with or next following the In-Service Date and, thereafter, anniversaries thereof; provided, however, that, in the event the In-Service Date is not the first Day of the calendar month, the initial Contract Year shall also include the Days from the In-Service Date to the first Day of the succeeding month.
- "Contract Year 1": The initial Contract Year.
- "Control System Acceptance Test(s)": A test or tests performed on the centralized control system and Curtailment Control Interface of the Facility in accordance with procedures set forth in Section 1(H) (Control System Acceptance Test Procedures) of Attachment B

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(Facility Owned by Seller). Attachment O (Control System Acceptance Test Criteria) provides general criteria to be included in the written protocol for the Control System Acceptance Test.

"Curtailment Event": The temporary curtailment, interruption or reduction of deliveries of electric energy from the Facility initiated by Company as a result of circumstances described in Article 8 (Continuity of Service) and Article 9 (Personnel and System Safety) of this Agreement.

"Day": A calendar day.

"<u>Defaulting Party</u>": The Party whose failure, action or breach of its obligations under this Agreement results in an Event of Default under Article 15 (Events of Default) of this Agreement.

"Design Capacity": The capacity of the generator in kilowatts 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 the Company under Schedule FIT Tier 3.

"Dispute": Shall have the meaning set forth in Section 28.1 (Good Faith Negotiations).

"DOD": Shall have the meaning set forth in <u>Section 17.4</u> (Seller As An Agency of the Department of Defense) of this Agreement.

"DPR": Shall have the meaning set forth in Section 28.2(A) (Arbitration).

"Energy Cost Adjustment Clause": The provision in Company's rate schedules that allows Company to pass through to its customers Company's costs of fuel and purchased power.

"Environmental Credits": Any environmental credit, offset, or other benefit allocated, assigned or otherwise awarded by any Governmental Authority or international agency to Company or 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 the Facility does not produce carbon dioxide when generating electric energy, or any renewable electric energy credit, but in all cases shall not mean tax credits.

"Event of Default": Shall have the meaning set forth in Article 15 (Events of Default) of this Agreement.

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- "Execution Date": The date designated as such on the first page of this Agreement or, if no date is so designated, the date the Parties exchanged executed signature pages to this Agreement.
- "Extended Term": The period following expiration of the Initial Term which continues in effect until terminated by either Party pursuant to the terms of this Agreement as further described in Section 12.2 (Extended Term).
- "Facility": Seller's renewable electric energy facility that is the subject of this Agreement, including all Seller-Owned Interconnection Facilities and all other 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": Shall have the meaning set forth in Section 24.1 (Financial Compliance).
- "FASB ASC 810": Shall have the meaning set forth in <u>Section 24.1</u> (Financial Compliance).
- "Financing Documents": The loan and credit agreements, notes, bonds, indentures, security agreements, lease financing agreements, mortgages, deeds of trust, interest rate exchanges, swap agreements and other documents relating to the development, bridge, construction and/or permanent debt financing for the Facility, including any credit enhancement, credit support, working capital financing, or refinancing documents, and any and all amendments, modifications, or supplements to the foregoing that may be entered into from time to time at the discretion of Seller in connection with development, construction, ownership, leasing, operation or maintenance of the Facility.
- "Force Majeure": Shall have the meaning set forth in <u>Section 21.1</u> (Force Majeure) of this Agreement.
- "Forced Outage": An unplanned unit shutdown caused by factors such as automatic or programmed protective trips and operatorinitiated trips due to equipment malfunction.
- "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, considering Company's isolated island setting and

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other characteristics, 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 for an island system, 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:

- Adequate materials, resources and supplies, including fuel, are available to meet the Facility's needs under normal conditions and reasonably anticipated abnormal conditions.
- 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.
- 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.
- 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.
- 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.

"Governmental Approvals": Shall have the meaning set forth in Section 8 (Government Approvals for Any Company-Owned Interconnection Facilities Constructed by Seller) of Attachment G (Company-Owned Interconnection Facilities).

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- "Governmental Authority": 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.
- "Guaranteed In-Service Date": The date specified as such in Attachment K (Guaranteed Project Milestones) of this Agreement, by which Seller guarantees that it will achieve the In-Service Date.
- "Guaranteed Project Milestone": Shall have the meaning set forth in Attachment K (Guaranteed Project Milestones) of this Agreement.
- "Guaranteed Project Milestone Date": Each of the dates identified as such in Attachment K (Guaranteed Project Milestones).
- "Indemnified Company Party": Shall have the meaning set forth in Section 17.1(A) (Personal Injury, Death or Property Damage) of this Agreement.
- "Indemnified Seller Party": Shall have the meaning set forth in Section 17.2(A) (Personal Injury, Death or Property Damage) of this Agreement.
- "Independent Evaluator": A person empowered, pursuant to Section 23.5 (Failure to Reach Agreement) and Section 23.10 (Dispute) of this Agreement, to resolve disputes due to failure of the Parties to agree on a Performance Standards Revision Document.
- "Information": Shall have the meaning set forth in Section $24.1 \, (Financial \, Compliance)$.
- "In-Service Date": The date that both the Acceptance Test and Control System Acceptance Test(s) for all generating units are deemed by Company to have been successfully completed.
- "Initial Term": Shall have the meaning set forth in <u>Section 12.1</u> (Term).
- "Interconnection Facilities": The equipment and devices required to permit the Facility to operate in parallel with and deliver electric energy to the Company System, such as, but not limited to, transmission lines, transformers, switches, and circuit breakers.

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- "Interconnection Requirements Study" ("IRS"): A study, performed in accordance with the terms of the IRS Letter Agreement and with Article_4 (Interconnection Facilities Owned by Company) and Attachment_G (Company-Owned Interconnection Facilities) of this Agreement, to assess the projected interaction of the Facility with the Company System.
- "Interconnection Requirements Study Letter Agreement" or "IRS Letter Agreement": The letter agreement and any written, signed amendments thereto, between Company and Seller that describes the scope, schedule, and payment arrangements for the Interconnection Requirements Study.
- "Issuer": Shall have the meaning set forth in <u>Section 14.8</u> (Establishment of Operating Period Security) of this Agreement.
- "kV": Kilovolt.
- "kW": Kilowatt.
- "Land Rights": All easements, rights of way, licenses, leases, surface use agreements and other interests or rights in real estate.
- "Laws" All federal, state and local laws, rules, regulations, orders, ordinances, permit conditions and other governmental actions.
- "Losses": Any and all direct, indirect or consequential damages, fines, penalties, deficiencies, losses, liabilities (including settlements and judgments), costs, expenses (including reasonable attorneys' fees and court costs) and disbursements.
- "Management Meeting": Shall have the meaning set forth in Section 28.1 (Good Faith Negotiations).
- "Measured Wind Speed": The arithmetic mean, over any given period of time, of the wind speed readings from each of a Facility's wind turbine anemometers, taken or sampled every two (2) seconds by the Facility's monitoring equipment, in meters per second (m/s).
- "MW": Megawatt.
- "Non-appealable PUC Approval Order": Shall have the meaning set forth in Section 30.20(B) (Non-appealable PUC Approval Order) of this Agreement.

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- "Non-defaulting Party": Shall have the meaning set forth in Section 15.4 (Rights of Non-Defaulting Party) of this Agreement.
- "Non-performing Party": The Party who is in breach of, or is otherwise failing to perform, its obligations under this Agreement.
- "Operating Period Security": Shall have the meaning set forth in Section 14.4 (Operating Period Security) of this Agreement.
- "Party": Each of Seller or Company.
- "Parties": Seller and Company, collectively.
- "Performance Standards": The various performance standards for the operation of the Facility and the delivery of electric energy from the Facility to the Company specified in Section 3 (Performance Standards) of Attachment B (Facility Owned by Seller), as such standards may be revised from time to time pursuant to Article 23 (Process for Addressing Revisions to Performance Standards) of this Agreement.
- "Performance Standards Information Request": A written notice from Company to Seller proposing revisions to one or more of the Performance Standards then in effect and requesting information from Seller concerning such proposed revision(s).
- "Performance Standards Modifications": For each Performance Standards Revision, any capital improvements, additions, enhancements, replacements, repairs or other operational modifications to the Facility and/or to changes in Seller's operations or maintenance practices necessary to enable the Facility to achieve the performance requirements of such Performance Standards Revision.
- "Performance Standards Pricing Impact": Any adjustment in Contract Price in \$/MWh necessary to specifically reflect the recovery of the net costs and/or net lost revenues specifically attributable to any Performance Standards Modification necessary to comply with a Performance Standard Revision, which shall consist of the following: (i) recovery of any capital investment (aa) made over a cost recovery period starting after the Performance Standards Revision is made effective following a PUC Performance Standards Revision Order through the end of the Initial Term and (bb) based on a proposed capital structure that is commercially reasonable for such an investment and the return on investment is at market rates for such an investment or similar

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investment); (ii) recovery of reasonably expected net additional operating and maintenance costs; and (iii) an adjustment in pricing necessary to compensate Seller for reasonably expected reductions, if any, in the delivery of electric energy to Company under this Agreement, which shall consist of (yy) an increase in payments necessary to compensate Seller for expected reduced electric energy payments under this Agreement; and (zz) to the extent applicable, an increase in payments necessary to compensate Seller for reasonably expected reductions in receipt of Production Tax Credits (pursuant to Section 45 of the Internal Revenue Code) calculated on an after-tax basis.

"Performance Standards Proposal": A written communication from Seller to Company detailing the following with respect to a proposed Performance Standards Revision: (i) a statement as to whether Seller believes that it is technically feasible to comply with the Performance Standards Revision and the basis therefore; (ii) the Performance Standards Modifications proposed by Seller to comply with the Performance Standards Revision; (iii) the capital and incremental operating costs of any necessary technical improvements, and any other incremental net operating or maintenance costs associated with any necessary operational changes, and any expected lost revenues associated with expected reductions in electric energy delivered to Company; (iv) the Performance Standards Pricing Impact of such costs and/or lost revenues; (v) information regarding the effectiveness of such technical improvements or operational modifications; (vi) proposed contractual consequences for failure to comply with the Performance Standard Revision that would be commercially reasonable under the circumstances; and (vii) such other information as may be reasonably required by Company to evaluate Seller's proposals. A Performance Standards Proposal may be issued either in response to a Performance Standards Information Request or on Seller's own initiative.

"Performance Standards Revision": A revision, as specified in a performance Standards Information Request or a Seller-initiated Performance Standards Proposal, to the Performance Standards in effect as of the date of such Request or Proposal.

"Performance Standards Revision Document": A document specifying one or more Performance Standards Revisions and setting forth the changes to the Agreement necessary to implement such Performance Standards Revision(s). A Performance Standards Revision Document may be either a written agreement executed by Company and Seller or as directed by the Independent Evaluator pursuant to Section

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- 23.10 (Dispute) of this Agreement, in the absence of such written agreement.
- "Permit Application Filing Date": The Reporting Milestone by which Seller shall file all applications for Permits required for the construction and operation of the Facility as set forth in Attachment L (Reporting Milestone).
- "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 supplied by Seller to Company where the Facility interconnects with the Company System.
- "Power Curve": The manufacturer-warranted power curve.
- "Project": The Facility as described in Attachment A (Description of Generation and Conversion Facility).
- "Proprietary Rights": Shall have the meaning set forth in Section 30.17 (Proprietary Rights) of this Agreement.
- "PUC": Shall have the meaning set forth in the Recitals.
- "PUC Performance Standards Revision Order": The decision and order of the PUC approving the application or motion by the Parties seeking (i) approval of the Performance Standards Revision in question and the associated Performance Standards Revision Document, (ii) finding that the impact of the changes to the Contract Price on Company's revenue requirements is reasonable, and (iii) approval to include the costs arising out of pricing changes in Company's Energy Cost Adjustment Clause (or equivalent).
- "PUC's Standards": Standards for Small Power Production and Cogeneration in the State of Hawaii, issued by the Public Utilities Commission of the State of Hawaii, Chapter 74 of Title 6, Hawaii Administrative Rules, currently in effect and as may be amended from time to time.
- "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 Public Utilities Commission.

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- "Qualifying Facility": As defined in the Public Utility Regulatory Policies Act of 1978 and the regulations issued thereunder.
- "Recipient": Shall have the meaning set forth in Section 24.2 (Confidentiality).
- "Renewable Portfolio Standards" ("RPS"): The Hawaii law that mandates that Company and its subsidiaries generate or purchase certain amounts of their net electricity sales over time from qualified renewable resources. The RPS requirements in Hawaii are currently codified as Hawaii Revised Statutes (HRS) 269-91 through 269-95.
- "Reporting Milestones": Shall have the meaning set forth in Attachment L (Reporting Milestones).
- "Reservation Fee": The refundable reservation fee defined in Schedule FIT Tier 3.
- "Schedule FIT Tier 3": The schedule feed-in tariff for Tier 3 eligible renewable energy generating facilities.
- "Seller": Shall have the meaning set forth in the preamble to this Agreement.
- "Seller-Owned Interconnection Facilities": The Interconnection Facilities constructed and owned by Seller.
- "Site": The parcel of real property on which the Facility will be constructed and located, together with any Land Rights reasonably necessary for the construction, operation and maintenance of the Facility. The Site is identified in Attachment A (Description of Generation and Conversion Facility) to this Agreement.
- "SOX 404": Shall have the meaning set forth in Section 24.1 (Financial Compliance).
- "State": Shall have the meaning set forth in <u>Section 17.3</u> (Seller As An Agency of the State) of this Agreement.
- "Term": Shall mean, collectively, the Initial Term and the Extended Term (if any).
- "Termination Damages": Shall have the meaning set forth in Section 15.4 (Rights of the Non-Defaulting Party) and shall be

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calculated in accordance with <u>Article 16</u> (Damages in the Event of Termination by Company) of this <u>Agreement</u>.

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

"Total Actual Interconnection Cost": Actual costs for the Interconnection Facilities, to be designed, engineered and constructed by Company, as provided in Attachment G (Company-Owned Interconnection Facilities).

"Total Estimated Interconnection Cost": Estimated costs for the Interconnection Facilities, to be designed, engineered and constructed by Company, as provided in Attachment \underline{G} (Company-Owned Interconnection Facilities).

"Transfer Date": The date, prior to the In-Service Date, upon which Seller transfers to Company all right, title and interest in and to Company-Owned Interconnection Facilities to the extent, if any, that such facilities were constructed by Seller and/or its contractors.

"Wind Turbine": A generating device powered by the wind that is included in Facility.

ARTICLE 1 PARALLEL OPERATION

Company agrees to allow Seller to interconnect and operate the Facility to provide As-Available Energy in parallel with the Company System provided that such interconnection and operation shall not: (i) adversely affect Company's property or the operations of its customers and customers' property; (ii) present safety hazards to the Company System, property or employees or Company's customers or the customers' property or employees; or (iii) otherwise fail to comply with this Agreement. Such parallel operation shall be contingent upon the satisfactory completion, as determined solely by Company, of the Acceptance Test and, to the extent applicable, the Control System Acceptance Test, in accordance with Good Engineering and Operating Practices.

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ARTICLE 2 PURCHASE AND SALE OF ENERGY; RATE

FOR PURCHASE AND SALE; BILLING AND PAYMENT

- Purchase and Sale of Actual Output. Seller agrees to deliver to Company all of the Actual Output produced by the Facility and delivered to the Point of Interconnection from the In-Service Date through the end of Term, in accordance with the terms and conditions of this Agreement. Company agrees to purchase electric energy from Seller in accordance with the terms and conditions of this Agreement. Included in the purchase and sale of Actual Output are all of the Environmental Credits associated with the Actual Output. Company will not reimburse Seller for any taxes or fees imposed on Seller including, but not limited to, State of Hawaii general excise tax.
- 2.2 <u>Payment for Electric Energy</u>. Commencing on the In-Service Date, Seller will be paid for electric energy on a monthly basis as provided in <u>Section 1</u> (Price for Purchase and Rate of Delivery) of <u>Attachment J</u> (Energy Purchases by Company and Table).
- Payments Prior to the In-Service Date. Prior to the In-Service Date, Seller will be paid for electric energy as follows: the Company shall not be obligated to accept or pay for any electric energy delivered by the Seller, however, any electric energy accepted by the Company during this period shall be paid for at a rate equivalent to 100% of the Contract Price for Contract Year 1.
- 2.4 Sales of Electric Energy By Company to Seller. Sales of electric energy by Company to Seller shall be governed by an applicable rate schedule filed with the PUC and not by this Agreement.
- 2.5 Company's Obligation to Provide Certain Data. By the fifth Business Day of each calendar month, Company shall provide Seller or its designated agent with the appropriate data for Seller to compute the amount to be paid for the electric energy in the preceding calendar month as determined in accordance with this Agreement.
- 2.6 <u>Seller's Preparation of the Monthly Invoice</u>. By the tenth Business Day of each calendar month, Seller shall submit to Company an invoice that separately states the following for the preceding month: (i) the Actual Output during this

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- period; (ii) the electric energy charge for electric energy purchased by Company as set forth in Attachment J (Energy Purchases by Company and Table) of this Agreement; and (iii) the monthly metering charge as set forth in Article 7 (Seller Payments) of this Agreement.
- 2.7 Payment Procedures. By the twentieth Business Day of each calendar month (but, except as otherwise provided in the following sentence, no later than the last Business Day of that month if there are less than twenty Business Days in that month), Company shall make payment on such invoice, or provide to Seller an itemized statement of its objections to all or any portion of such invoice and pay any undisputed amount. Notwithstanding the foregoing, the time in which the Company shall make payment to Seller shall be increased on a day for day basis for each Day that Seller is delinquent in providing to the Company the information required under Section 2.6 (Seller's Preparation of the Monthly Invoice) of this Agreement. However, if Company is not timely in providing data required in Section 2.5 (Company's Obligation to Provide Certain Data) and this directly causes Seller to be unable to deliver its invoice in accordance with the timeframe set forth in Section 2.6 (Seller's Preparation of the Monthly Invoice), then Company shall still meet the twentieth Business Day payment date. In such case, an estimated payment, subject to reconciliation with the complete invoice, may be made by Company as an interim provision until a complete invoice can be prepared by Seller and received by Company.
- Late Payments. Notwithstanding all or any portion of such invoice in dispute, any payment not made to Seller by the twentieth Business Day of each calendar month (or the last Business Day of that month if there are less than twenty Business Days in that month), or by the due date for such payment if extended pursuant to Section 2.7 (Payment Procedures), shall accrue interest at the average daily Base Rate at the Bank of Hawaii plus two percent (2%) for the period until the outstanding interest and invoiced amounts (or amounts due to Seller if determined to be less than the invoiced amounts) are paid in full. Partial payments shall be applied first to outstanding interest and then to outstanding invoice amounts.
- 2.9 Adjustments to Invoices After Payment. 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

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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 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 Base 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 shall be waived for any deliveries of electricity made more than thirty-six (36) months preceding the date of any such request.

2.10 Company's Billing Records. Seller, after giving reasonable advance written notice to Company, shall have the right to review all billing, metering and other records necessary to verify the accuracy of the data provided by Company pursuant to Section 2.5 (Company's Obligation to Provide Certain Data) and payments relating to the Facility during Company's normal working hours on Business Days. Company shall maintain such records for a period of not less than thirty-six (36) months.

ARTICLE 3 FACILITY OWNED AND/OR OPERATED BY SELLER

- 3.1 The Facility. Seller agrees to furnish, install, operate, and maintain the Facility in accordance with the provisions of this Agreement, specifically the operating procedures as more fully described in Attachment B (Facility Owned by Seller). After the In-Service Date, Seller agrees that no changes or additions to the Facility shall be made without prior written approval by the Company unless such changes or additions to the Facility could not reasonably be expected to have a material effect on the assumptions used in performing the IRS.
- Allowed Capacity. The net instantaneous MW output from Facility may not exceed the Allowed Capacity. Company may take appropriate action to limit the Allowed Capacity pursuant to, but not limited to, Article 8 (Continuity of Service), Article 9 (Personnel and System Safety), Article 25 (Good Engineering and Operating Practices), Attachment B (Facility Owned by Seller), Attachment J (Energy Purchases by Company and Table) of this Agreement.
- 3.3 <u>Point of Interconnection</u>. The Point of Interconnection is shown on <u>Attachment E</u> (Three-Line Drawing), as provided in HAWAII ELECTRIC LIGHT COMPANY, INC.

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Section 1(A) (Three-Line Diagram, Relay List, Relay Settings and Trip Scheme) of Attachment B (Facility Owned by Seller). The Point of Interconnection will be at the voltage level of the Company System. If it is necessary to step up the voltage at which Seller's electric energy is delivered to Company System, the Point of Interconnection will be on the high voltage side of the step-up transformer.

ARTICLE 4 COMPANY-OWNED INTERCONNECTION FACILITIES

The terms and conditions related to the Company-Owned Interconnection Facilities are set forth in Attachment G (Company-Owned Interconnection Facilities) of this Agreement.

ARTICLE 5 SCHEDULING

- Seller's Weekly Maintenance Schedule: On Friday of each week, Seller shall provide to Company in writing a projection of maintenance outages for the next seven-Day period. During any such maintenance outage, Seller will provide an update each Day to Company's operating personnel of the status of the maintenance.
- 5.2 Seller's Annual Maintenance Schedule: In addition, Seller shall submit a schedule of maintenance outages which will reduce the capacity of the Facility by (i) five(5) MW or more for Oahu and (ii) one (1) MW or more for each of Maui and Hawaii for the next two-year period beginning with January of the following year in writing to Company each year by June 30. The schedule shall state the proposed dates and durations of scheduled maintenance, including the scope of work for the maintenance requiring shutdown or reduction in output of the Facility. Company shall review the maintenance schedule for the two-year period and inform Seller in writing no later than December 1 of the same year of Company's concurrence or requested revisions, provided that Seller shall not be required to agree to any proposed revisions that, in Seller's judgment, will void or violate any warranties of equipment that is part of, or used in connection with, the Facility or violate any long-term service agreement with respect to such equipment, in which case Seller shall promptly notify Company thereof, and Seller and Company shall endeavor to reach a mutually satisfactory resolution of the matter in question. With respect to such agreed upon revisions, Seller shall revise its schedule for timing and duration of scheduled shutdowns

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and scheduled reductions of output of the Facility to accommodate Company's revisions, unless such revisions would not be consistent with Good Engineering and Operating Practices, and make all commercially reasonable efforts, consistent with Good Engineering and Operating Practices, to accommodate any subsequent changes in such schedule reasonably requested by Company.

5.3 Seller's Notification Obligations. When Seller learns that any of its equipment will be taken out of service or will be returned to service which may effect its delivery of electric energy to Company, Seller shall notify Company as soon as practicable, and in any event, no later than the daily forecasts required by Section 5.1 (Seller's Weekly Maintenance Schedule). This requirement to notify shall include, but not be limited to, notice to Company of Seller's intention to start up or shut down any turbines, such as a high wind-speed shut-down. Any turbine start-up or shut-down shall be coordinated with Company in advance to the extent practicable to allow a reasonable amount of time for Company to make generation adjustments required by the additional energy resulting from a turbine start-up or the loss of energy from a turbine shut-down.

ARTICLE 6 FORECASTING

- Annual Forecasts. For Company's planning purposes, Seller shall, by December 1 of each year during the Term of the Agreement, provide a forecast of each month's average-Day electric energy production from the Facility, by hour, for the following calendar year (or partial calendar year, if the Term does not end on December 31). This forecast (i) shall include an expected range of uncertainty based on historical operating experience, and (ii) shall be updated on a monthly basis by notice given to Company at least six Business Days before the first Business Day of each month.
- 6.2 <u>Weekly Forecasts</u>. By 0900 Hawaii time on Sunday of the week on which electric energy from the Facility is to be delivered, Seller shall provide Company with an hourly forecast of deliveries for each hour of the day for the ensuing week (Monday to Sunday). Seller shall update a forecast any time information becomes available indicating a change in the forecast of generation of Actual Output from the then current forecast; <u>provided</u>, however, that Seller shall not be required to update such forecasts more frequently than once per hour.

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- 6.3 <u>Data</u>. In connection with the Annual Forecasts and Weekly Forecasts set forth in this <u>Article 6</u> (Forecasting), Seller shall also provide to Company the data and information required by Company to conduct its own annual and weekly forecasts for all variable generation facilities on the Company System.
- 6.4 Equipment. In order to make Seller's forecasts as accurate as possible, Seller will install and maintain appropriate equipment for the purpose of forecasting (e.g., for wind projects, instrumentation to measure and record wind speed and direction; for PV projects, instrumentation to measure and record solar radiation).
- Good Faith Estimates. The forecasts called for by this Agreement shall be non-binding, good faith estimates only, and shall be substantially in the form reasonably requested by Company. For Wind projects, Seller shall prepare such forecasts and updates by utilizing a wind speed and direction prediction model or service that is (i) commercially available or proprietary to Seller, and (ii) comparable in accuracy to models or services commonly used in the wind electric energy industry and that reflect turbine availability, so long as such model or service is available at a commercially reasonable cost and is satisfactory to Company in the exercise of its reasonable discretion.

ARTICLE 7 SELLER PAYMENTS

Seller shall pay to Company (i) all amounts pursuant to Attachment \underline{G} (Company Owned Interconnection Facilities), and (ii) a monthly metering charge of \$25.00 per month, which is in addition to any charges due Company pursuant to the applicable rate schedule pursuant to Section 2.4 (Sales of Electric Energy By Company to Seller) of this Agreement.

ARTICLE 8 CONTINUITY OF SERVICE

8.1 <u>General</u>. Company may require Seller to temporarily curtail, interrupt or reduce deliveries of electric energy when necessary in order for 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 acceptance test of non-utility owned

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facilities to Company System; or if Company determines that such curtailment, interruption or reduction is necessary because of a system emergency, Forced Outage, operating conditions on the Company System such as, but not limited to, those described in Attachment B (Facility Owned by Seller); or the inability to accept deliveries of electric energy due to light loading conditions (such conditions are described in Section 8.5 (Light Loading Conditions)); or if either the Facility does not operate in compliance with Good Engineering and Operating Practices or acceptance of electric energy from Seller by Company would require 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 using Good Engineering and Operating Practices, could place in jeopardy the reliability of the Company System. In the event that Company initiates a Curtailment Event pursuant to this Section 8.1 (General), Company shall not be obligated to accept or pay for any electric energy from Seller except for such electric energy that Company notifies Seller that it is able to take during the duration of a Curtailment Event.

8.2 Negative Avoided Cost. Company shall not be required to purchase electric energy during any period during which, due to operational circumstances, purchases from Seller will result in costs greater than those which Company would incur if it did not make those purchases, but instead generated an equivalent amount of electric energy itself. Company shall provide Seller with at least twenty-four (24) hours advance oral or written notice of any such period to allow Seller to cease the delivery of electric energy to Company. Company and 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 Seller. If Company fails to provide such notice, it will pay the same rate for such purchase of electric energy as would be required had the period not occurred. Company and Seller acknowledge that this Section 8.2 (Negative Avoided Cost) is based upon 18 CFR § 292.304(f) of the Regulations under PURPA issued by the Federal Energy Regulatory Commission and § 6-74-24 of the Standards for Small Power Production and Cogeneration issued by the PUC.

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- 8.3 No Curtailment for Economic Dispatch. This Article 8
 (Continuity of Service) of this Agreement is not intended to permit Company to require Seller to curtail, interrupt or reduce deliveries of electric energy based on Company's economic dispatch (for example, as a consequence of Company's filed Avoided Energy Cost Data being lower than the applicable price per MWh paid to Seller under this Agreement, or to make purchases of less expensive electric energy from a Qualifying Facility).
- Reasonable Steps. Company shall take all reasonable steps (such as reducing the output of Base Load Units, including its own Base Load Units, during light loading conditions, taking into consideration factors such as the need to maintain the reliability and stability of the Company System under changing system conditions and configurations, the need for downward regulating reserves, the terms and conditions of power purchase agreements for firm capacity Base Load Units or scheduled electric energy, and the normal minimum loading levels of such units) to minimize the number and duration of curtailments, interruptions or reductions, subject to and in accordance with Attachment B (Facility Owned by Seller).
- 8.5 <u>Light Loading Conditions</u>. For purposes of this <u>Article 8</u> (Continuity of Service), as of the Execution Date, light loading conditions typically occur between the hours of 12:00 midnight and 7:00 a.m., but the timing of such conditions may change over time.

ARTICLE 9 PERSONNEL AND SYSTEM SAFETY

Notwithstanding any other provisions of this Agreement, if at any time Company reasonably determines that the Facility may endanger Company's personnel, and/or the continued operation of the Facility may endanger the integrity of the Company System or have an adverse effect on Company's other customers' electric service, Company shall have the right to curtail or disconnect, as determined in the sole discretion of the Company System Operator, Facility from the Company System. The Facility shall remain curtailed or disconnected, as the case may be, until such time as Company is satisfied that the condition(s) referred to above have been corrected, and Company shall not be obligated to accept or pay for any electric energy from Seller except for such electric energy as is accepted by Company from Seller during such period. If Company curtails or disconnects the Facility from the Company System for personnel or system safety reasons, it shall as soon as HAWAII ELECTRIC LIGHT COMPANY, INC.

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practicable notify Seller by telephone and thereafter confirm in writing the reasons for the curtailment or disconnection. In the event that Company initiates a Curtailment Event pursuant to this Article 9 (Personnel and System Safety), Company shall not be obligated to accept or pay for any electric energy from Seller except for such electric energy that Company notifies Seller that it is able to take during the duration of a Curtailment Event.

ARTICLE 10 METERING

- 10.1 Meters. Company shall purchase and own revenue meters suitable for measuring the Actual Output of the Facility sold to Company in kilowatts and kilowatthours on a time-ofday basis and of reactive power flow in kilovars and true root mean square kilovarhours. The metering point shall be at the Point of Interconnection. Seller shall supply, at no expense to Company, a mutually agreeable location and mounting structure for revenue meters and metering equipment. Company will calibrate the revenue meters in accordance with the latest edition of the American National Standards Institute (ANSI) Code for Electricity Metering. All revenue meters shall be ratcheted to prevent reversal. Company shall install, maintain and annually test such revenue meters and shall be reimbursed by Seller for all reasonably incurred costs for such installation, maintenance and testing work.
- Meter Testing. Company shall provide at least twenty-four 10.2 (24) hours' notice to Seller prior to any test it may perform on the revenue meters or metering equipment. Seller shall have the right to have a representative present during each such test. Seller may request, and Company shall perform if requested, tests in addition to the annual test and Seller shall pay the cost of such tests. Company may, at its own discretion, perform tests in addition to the annual test and Company shall pay the cost of such tests. If any of the revenue meters or metering equipment is found to be inaccurate at any time, as determined by testing in accordance with this Section 10.2 (Meter Testing), 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 10.3 (Corrections).
- 10.3 <u>Corrections</u>. If any test of revenue meters or metering equipment conducted by Company indicates that the revenue meter readings are in error by one percent (1%) or more, the HAWAII ELECTRIC LIGHT COMPANY, INC.

revenue meters or meter readings shall be corrected as follows: (i) determine the error by testing the revenue meter at approximately ten percent (10%) of the rated current (test amperes) specified for such revenue meter; (ii) determine the error by testing the revenue meter at approximately one hundred percent (100%) of the rated current (test amperes) specified for the revenue meter; (iii) the average meter error shall then be computed as the sum of one-fifth (1/5) the error determined in the foregoing clause "(i)" and four-fifths (4/5) the error determined in the foregoing clause "(ii)". The average meter error shall be used to adjust the invoices in accordance with Section 2.9 (Adjustment to Invoices After Payment) for the amount of electric energy supplied to Company for the previous six (6) months from Facility, unless records of 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.

ARTICLE 11 PERMITS AND LAND RIGHTS

- 11.1 Seller shall obtain, at its expense, any and all Permits required for the construction and operation of the Facility, including but not limited to Land Rights. Seller shall install, operate and maintain the Facility safely and in compliance with all applicable Laws. To the extent private land or land owned by a Governmental Authority is involved, Seller shall obtain, at its expense, any necessary Permits and Land Rights required in order that the Facility can be interconnected with the Company System.
- 11.2 If the Site is not owned by Seller, a copy of the agreement with the owner of the land which establishes the right of Seller to put the Facility on the Site, together with all required Land Rights, shall be provided to Company before the In-Service Date.
- 11.3 Seller shall, prior to commencement of construction of Company-Owned Interconnection Facilities (whether to be built by Seller or by Company), provide the necessary Government Approvals and Land Rights for construction, ownership, operation and maintenance of Company-Owned Interconnection Facilities.

ARTICLE 12 TERM OF AGREEMENT

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- 12.1 <u>Initial Term</u>. The initial Term of this Agreement shall commence upon the Execution Date of this Agreement and shall remain in effect for twenty (20) Contract Years following the In-Service Date (the "Initial Term") unless terminated sooner as provided in this Agreement.
- 22.2 Extended Term. Upon expiration of the Initial Term, Seller shall offer to sell its electric energy to the Company during the Extended Term at the modified electric energy payment rate set forth in Schedule FIT Tier 3, to be determined and approved by the PUC. The Company does not have an obligation to purchase electric energy from the Seller after the Initial Term, however, if the Company does, in its sole discretion, exercise its option to purchase electric energy from Seller during the Extended Term, it will notify Seller no less than six months prior to the expiration of the Initial Term. Either Company or Seller may terminate this Agreement at any time after the end of the Initial Term upon not less than ninety (90) Days' advance written notice to the other Party.
- 12.3 <u>Termination Rights</u>. Notwithstanding any of the foregoing, Company or Seller may terminate the Agreement at any time upon the occurrence of any condition described in <u>Article 15</u> (Events of Default).

ARTICLE 13 CONSTRUCTION MILESTONES INCLUDING THE GUARANTEED IN-SERVICE DATE

- 13.1 <u>Time is of the Essence</u>. Time is of the essence of this Agreement, and Seller's ability to achieve the Construction Milestones is critically important.
- 13.2 Failure to Meet Certain Reporting Milestones. If Seller misses the Permit Application Filing Date Milestone, the Construction Financing Closing Milestone or the Construction Start Date Milestone as set forth in Attachment L (Reporting Milestones), by more than ninety (90) Days, Seller shall submit to Company, within ten (10) Business Days of an such missed Reporting Milestone, a remedial action plan which shall provide a detailed description of Seller's course of action and plan to achieve the missed Reporting Milestone and all subsequent Construction Milestones, provided that delivery of any remedial action plan shall not relieve Seller of its obligation to meet any subsequent Construction Milestones.

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- 13.3 <u>Guaranteed In-Service Date</u>. Seller shall achieve the In-Service Date no later than the Guaranteed In-Service Date. If Seller fails to achieve the In-Service Date by the Guaranteed In-Service Date, Seller shall have the following grace periods within which to achieve the In-Service Date:
 - (A) if the failure to achieve the In-Service Date by the Guaranteed In-Service Date is not the result of Force Majeure, Seller shall be entitled to a grace period following the Guaranteed In-Service Date equal to the lesser of 90 Days or the number of Days reasonably necessary to cure the failure in question if such cure were to be implemented promptly and pursued with reasonable diligence; or
 - (B) if the failure to achieve the In-Service Date by the Guaranteed In-Service Date is the result of Force Majeure, and if and so long as the conditions set forth in Section 21.3 (Satisfaction of Certain Conditions) are satisfied, Seller shall be entitled to a grace period following the Guaranteed In-Service Date equal to the lesser of 180 Days or the duration of the Force Majeure.
- 13.4 Termination. If the In-Service Date has not been achieved prior to the end of whichever of the two Section 13.3 (Guaranteed In-Service Date) grace periods is applicable, Company shall have the right, notwithstanding any other provision of this Agreement to the contrary, to terminate this Agreement with immediate effect by issuing a written termination notice to Seller designating the Day such termination is to be effective, which Day shall be no later than thirty (30) Days after such notice is deemed to be received by Seller.
- Monthly Progress Reports. Commencing upon the Execution Date of this Agreement, Seller shall submit to Company, on the first Day of each calendar month until the In-Service Date is achieved, progress reports in a form reasonably satisfactory to Company. These progress reports shall notify Company of the current status of each Construction Milestone. Seller shall include in such report a list of all letters, notices, applications, filings and Permits sent to or received from any Governmental Authority and shall provide any such documents as may be reasonably requested by Company. In addition, Seller shall advise Company as soon as reasonably practicable of any problems or issues of which it is aware which may materially impact its ability to meet the Construction Milestones. Seller shall provide Company

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with any requested documentation to support the achievement of Construction Milestones within ten (10) Business Days of receipt of such request from Company. Upon the occurrence of a Force Majeure, Seller shall also comply with the requirements of Section 21.3 (Satisfaction of Certain Conditions) to the extent such requirements provide for communications to Company beyond those required under this $\underline{Section \ 13.5}$ (Monthly Progress Reports).

ARTICLE 14 CREDIT ASSURANCE AND SECURITY

- 14.1 <u>General</u>. Seller is required to post and maintain the Operating Period Security based on the requirements of this <u>Article 14</u> (Credit Assurance and Security).
- 14.2 Reservation Fee. To guarantee its undertaking to meet the Guaranteed In-Service Date, Seller shall provide Reservation Fee to Company in accordance with Schedule FIT Tier 3.
- 14.3 <u>Refund of Reservation Fee</u>. The Reservation Fee may be refunded to Seller under certain circumstances pursuant to the terms of the Schedule FIT Tier 3.
- 14.4 Amount of the Operating Period Security. To guarantee the performance of Seller's obligations under the Agreement for the period starting from the In-Service Date to the expiration or termination of this Agreement, Seller shall provide Operating Period Security to Company in the amount of \$40/kW based on the Contract Capacity. Seller shall fully fund the Operating Period Security prior to the In-Service Date.
- 14.5 Form of Security. Seller may supply the Operating Period Security required in the form of cash or an irrevocable letter of credit substantially in the form attached to this Agreement as Attachment M (Form of Letter of Credit) from a bank or other financial institution with a credit rating of "A-" or better. If the rating (as measured by Standard & Poors) of the bank or financial institution issuing the irrevocable letter of credit falls below A-, Company may require Seller to replace the irrevocable letter of credit with an irrevocable letter of credit from another bank or financial institution with a credit rating of "A-" or better. If security in the form of an irrevocable letter of credit is utilized by Seller, such security shall be issued for a minimum term of one (1) year. Furthermore, at the end of each year the security shall be renewed for an additional

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- one (1) year term so that at the time of such renewal, the remaining term of any such security shall not be less than one (1) year. Security in the form of an irrevocable letter of credit shall be consistent with this Agreement and include a provision for at least thirty (30) Days advance notice to Company of any expiration or earlier termination of the security so as to allow Company sufficient time to exercise its rights under said security if Seller fails to extend or replace the security.
- 14.6 Operating Period Security. The Operating Period Security established, funded, and maintained by Seller pursuant to the provisions of this Article 14 (Credit Assurance and Security) shall be available to pay any amount due Company pursuant to this Agreement, and to provide Company security that Seller will construct the Facility to meet the Construction Milestones. The Operating Period Security shall also provide security to Company to cover damages, should the Seller fail operate the Facility in accordance with this Agreement. Seller shall maintain the Operating Period Security at the contractually-required level throughout the Term of this Agreement. Seller shall replenish the Operating Period Security to such required level within fifteen (15) Business Days after any draw on the Operating Period Security by Company.
- 14.7 Company's Right to Draw from Operating Period Security. In addition to any other remedy available to it, Company may, before or after termination of this Agreement, draw from the Operating Period Security such amounts as are necessary to recover amounts Company is owed pursuant to this Agreement, including, but without limitation, any damages due Company and any amounts for which Company is entitled to indemnification under this Agreement. Company may, in its sole discretion, draw all or any part of such amounts due Company from any form of security to the extent available pursuant to this Article 14 (Credit Assurance and Security), and from all such forms, and in any sequence Company may select. Any failure to draw upon the Operating Period Security or other security for any damages or other amounts due Company shall not prejudice Company's rights to recover such damages or amounts in any other manner.
- 14.8 Establishment of Operating Period Security. The Operating Period Security shall be maintained at Seller's expense, and shall be originated by or deposited in a financial institution or company ("Issuer") acceptable to Company. Seller may change the form of the Operating Period Security HAWAII ELECTRIC LIGHT COMPANY, INC.

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- at any time and from time to time upon reasonable prior notice to Company, but the Operating Period Security shall at all times be comprised of one or a combination of the forms specified above in $\underline{\text{Section } 14.5}$ (Form of Security).
- Certain Requirements. The form of such security shall meet 14.9 Company's requirements to ensure that claims or draw-downs can be made unilaterally by Company in accordance with the terms of this Agreement. If the security is not renewed or extended as required herein, Company shall have the right to draw immediately upon the security and to place the amounts so drawn, at Seller's cost and with Seller's funds, in an interest bearing escrow account in accordance with Section 14.10 (Security in the Form of Cash), until and unless Seller provides a substitute form of such security meeting the requirements of this Article 14 (Credit Assurances and Security). In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.
- 14.10 Security in the Form of Cash. If the security is in the form of cash as permitted in Section 14.5 (Form of Security), above, the cash shall be United States currency, in which Company holds a first and exclusive perfected security interest, deposited with a reputable, federallyinsured bank, either: (i) in an account under which Company is designated as beneficiary with sole authority to draw from the account or otherwise access the security; or (ii) held by Issuer as escrow agent with instructions to pay claims made by Company pursuant to this Agreement, such instructions to be in a form satisfactory to Company. Seller, Issuer (or escrow) and Company shall execute a control agreement and other agreements required by Company in form and content satisfactory to Company to perfect Company's security interest in the Operating Period Security. Security provided in the form of cash shall include a requirement for immediate notice to Company from Issuer and Seller in the event that the sums held as security in the account or trust do not at any time meet the required level for the Operating Period Security as set forth in this Article 14 (Credit Assurance and Security). Funds held in the account may be deposited in a money-market fund, short-term treasury obligations, investment-grade commercial paper and other liquid investment-grade investments with maturities of three months or less, with all investment income thereon to be taxable to, and to

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accrue for the benefit of, Seller. After the In-Service Date is achieved, annual account sweeps for recovery of interest earned by the Operating Period Security shall be allowed by Seller. At such times as the balance in the escrow account exceeds the amount of Seller's obligation to provide security hereunder, Company shall remit to Seller on demand any excess in the escrow account above Seller's obligations, including, but not limited to, any and all damages owed by Seller to Company under the terms of this Agreement.

14.11 Release of Operating Period Security. Promptly following the end of the Term, and the completion of all of Seller's obligations, including, but not limited to, the obligation to pay any and all damages owed by Seller to Company, under this Agreement, Company shall release the Operating Period Security (including any accumulated interest, if applicable) to Seller.

ARTICLE 15 EVENTS OF DEFAULT

- 15.1 <u>Events of Default by Seller</u>. The occurrence of any of the following shall constitute an Event of Default by Seller:
 - (A) if at any time during the Term, Seller delivers or attempts to deliver to the Point of Interconnection for sale under this Agreement electric energy that was not generated by the Facility;
 - (B) if at any time subsequent to the In-Service Date, Seller fails to provide electric energy to Company for a period of three hundred sixty-five (365) or more consecutive Days, unless such failure is caused by the inability of Company to accept such electric energy;
 - (C) failure by Seller to deliver from the Facility at least sixty percent (60%) of the Annual Contract Energy to the Point of Interconnection for a period of three consecutive Contract Years;
 - (D) if at any time during the Term, Seller fails to satisfy the Credit Assurance and Security requirements agreed to pursuant to Article 14 (Credit Assurance and Security) of this Agreement;
 - (E) if at any time subsequent to the In-Service Date, Seller fails to install, operate, maintain, or repair the

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Facility in accordance with Good Engineering and Operating Practices if such failure is not cured without thirty (30) Days after written notice of such failure from Company unless such failure cannot be cured within said thirty (30) Day period and Seller is making commercially reasonable efforts to cure such failure, in which case Seller shall have a cure period of 365 Days after Company's written notice of such failure.

- 15.2 Events of Default by a Party. The occurrence of any of the following during the Term of the Agreement shall constitute an Event of Default by the Party responsible for the failure, action or breach in question:
 - (A) The failure to make any payments required pursuant to this Agreement when due if such failure is not cured within ten (10) Business Days after written notice is received by the Party failing to make such payment;
 - (B) Any representation or warranty made by such Party herein is false and misleading in any material respect when made;
 - (C) Such Party becomes bankrupt;
 - (D) Such Party fails to comply with an arbitrator's decision under Article 28 (Dispute Resolution), or on Independent Evaluator's decision under Article 23 (Process for Addressing Revisions to Performance Standards), within thirty (30) Days after such decision becomes binding on the Parties in accordance with Article 28 (Dispute Resolution) or within thirty (30) Days of the issuance of such decision under Article 23 (Process for Addressing Revisions to Performance Standards), as applicable, or, if such decision cannot be complied with within thirty (30) Days, such Party fails to have commenced commercially reasonable efforts designed to comply and diligently continued such commercially reasonable efforts until compliance is attained; or
 - (E) A Party, by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Agreement, other than the provisions specified in <u>Section 15.1</u> (Events of Default by Seller) and <u>Section 15.2(A)</u> through <u>Section 15.2(D)</u>, if such breach or default is not cured within thirty (30) Days after written notice of such breach or default from the other Party unless such breach or default cannot be

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cured within said thirty (30) Day period and the Non-performing Party is making commercially reasonable efforts to cure such breach or default, in which case the Non-performing Party shall have a cure period of 365 Days of Company's written notice of such breach or default.

- 15.3 <u>Cure/Grace Periods</u>. Before becoming an Event of Default, the occurrences set forth in <u>Section 15.1</u> (Events of Default by Seller) and <u>Section 15.2</u> (Events of Default by a Party) are subject to the following cure/grace periods:
 - (A) If the occurrence is not the result of Force Majeure, Non-performing Party shall be entitled to a cure period to the limited extent expressly set forth in the applicable provision of <u>Section 15.1</u> (Events of Default by Seller) or <u>Section 15.2</u> (Events of Default by a Party); or
 - (B) If the occurrence is the result of Force Majeure, and if and so long as the conditions set forth in Section 21.3 (Satisfaction of Certain Conditions) are satisfied, the Non-performing Party shall be entitled to a grace period as provided in Section 21.5 (Events of Default), which shall apply in lieu of any cure periods provided in Section 15.1 (Events of Default by Seller) and Section 15.2 (Events of Default by a Party).
- 15.4 Rights of the Non-defaulting Party. If an Event of Default shall have occurred and be continuing, the Party who is not the Defaulting Party ("Non-defaulting Party") shall have the right (i) to terminate this Agreement by sending written notice to the Defaulting Party as provided in this Section 15.4 (Rights of the Non-defaulting Party); (ii) to withhold any payments due to the Defaulting Party under this Agreement; (iii) suspend performance; and (iv) exercise any other right or remedy available at law or in equity to the extent permitted under this Agreement. A notice terminating this Agreement pursuant to this Section 15.4 (Rights of the Non-defaulting Party) shall designate the Day such termination is to be effective which Day shall be no later than thirty (30) Days after such notice is deemed to be received by the Defaulting Party and not earlier than the first to occur of the Day such notice is deemed to be received by the Defaulting Party or the Day following the expiration of any period afforded the Defaulting Party under Section 15.1 (Events of Default by Seller) and Section 15.2 (Events of Default by a Party) to cure the default in HAWAII ELECTRIC LIGHT COMPANY, INC.

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question. If the Agreement is terminated by Company because of one or more of the Events of Default by Seller, Company shall have the right, in addition to the rights set forth above in this Section 15.4 (Rights of the Non-defaulting Party), to collect liquidated damages ("Termination Damages"), which shall be calculated in accordance with Article 16 (Damages in the Event of Termination by the Company).

- 15.5 Force Majeure. To the extent a Non-performing Party is entitled to defer certain liabilities pursuant to Article 21 (Force Majeure) of the Agreement, the permitted period of deferral shall be governed by Section 21.5 in lieu of this Article 15 (Events of Default).
- 15.6 <u>In-Service Date</u>. Not withstanding any other provision of this <u>Article 15</u> (Events of Default) to the contrary, any failure of Seller to achieve the In-Service Date by the Guaranteed In-Service Date shall be governed by <u>Article 13</u> (Construction Milestones Including the Guaranteed In-Service Date) in lieu of this Article 15 (Events of Default).
- 15.7 Remedies. Seller acknowledges that Company is a public utility and is relying upon Seller's performance of its obligations under this Agreement, and that Company and/or its customers may suffer irreparable injury as a result of any failure in Seller's performance of such obligations. Accordingly, the Termination Damages shall not limit or otherwise affect Company's rights and remedies for Seller's failure to perform its obligations under this Agreement when such failure does not result in a termination of this Agreement, including but not limited to Company's right to damages arising out of such failure in performance and Company's right to seek specific performance.

ARTICLE 16 DAMAGES IN THE EVENT OF TERMINATION BY COMPANY

- 16.1 Termination Due to Failure to Meet the Guaranteed In-Service

 Date. If the Agreement is terminated by Company pursuant to

 Section 13.4 (Termination), Company shall be entitled to

 retain the Reservation Fee pursuant to the Schedule FIT Tier

 3.
- 16.2 Termination Due to an Event of Default. If the Agreement is terminated by Company in accordance with this Agreement after the In-Service Date due to an Event of Default where Seller is the Defaulting Party, Company shall be entitled to HAWAII ELECTRIC LIGHT COMPANY, INC.

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Termination Damages calculated by multiplying the Contract Capacity by \$40/kW.

Liquidated Damages Appropriate. Each Party agrees and acknowledges that (i) the damages that Company would incur due to early termination of the Agreement pursuant to either Section 13.4 (Termination) or Section 15.4 (Rights of the Non-defaulting Party) would be difficult or impossible to calculate with certainty, (ii) the Reservation Fee and the Termination Damages, as applicable, are an appropriate approximation of such damages, and (iii) payment of Termination Damages or the retention of the Reservation Fee does not relieve Seller of liability for costs and balances incurred prior to the effective date of such termination.

ARTICLE 17 INDEMNIFICATION

17.1 Indemnification of Company.

- Personal Injury, Death or Property Damage. Seller shall (A) indemnify, defend, and hold harmless Company, its successors, permitted assigns, affiliates, controlling persons, directors, officers, employees, servants and agents, including but not limited to contractors and their employees (collectively referred to as an "Indemnified Company Party"), from and against any Losses suffered, incurred or sustained by any Indemnified Company Party or to which any Indemnified Company Party becomes subject, resulting from, arising out of or relating to any Claim by a third party not controlled by or under common ownership and/or control with Company (whether or not well founded, meritorious or unmeritorious) relating to any actual or alleged personal injury or death or damage to property, in any way arising out of, incident to, or resulting directly or indirectly from the acts or omissions of Seller or its agents or subcontractors, except to the extent that any of the foregoing is attributable to the gross negligence or willful misconduct of an Indemnified Company Party.
- (B) Compliance with Laws. Any Losses incurred by an Indemnified Seller Party for noncompliance by Seller or an Indemnified Seller Party with applicable Laws shall not be reimbursed by Company but shall be the sole responsibility of Seller. Seller shall indemnify, defend and hold harmless each Indemnified Company Party

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from and against any and all Losses in any way arising out of, incident to, or resulting directly or indirectly from the failure of Seller to comply with any Laws.

(C) Notice. If Seller shall obtain knowledge of any Claim subject to Section 17.1(A) (Personal Injury, Death or Property Damage), Section 17.1(B) (Compliance with Laws) or otherwise under this Agreement, Seller shall give prompt notice thereof to Company, and if Company shall obtain any such knowledge, Company shall give prompt notice thereof to Seller.

(D) Indemnification Procedures.

- In case any Claim subject to Section 17.1(A) (1)(Personal Injury, Death or Property Damage) or Section 17.1(B) (Compliance with Laws) or otherwise under this Agreement, shall be brought against an Indemnified Company Party, Company shall notify Seller of the commencement thereof and, provided that Seller has acknowledged in writing to Company its obligation to an Indemnified Company Party under this Section 17.1 (Indemnification of Company), Seller shall be entitled, at its own expense, acting through counsel acceptable to Company, to participate in and, to the extent that Seller desires, to assume and control the defense thereof, provided that Seller shall not compromise or settle a Claim against an Indemnified Company Party without the prior written consent of Company which consent shall not be unreasonably withheld.
- Seller shall not be entitled to assume and control (2)the defense of any such Claim subject to Section 17.1(A) (Personal Injury, Death or Property Damage), Section 17.1(B) (Compliance with Laws) or otherwise under this Agreement, if and to the extent that, in the opinion of Company, such Claim involves the potential imposition of criminal liability on an Indemnified Company Party or a conflict of interest between an Indemnified Company Party and Seller, in which case Company shall be entitled, at its own expense, acting through counsel acceptable to Seller to participate in any Claim, the defense of which has been assumed by Seller. Company shall supply Seller with such information and documents

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requested by Seller as are necessary or advisable for Seller to possess in connection with its participation in any Claim to the extent permitted by this <u>Section 17.1(2)</u>. An Indemnified Company Party shall not enter into any settlement or other compromise with respect to any Claim without the prior written consent of Seller, which consent shall not be unreasonably withheld or delayed.

- (3) Upon payment of any Losses by Seller pursuant to this <u>Section 17.1</u> (Indemnification of Company) or other similar indemnity provisions contained herein to or on behalf of Company, Seller, without any further action, shall be subrogated to any and all claims that an Indemnified Company Party may have relating thereto.
- (4) Company shall fully cooperate and cause all Company Indemnified Parties to fully cooperate, in the defense of or response to any Claim subject to Section 17.1 (Indemnification of Company).

17.2 Indemnification of Seller.

- Personal Injury, Death or Property Damage. Company (A) shall indemnify, defend, and hold harmless Seller, its successors, permitted assigns, affiliates, controlling persons, directors, officers, employees, servants and agents, including but not limited to contractors and their employees (collectively referred to as an "Indemnified Seller Party"), from and against any Losses suffered, incurred or sustained by any Indemnified Seller Party or to which any Indemnified Seller Party becomes subject, resulting from, arising out of or relating to any Claim by a third party not controlled by or under common ownership and/or control with Company (whether or not well founded, meritorious or unmeritorious) relating to any actual or alleged personal injury or death or damage to property, in any way arising out of, incident to, or resulting directly or indirectly from the acts or omissions of Seller or its agents or subcontractors, except to the extent that any of the foregoing is attributable to the gross negligence or willful misconduct of an Indemnified Seller Party.
- (B) Notice. If Company shall obtain knowledge of any Claim subject to Section 17.2(A) (Personal Injury, Death or Property Damage) or otherwise under this Agreement,

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Company shall give prompt notice thereof to Seller, and if Seller shall obtain any such knowledge, Seller shall give prompt notice thereof to Company.

- (1)In case any action, suit or proceeding subject to Section 17.2(A) (Personal Injury, Death or Property Damage), or otherwise under this Agreement, shall be brought against an Indemnified Seller Party, Seller shall notify Company of the commencement thereof and, provided that Company has acknowledged in writing to Seller its obligation to an Indemnified Seller Party under this Section 17.2 (Indemnification of Seller), Company shall be entitled, at its own expense, acting through counsel acceptable to Seller, to participate in and, to the extent that Company desires, to assume and control the defense thereof, provided, however, Company shall not compromise or settle a Claim against an Indemnified Seller Party without the prior written consent of Seller which consent shall not be unreasonably withheld.
- (2) Company shall not be entitled to assume and control the defense of any such Claim subject to Section 17.2(A) (Personal Injury, Death or Property Damage), or otherwise under this Agreement, if and to the extent that, in the opinion of Seller, such Claim involves the potential imposition of criminal liability on an Indemnified Seller Party or a conflict of interest between an Indemnified Seller Party and Company, in which case Seller shall be entitled, at its own expense, acting through counsel acceptable to Company, to participate in any Claim the defense of which has been assumed by Company. An Indemnified Seller Party shall supply Company with such information and documents requested by Company as are necessary or advisable for Company to possess in connection with its participation in any Claim, to the extent permitted by this Section 17.2(C)(2). An Indemnified Seller Party shall not enter into any settlement or other compromise with respect to any Claim without the prior written consent of Company, which consent shall not be unreasonably withheld or delayed.

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- (3) Upon payment of any Losses by Company pursuant to this <u>Section 17.2</u> (Indemnification of Seller) or other similar indemnity provisions contained herein to or on behalf of Seller, Company, without any further action, shall be subrogated to any and all claims that an Indemnified Seller Party may have relating thereto.
- (4) Seller shall fully cooperate and cause all Seller Indemnified Parties to fully cooperate, in the defense of or response to any Claim subject to Section 17.2 (Indemnification of Seller).

17.3 Seller As An Agency of the State.

Notwithstanding the foregoing, where the Seller is an agency of the State of Hawaii (the "State"), the Parties agree that the indemnification provisions set forth in the Company's Rule No. 14 (Service Connections and Facilities on Customer's Premises), Section H (Interconnection of Distributed Generating Facilities Operating in Parallel with the Company's Electric System), Appendix II (Standard Interconnection Agreement), Section 18 (Indemnification) shall apply and are hereby incorporated by reference into this Agreement.

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

Notwithstanding the foregoing, where the Seller is an agency of the Department of Defense (the "DOD"), the Parties agree that the indemnification provisions set forth in the Company's Rule No. 14 (Service Connections and Facilities on Customer's Premises), Section H (Interconnection of Distributed Generating Facilities Operating in Parallel with the Company's Electric System), Appendix II (Standard Interconnection Agreement), Section 18 (Indemnification) shall apply and are hereby incorporated by reference into this Agreement.

ARTICLE 18 INSURANCE

18.1 <u>Insurance</u>. Seller shall, at its own expense and during the Term and during any other time that Facility is interconnected with Company System, secure and maintain in effect with a responsible insurance company authorized to do

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insurance business in Hawaii the following insurance that will protect Seller and Company: commercial general liability insurance with respect to Facility, Seller's operations, and Seller's interconnection with Company System, with a bodily injury and property damage combined single limit of two million dollars (\$2,000,000).

- Insurance Policy Requirements. Said insurance shall include Company as an additional insured, shall include contractual liability coverage for written contracts and agreements including this Agreement, and shall be non-cancelable and non-alterable without thirty (30) Days' prior written notice to Company. "Claims made" policies are not acceptable.
- Annual Review by Company. The coverage limits shall be reviewed annually by Company and if, in Company's discretion, Company determines that the coverage limits should be increased, Company shall so notify Seller. The amount of any increase of the coverage limits, when considered as a percentage of the then existing coverage limits, shall not exceed the cumulative amount of increase in the Consumer Price Index occurring after the coverage limits herein were last set. Seller shall within thirty (30) Days of notice from Company increase the coverage as directed in such notice and the costs of such increased coverage limits shall be borne by Seller.
- Additional Requirements. The insurance required hereunder shall provide that it is primary with respect to Seller and Company. Seller shall provide evidence of such insurance by providing certificates of insurance to Company prior to construction of Company-Owned Interconnection Facilities and within 30 Days of any change and upon renewal of the policy. Seller's indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of Seller. The limits may be obtained through a combination of primary and excess liability policies.

ARTICLE 19 TRANSFERS, ASSIGNMENTS, AND FACILITY DEBT

This Agreement may not be assigned by either the Company or the Seller without the prior written consent of the other Party (such consent not to be unreasonably withheld, conditioned, or delayed); provided that Seller shall have the right, without the consent of the Company, for the purposes of arranging or rearranging debt and/or equity financing for the Facility, to assign all or any

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part of its rights or benefits, but not its obligations, to any lender providing debt financing for the Facility. Seller shall immediately provide written notice to the Company of any assignment of all or part of this Agreement and Seller shall provide to the Company all information about the assignment and the assignee reasonably requested by the Company.

ARTICLE 20 SALE OF ENERGY TO THIRD PARTIES

Seller shall not sell energy from Facility to any Third Party.

ARTICLE 21 FORCE MAJEURE

- 21.1 Definition of Force Majeure. The term "Force Majeure", as used in this Agreement, means causes or events beyond the reasonable control of, and without the fault or negligence of the Party claiming Force Majeure, including, without limitation, acts of God, sudden actions of the elements such as floods, earthquakes, hurricanes, or tornadoes, or volcanic activity; high winds of sufficient strength or duration to materially damage a facility or significantly impair its operation for a period of time longer than normally encountered in similar businesses under comparable circumstances; lightning; fire; sabotage; vandalism beyond that which could reasonably be prevented by the Party claiming Force Majeure; terrorism; war; riots; explosion; blockades; insurrection; strike; slow down or labor disruptions (even if such difficulties could be resolved by conceding to the demands of a labor group); and emergency orders issued by a Governmental Authority.
- 21.2 <u>Exclusions From Force Majeure</u>. Force Majeure does not include:
 - (A) 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;
 - (B) any full or partial curtailment in the electric output of 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 defects, unless such mishap is caused by Force Majeure;

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- (C) changes in market conditions that affect the cost of Seller's supplies, or that affect demand or price for any of Seller's products, or that otherwise render this Agreement uneconomic or unprofitable for Seller;
- (D) Seller's inability to obtain Permits or approvals of any type for the construction, operation, or maintenance of Facility;
- (E) Seller's inability to obtain sufficient fuel, power or materials to operate its Facility, except if Seller's inability to obtain sufficient fuel, power or materials is caused solely by an event of Force Majeure;
- (F) Seller's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Company pursuant to this Agreement;
- (G) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure;
- (H) litigation or administrative or judicial action pertaining to the 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
- (I) any full or partial curtailment in the delivery of the Actual Output of Seller or of the ability of Company to accept Actual Output from Seller which is caused by any Third Party including, without limitation, any vendor or supplier of Seller or Company, except to the extent due to Force Majeure.
- 21.3 Satisfaction of Certain Conditions. Section 21.4 (InService Date), Section 21.5 (Events of Default) and Section
 21.6 (Effect of Force Majeure) defer or limit certain
 liabilities of a Party for delay and/or failure in
 performance to the extent such delay or failure is the
 result of conditions or events of Force Majeure; provided,
 however, that a Non-performing Party is only entitled to
 such limitations or deferrals of liabilities as and to the
 extent the following conditions are satisfied:
 - (A) the Non-performing Party gives the other Party, within 48 hours after the Force Majeure condition or event begins, written notice stating that Seller considers

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such condition or event to constitute Force Majeure and describing the particulars of such Force Majeure condition or event;

- (B) the Non-performing Party gives the other Party, within 14 Days after the Force Majeure condition or event begins, a written explanation of the Force Majeure condition or event and its effect on the Non-performing Party's performance, which explanation shall include evidence reasonably sufficient to establish that the occurrence constitutes Force Majeure;
- (C) the suspension of performance is of no greater scope and of no longer duration than is required by the condition or event of Force Majeure;
- (D) the Non-performing Party proceeds with reasonable diligence to remedy its inability to perform and provides written weekly progress reports to the other Party describing actions taken to end the Force Majeure; and
- (E) when the condition or event of Force Majeure ends and the Non-performing Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party written notice to that effect.
- 21.4 <u>In-Service Date</u>. A condition or event of Force Majeure affecting the achievement of the In-Service Date shall not relieve Seller from Termination Damages for early termination under <u>Section 16.1</u> (Termination Due to Failure to Meet the Guaranteed In-Service Date), although such a condition or event of Force Majeure shall, if and for so long as the conditions of <u>Section 21.3</u> (Satisfaction of Certain Conditions) are satisfied, have the effect of deferring such liabilities to the extent of the grace period provided in Section 13.3(B).
- Events of Default. If an occurrence that would constitute an Event of Default under Article 15 (Events of Default) is the result of a condition or event of Force Majeure, Seller shall not be relieved from liability for Termination Damages for early termination under Article 16 (Damages in the Event of Termination by Company), although such a condition or event of Force Majeure shall, if and for so long as the conditions set forth in Section 21.3 (Satisfaction of Certain Conditions) are satisfied, have the effect of

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deferring such liability for the lesser of the duration of the Force Majeure or three hundred sixty-five (365) Days from the occurrence or inception of the Force Majeure, as noticed pursuant to $\underline{\text{Section 21.3(A)}}$ (Satisfaction of Certain Conditions).

- 21.6 Effect of Force Majeure. Other than as provided in Section 21.4 (In-Service Date) and Section 21.5 (Events of Default), neither Party shall be responsible or liable for any delays or failures in its performance under this Agreement as and to the extent (i) such delays or failures are substantially caused by conditions or events of Force Majeure, and (ii) the conditions of Section 21.3(A) (Satisfaction of Certain Conditions) are satisfied.
- 21.7 No Relief of Other Obligations. Except as otherwise expressly provided for in this Agreement, the existence of a condition or event of Force Majeure shall not relieve the Parties of their obligations under this Agreement (including, but not limited to, payment obligations) to the extent that performance of such obligations is not precluded by the condition or event of Force Majeure.
- 21.8 No Extension of the Term. In no event will any delay or failure of performance caused by any conditions or events of Force Majeure extend this Agreement beyond its stated Term.

ARTICLE 22 WARRANTIES AND REPRESENTATIONS

- 22.1 By the Parties. Both Company and Seller represent and warrant, respectively, that:
 - (A) Each respective Party has all necessary right, power and authority to execute, deliver and perform this Agreement
 - (B) The execution, delivery and performance of this
 Agreement by each respective Party will not result in a
 violation of any Laws of any Governmental Authority, or
 conflict with, or result in a breach of, or cause a
 default under, any agreement or instrument to which such
 Party is also a Party or by which it is bound. No
 consent of any person or entity not a Party to this
 Agreement, including any Governmental Authority (other
 than the PUC and other agencies whose approval is
 necessary for construction of Company-Owned
 Interconnection Facilities), is required for such
 execution, delivery and performance by either Party.

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- 22.2 By Seller. Seller represents and warrants that:
 - (A) It is an entity in good standing with the Hawaii Department of Commerce and Consumer Affairs and shall provide Company with a certified copy of a certificate of good standing by the Execution Date.
 - (B) As of the In-Service Date, the Facility is a qualified renewable resource under RPS.

ARTICLE 23 PROCESS FOR ADDRESSING REVISIONS TO PERFORMANCE STANDARDS

- 23.1 Revisions to Performance Standards. The Parties acknowledge that, during the Term, certain Performance Standards may be revised or added to facilitate necessary improvements in integrating intermittent renewable energy resources into the Company System and operations. In particular, the following Performance Standards in Attachment B (Facility Owned by Seller) to this Agreement may be revised: Section 3(C) (Ramp Rates); Section 3(D) (Power Fluctuation Rate); and, Section 3(M) (Frequency Regulation). Such revisions or additions may be attributable to, without limitation, the following: changes in penetration levels of intermittent renewable resources on the Company System, changes to the state of commercially available technology, changes to Company-owned generation resources, changes in customer electrical usage (such as changes in average hourly load profiles), and changes in Laws (e.g., new environmental constraints, which may limit Company's ability to start/stop its generators in response to integration of intermittent generation, or Laws impacting the power quality standards for the Company System).
- 23.2 Performance Standards Information Request. If Company concludes that a Performance Standards Revision is necessary or important for the operation of the Company System and is capable of being complied with by Seller, Company shall have the right to issue to Seller a Performance Standards Information Request with respect to such Performance Standards Revision. Seller shall, within a reasonable period of time following Seller's receipt of such Performance Standards Information Request, but in no event more than 90-Days after Seller's receipt of such Request (or such other period of time as Company and Seller may agree in writing), submit to Company a Performance Standards Proposal responsive to the Performance Standards Revision proposed in such Performance Standards Information Request

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- Performance Standards Proposal. Upon receipt of a Performance Standards Proposal submitted in response to a Performance Standards Information Request, Company will evaluate such Performance Standards Proposal and Seller shall assist Company in performing such evaluation as and to the extent reasonably requested by Company (including, but not limited to, providing such additional information as Company may reasonably request and participating in meetings with Company as Company may reasonably request). Company shall have no obligation to evaluate a Performance Standards Proposal submitted at Seller's own initiative.
- 23.4 Performance Standards Revision Document. If, following Company's evaluation of a Performance Standards Proposal, Company desires to consider implementing the Performance Standards Revision addressed in such Proposal, Company shall provide Seller with written notice to that effect, such notice to be issued to Seller within 180 Days of receipt of the Performance Standards Proposal, and Company and Seller shall proceed to negotiate in good faith a Performance Standards Revision Document setting forth the specific changes to the Agreement that are necessary to implement such Performance Standards Revision. A decision by Company to initiate negotiations with Seller as aforesaid shall not constitute an acceptance by Company of any of the details set forth in Seller's Performance Standards Proposal for the Performance Standards Revision in question, including but not limited to the Performance Standards Modifications and the Performance Standards Pricing Impact. Any adjustment to the Contract Price pursuant to such Performance Standards Revision Document shall be limited to the Performance Standards Pricing Impact (other than with respect to the financial consequences of non-performance as to a Performance Standards Revision). The time periods set forth in such Performance Standards Revision Document as to the effective date for the Performance Standards Revision shall be measured from the date the PUC Performance Standards Revision Order becomes non-appealable as provided in Section 23.6 (PUC Performance Standards Revision Order).
- 23.5 Failure to Reach Agreement. If Company and Seller are unable to agree upon and execute a Performance Standards Revision Document within 180 Days of Company's written notice to Seller pursuant to Section 23.4 (Performance Standards Revision Document), Company shall have the option of declaring the failure to reach agreement on and execute such Document to be a dispute and submit such dispute to an

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Independent Evaluator for the conduct of a determination pursuant to Section 23.10 (Dispute) of this Agreement. Any decision of the Independent Evaluator, rendered as a result of such dispute shall include a form of a Performance Standards Revision Document as described in Section 23.4 (Performance Standards Revision Document).

- 23.6 PUC Performance Standards Revision Order. No Performance Standards Revision Document shall constitute an amendment to the Agreement unless and until a PUC Performance Standards Revision Order issued with respect to such Document has become non-appealable. Once the condition of the preceding sentence has been satisfied, such Performance Standards Revision Document shall constitute an amendment to this Agreement. To be "non-appealable" under this Section 23.6 (PUC Performance Standards Revision Order), such PUC Performance Standards Revision Order shall be either (i) not subject to appeal to any Circuit Court of the State of Hawaii or the Supreme Court of the State of Hawaii, because the thirty (30) Day period (accounting for weekends and holidays as appropriate) permitted for such an appeal has passed without the filing of notice of such an appeal, or (ii) affirmed on appeal to any Circuit Court of the State of Hawaii or the Supreme Court, or the Intermediate Appellate Court upon assignment by the Supreme Court, of the State of Hawaii, or affirmed upon further appeal or appellate process, and is not subject to further appeal, because the jurisdictional time permitted for such an appeal (and/or further appellate process such as a motion for reconsideration or an application for writ of certiorari) has passed without the filing of notice of such an appeal (or the filing for further appellate process).
- 23.7 Company's Rights. The rights granted to Company under Section 23.4 (Performance Standards Revision Document) and Section 23.5 (Failure to Reach Agreement) above are exclusive to Company. Seller shall not have a right to initiate negotiations of a Performance Standards Revision Document or to initiate dispute resolution under Section 23.10 (Dispute), as a result of a failure to agree upon and execute any Performance Standards Revision Document.
- 23.8 <u>Seller's Obligation</u>. Notwithstanding any provision of this <u>Article 23</u> (Process for Addressing Revisions to Performance Standards) to the contrary, Seller shall have no obligation to respond to more than one Performance Standards Information Request during any 12-month period.

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- Revisions to Performance Standards) is intended to specifically address necessary revisions to the Performance Standards to enhance integration of intermittent resources onto Company System, or to comply with future Laws which may be driven in part by higher integration of intermittent resources, and is not intended for either Party to provide a means for renegotiating any other terms of this Agreement. Revisions to the Performance Standards in accordance with the provisions of this Article 23 (Process for Addressing Revisions to Performance Standards) are not intended to materially increase Seller's risk of non-performance or default.
- 23.10 Dispute. If Company decides to declare a dispute as a result of the failure to reach agreement and execute a Performance Standards Revision Document pursuant to Section 23.5 (Failure to Reach Agreement), it shall provide written notice to that effect to Seller. Within 20 Days of delivery of such notice Seller and Company shall agree upon an Independent Evaluator to resolve the dispute regarding a Performance Standards Revision Document. The Independent Evaluator shall be reasonably qualified and expert in renewable energy power generation, matters relating to the Performance Standards, financing, and power purchase agreements. If the Parties are unable to agree upon an Independent Evaluator within such 20-Day period, Company shall apply to the PUC for the appointment of an Independent Evaluator. If an Independent Observer retained under the Competitive Bidding Framework is qualified and willing and available to serve as Independent Evaluator, the PUC shall appoint one of the persons or entities qualified to serve as an Independent Observer to be the Independent Evaluator; if not, the PUC shall appoint another qualified person or entity to serve as Independent Evaluator. In its application, Company shall ask the PUC to appoint an Independent Evaluator within 30 Days of the application.
 - (A) Promptly upon appointment, the Independent Evaluator shall request the Parties to address the following matters within the next 15 Days:
 - (1) The Performance Standard Revision(s);
 - (2) The technical feasibility of complying with the Performance Standard Revision(s) and likelihood of compliance;

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- (3) How Seller would comply with the Performance Standard Revision(s);
- (4) Reasonably expected net costs and/or lost revenues associated with the Performance Standards Revision(s);
- (5) The appropriate level, if any, of Performance Standards Pricing Impact in light of the foregoing; and
- (6) Contractual consequences for non-performance that are commercially reasonable under the circumstances.
- (B) Within 90 Days of appointment, the Independent Evaluator shall render a decision unless the Independent Evaluator determines it needs to have additional time, not to exceed 45 Days, to render a decision.
- (C) The Parties shall assist the Independent Evaluator throughout the process of preparing its review, including making key personnel and records available to the Independent Evaluator, but neither Party shall be entitled to participate in any meetings with personnel of the other Party or review of the other Party's records. However, the Independent Evaluator will have the right to conduct meetings, hearings or oral arguments in which both Parties are represented. The Parties may meet with each other during the review process to explore means of resolving the matter on mutually acceptable terms.
- (D) The following standards shall be applied by the Independent Evaluator in rendering his or her decision: (i) if it is not technically or operationally feasible for Seller to comply with a Performance Standard Revision, the Independent Evaluator shall determine that the Agreement shall not be amended to incorporate such Performance Standard Revision (unless the Parties agree otherwise); (ii) if it is technically or operationally feasible for Seller to comply with a Performance Standard Revision, the Independent Evaluator shall incorporate such Performance Standard Revision into a Performance Standards Revision Document including (aa) Seller's Performance Standards Modifications, (bb) pricing terms that incorporate the Performance Standards Pricing Impact, and (cc) contract terms and conditions

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that are commercially reasonable under the circumstances, especially with respect to the consequences of non-performance by Seller as to Performance Standards Revision(s). In addition to the Performance Standards Revision Document, the Independent Evaluator shall render a decision which sets forth the positions of the Parties and Independent Evaluator's rationale for his or her decisions on disputed issues.

(E) The fees and costs of the Independent Evaluator shall be paid by Company up to the first \$30,000 of such fees and costs; above those amounts, the Party that is not the prevailing Party shall be responsible for any such fees and costs; provided, if neither Party is the prevailing Party, then the fees and costs of the Independent Evaluator above \$30,000, shall be borne equally by the Parties. The Independent Evaluator in rendering his or her decision shall also state which Party prevailed over the other Party, or that neither Party prevailed over the other.

ARTICLE 24 FINANCIAL COMPLIANCE

24.1 Financial Compliance. 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 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 Governmental Authorities. 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

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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 this Agreement, from having access to such Information, and persons reviewing such Information shall not participate in negotiations of amendments, modifications or clarifications of this Agreement (unless approved in writing in advance by Seller).

- 24.2 Confidentiality. Company shall, and shall cause HEI to, maintain the confidentiality of the Information as provided in this Article 24 (Financial Compliance). Company may share the Information on a confidential basis with HEI and the independent auditors and attorneys for HEI. (Company, HEI, and their respective independent auditors and attorneys are collectively referred to in this Article 24 (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 PPC 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 PUC 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 PUC'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 PUC exceeds or is more detailed than that disclosed pursuant to the preceding sentence, such Information will not be disclosed until the PUC 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 Article 24 (Financial Compliance).
- 24.3 <u>Required Disclosure</u>. In circumstances other than those addressed in <u>Section 24.2</u> (Confidentiality), if any Recipient becomes legally compelled under applicable Laws or

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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 commercially 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 Article 24 (Financial Compliance). If such protective order or other remedy is not obtained, or if Seller waives compliance with the provisions at this Article 24 (Financial Compliance), Recipient shall furnish only that portion of the Information which it is legally required to so furnish and to use commercially reasonable efforts to obtain assurance that confidential treatment will be accorded to any disclosed material.

- 24.4 Exclusions from Confidentiality. The obligation of nondisclosure and restricted use imposed on each Recipient under this Article 24 (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.
- 24.5 Consolidation. Company is unwilling to be subject to accounting treatment that results from variable interest entity treatment as set forth in FASB ASC 810. If there is a change in circumstances during the Term 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.

ARTICLE 25 GOOD ENGINEERING AND OPERATING PRACTICES

25.1 <u>General</u>. Each Party agrees to install, operate and maintain its respective equipment and facility and to perform all obligations required to be performed by such Party under this Agreement in accordance with Good Engineering and Operating Practices and applicable Laws.

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- 25.2 Specifications, Determinations and Approvals. Wherever in this Agreement Company has the right to give specifications, determinations or approvals, such specifications, determinations or approvals shall be given in accordance with Company's standard practices, policies and procedures and shall not be unreasonably withheld.
- 25.3 No Endorsement, Warranty or Waiver. Any such specifications, determinations, or approvals shall not be deemed to be an endorsement, warranty, or waiver of any right of Company.

ARTICLE 26 EQUAL EMPLOYMENT OPPORTUNITY

- 26.1 Equal Employment Opportunity. (Applicable to all contracts of \$10,000 or more in the whole or aggregate. 41 CFR 60-1.4 and 41 CFR 60-741.5.) Seller is aware of and is fully informed of Seller's responsibilities under Executive Order 11246 (reference to which include amendments and orders superseding in whole or in part) and shall be bound by and agrees to the provisions as contained in Section 202 of said Executive Order and the Equal Opportunity Clause as set forth in 41 CFR 60-1.4 and 41 CFR 60-741.5(a), which clauses are hereby incorporated by reference.
- 26.2 Equal Opportunity For Disabled Veterans, Recently Separated Veterans, Other Protected Veterans and Armed Forces Service Medal Veterans. Applicable to (i) contract of \$25,000 or more entered into before December 31, 2003 (41 CFR 60-250.4) or (ii) each federal government contract of \$100,000 or more, entered into or modified on or after December 31, 2003 (41 CFR 60-300.4) for the purchase, sale or use of personal property or nonpersonal services (including construction).) If applicable to Seller under this Agreement, Seller agrees that is, and shall remain, in compliance with the rules and regulations promulgated under The Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended by the Jobs for Veterans Act of 2002, including the requirements of 41 CFC 60-250.5(a) (for orders/contracts entered into before December 31, 2003) and 41 CFR 60-300.5(a) (for orders/contracts entered into or modified on or after December 31, 2003) which are incorporated into this Agreement by reference.

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ARTICLE 27 SET OFF

Company shall have the right to set off any payment due and owing by Seller, including but not limited to any payment under this Agreement and any payment due under any arbitration award made under Article 28 (Dispute Resolution), against Company's payments of subsequent monthly invoices as necessary.

ARTICLE 28 DISPUTE RESOLUTION

- 28.1 Good Faith Negotiations. Except as otherwise expressly set forth in this Agreement, before submitting any claims, controversies or disputes ("Dispute(s)") under this Agreement to the Dispute Resolution Procedures set forth in Section 28.2 (Dispute Resolution Procedures), 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").
- 28.2 Dispute Resolutions Procedures.
 - Mediation. Except as otherwise expressly set forth in this Agreement and subject to Section 28.1 (Good Faith Negotiations), any and all Dispute(s) arising out of or relating to this Agreement, (i) which remain unresolved for a period of 20 Days after the Management Meeting takes place or (ii) for which the Parties fail to hold a Management Meeting within 60 Days of the date that a Management Meeting was requested by a Party, may upon the agreement of the Parties, first be submitted to confidential mediation in Honolulu, Hawaii pursuant to the administration by, and in accordance with the Mediation Rules, Procedures and Protocols of, Dispute Prevention & Resolution, Inc. (or its successor) or, in their absence, the American Arbitration Association ("DPR") then in effect. If settlement of the Dispute(s) is not reached within 60 Days after commencement of the mediation, either Party may initiate arbitration as set forth in Section 28.2(C) below.
 - (B) <u>Arbitration</u>. If (i) any Disputes remain unresolved after such mediation concludes or the 60-Day mediation period has expired, or (ii) the Parties do not mutually agree to invoke mediation procedures, the Parties agree to HAWAII ELECTRIC LIGHT COMPANY, INC.

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submit any such Dispute(s) to binding arbitration in Honolulu, Hawaii pursuant to the administration by DPR, and in accordance with (aa) the Arbitration Rules, Procedures, and Protocols of DPR then in effect (or the commercial arbitration rules then in effect of its successor) ("Arbitration Rules"), (bb) the Hawaii Revised Statutes ("HRS") Chapter 658A ("Chapter 658A") or the Federal Arbitration Act, 9 U.S.C. § 1 et seq., if applicable ("FAA"), and (cc) the procedures of this Section 28.2 (Dispute Resolution Procedures). To the extent that these procedures are permissible under Chapter 658A if the Parties agree to waive or vary the terms of the applicable Arbitration Rules and/or Chapter 658A and/or the FAA, the Parties do hereby so agree without prejudice to any application for judicial relief authorized by Chapter 658A. Capitalized and otherwise undefined terms in this Article 28 (Dispute Resolution). The final award and order of the arbitrator(s) is binding upon the Parties and judgment upon the final award and order rendered may be entered in any court of competent jurisdiction.

- Initiation of Arbitration. A Party shall initiate (C) arbitration by giving to the other Party its written notice of its demand for arbitration, which notice shall include a detailed statement of its contentions of law and fact and remedies sought, and submitting such notice to DPR in accordance with the applicable Arbitration Rules. No such notice shall be valid or effective to the extent that any claim(s) set forth therein would be barred by the applicable statute of limitations or laches. Such notice shall be signed by the president of the Party giving and submitting the notice and be delivered to the president of the other Party. other Party shall file a detailed answering statement within 20 Days of receipt of the notice of the demand for arbitration.
- (D) <u>Procedures for Appointing Arbitrator(s)</u>. 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.
 - (1) <u>Single Arbitrator</u>. Within 20 Days of the receipt by the initiating Party of the detailed answering statement, the Parties shall attempt to agree on a single arbitrator with apparent and substantial HAWAII ELECTRIC LIGHT COMPANY, INC.

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experience, knowledge or expertise with respect to electric utility practices and procedures or the design, construction and operation of electric generating facilities.

- Three-Arbitrator Panel. Should the Parties fail to agree on a single arbitrator within such 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, or if the arbitrator appointed by such Party is disqualified for any reason, DPR 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 to serve as the chair of the panel of arbitrators. If the two appointed arbitrators fail to agree upon the appointment of the third arbitrator within this 20-Day period or if the third arbitrator appointed by the two arbitrators is disqualified for any reason, DPR shall appoint the third arbitrator. In the event of any selection of an arbitrator by DPR, the Parties hereby request that DPR give preference to the residents of the State of Hawaii. The arbitration panel shall determine all matters by majority vote.
- (3) Disclosures and Objections. The Parties shall have 48 hours from the receipt of notice of the appointment of an arbitrator to request disclosures and shall have 48 hours from receipt of the notice of appointment of the arbitrator or the arbitrator's last disclosure in which to assert an objection to the arbitrator's appointment.
- (E) Conduct of the Arbitration by the Arbitrator(s). Each arbitrator appointed pursuant to Section 28.2(D) shall swear to conduct such arbitration in accordance with (i) the terms of Article 28 (Dispute Resolution), (ii) the applicable Arbitration Rules, (iii) the laws of the State of Hawaii, (iv) the most recent Guidelines for Arbitrator Reimbursement established by the Financial Industry Regulatory Authority (or its successor) and (v) the Code of Ethics of the American Arbitration Association ("Code of Ethics"), provided that, HAWAII ELECTRIC LIGHT COMPANY, INC.

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notwithstanding any thing in the Code of Ethics to the contrary, and regardless of whether appointed by a single Party, each arbitrator shall (aa) be neutral, impartial and not predisposed to favor either Party and (bb) subsequent to appointment as an arbitrator, refrain from any and all ex parte communication with any Party.

(F) Arbitration Procedures.

- (1) The Parties shall have 120 Days from the date of the appointment of the single agreed arbitrator or the third arbitrator of the arbitration panel to perform discovery and present evidence and argument to the arbitrator(s), including, without limitation, all evidence and argument with respect to the costs of arbitration, attorney fees and costs, and all other matters to be considered for inclusion in the final award and order issued by the arbitrator(s).
- During this 120-Day period, the arbitrator(s) (2) shall conduct a hearing to receive and consider all such evidence submitted by the Parties as the arbitrator(s) may choose to consider. arbitrator(s) may limit the amount of time allotted to each Party presentation of evidence and argument at the hearing, provided that such time be allocated equally to each Party. Subject to the foregoing sentence, the arbitrator(s) shall have complete discretion over the mode and order of prehearing discovery, the issuance of subpoenas and subpoenas duces tecum for the production of witnesses and/or evidence prior to and at the hearing, the presentment of evidence, and the conduct of the hearing. The arbitrator(s) shall not consider any evidence or argument not presented during this 120-Day period. This 120-Day period may be extended for sufficient cause by the arbitrator(s) or by agreement of the Parties.
- (3) The arbitrator(s) shall use all reasonable means to expedite discovery and may sanction a Party's non-compliance with obligations hereunder to produce evidence or witnesses prior to the hearing, at depositions or at the hearing. Each Party shall require and warrant that (i) all records of such Party, its partners, members, or HAWAII ELECTRIC LIGHT COMPANY, INC.

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affiliates pertaining to the negotiation, administration, and enforcement of this Agreement shall be maintained in the possession of such Party for no fewer than seven (7) years, and (ii) each of its officers, employees, consultants, general partners, or managing members shall submit to the jurisdiction of the arbitrator(s) and shall comply with all orders and subpoenas issued with respect to the production of witnesses or evidence at and/or prior to the hearing. All such evidence and witnesses shall made available at such Party's sole expense in Honolulu, Hawaii.

- (4) Upon the conclusion of such 120-Day period, the arbitrators shall have 30 Days to reach a determination and to give a written decision to the Parties, stating their findings of fact, conclusions of law and final award and order. The final award and order shall also state which Party prevailed or that neither Party prevailed over the other.
- The costs of arbitration (i.e., the fees and (5) expenses charged by the arbitrator(s) and DPR), the reasonable attorney fees of the Party that prevailed (but not including any attorney fees attributable to or charged by in-house counsel), and the reasonable costs of the Party that prevailed to the extent that such costs are recoverable pursuant to HRS § 607-9 (but not including testifying or nontestifying expert witness or consultant fees), shall be determined by the arbitrator(s) and awarded to the prevailing Party in the final award and order issued by the arbitrator(s); provided, however, that the arbitrator(s) shall have no power to award any costs of arbitration, attorney fees or costs incurred more than thirty (30) Days prior the date of the notice and demand for arbitration. event neither Party prevails, the Parties shall each pay fifty percent (50%) of the cost of the arbitration (i.e., the fees and expenses charged by the arbitrator(s) and DPR) and shall otherwise each bear their own arbitration costs, attorney fees, costs and all other expenses of arbitration, including without limitation their own testifying

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or nontestifying expert witness and consultant fees.

- (6) To the extent the final award and order directs either Party to pay any amounts to the other Party, including monetary damages, costs of arbitration, or reasonable attorney fees and costs:
 - (a) if neither Party seeks judicial review of the final award and order, payment shall be made within ninety-five (95) days after the final award and order is issued;
 - (b) if either Party seeks judicial review of the final award and order, payment shall be made within thirty (30) days after the available judicial review is exhausted.
- Authority of the Arbitrators. Notwithstanding anything (G) herein or in the Arbitration Rules to the contrary, the authority of the arbitrator(s) in rendering the final award and order 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 final award and order of the arbitrator(s) 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 final award and order and not otherwise.
- 28.3 The provisions of this <u>Article 28</u> (Dispute Resolution) shall not apply to any disputes within the authority of an Independent Evaluator under <u>Article 23</u> (Process for Addressing Revisions to Performance Standards).

ARTICLE 29 REGULATORY COMPLIANCE

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- 29.1 Seller shall file in Docket No. 2008-0273, subject to protective order, the following information within thirty (30) days of the In-Service Date and annually thereafter.
 - (A) The cost of design, permitting, and construction costs, including labor and materials costs of the Facility;
 - (B) Financing or capital cost;
 - (C) Land cost or actual cost of Site acquisition
 - (D) Interconnection and metering costs incurred by the Seller;
 - (E) Other project costs incurred in developing and constructing the Facility;
 - (F) Tax credits, rebates, incentives received and applied to the project development cost;
 - (G) Maintenance and operation labor and non-labor costs;
 - (H) Fuel supply costs (for biomass and biogas projects);
 - (I) Monthly land or leases costs for the Site; and
 - (J) Other operations and maintenance costs.
- 29.2 Additionally, Seller 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.

ARTICLE 30 MISCELLANEOUS

- 30.1 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. Notwithstanding the foregoing, administrative changes mutually agreed by Company and Seller in writing, such as changes to settings shown in the Three-Line Drawing (Attachment E) and the Relay List and Trip Scheme (Attachment F) and changes to numerical values of performance standards in Section 3 (Performance Standards) of Attachment B (Facility owned by Company) shall not be considered amendments to this Agreement requiring PUC approval.
- 30.2 <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their

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respective successors, legal representatives, and permitted assigns.

30.3 Notices.

(A) All notices, consents and waivers under this Agreement shall be in writing and will be deemed to have been duly given when (i) delivered by hand, (ii) sent by telecopier (with printed confirmation of transmission), (iii) sent by certified mail, return receipt requested, or (iv) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and telecopier numbers set forth below (or to such other addresses and facsimile numbers as a Party may designate by notice to the other Party):

Company:

By Mail:

Hawaiian Electric Company, Inc. PO BOX 2750 Honolulu, Hawaii 96840-0001 Attn: Energy Procurement Division

Delivered:

Hawaiian Electric Company, Inc. Central Pacific Plaza, Suite 2100 220 South King Street, Honolulu, Hawaii 96813 Attn: Energy Procurement Division

By facsimile:

Energy Procurement Division (808) 203-1801

- (B) $\frac{\text{Seller}}{\text{listed}}$: The mailing address and facsimile number listed in $\frac{\text{Attachment A}}{\text{Conversion}}$ (Description of Generation and Conversion Facility) hereto.
- (C) 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.

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- (D) Any notice delivered by facsimile shall 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.
- (E) The Parties may agree in writing upon additional means of providing notices, consents and waivers under this Agreement in order to adapt to changing technology and commercial practices.
- 30.4 Effect of Section and Attachment Headings. The headings or titles of the several sections and attachments hereof are for convenience of reference and shall not affect the construction or interpretation of any provision of this Agreement.
- 30.5 <u>Non-Waiver</u>. Except as otherwise provided in this Agreement, no delay or forbearance of Company or 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.
- 30.6 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. Seller does not hereby dedicate any part of Facility to serve Company, Company's customers or the public.
- 30.7 Entire Agreement. This Agreement (together with any confidentiality or non-disclosure agreements entered into by the Parties during the process of negotiating this Agreement and/or discussing the specifications of the Facility) constitutes the entire agreement between the Parties relating to the subject matter hereof, superseding all prior agreements, understandings or undertakings, oral or written. Each of the Parties confirms that in entering into this Agreement, it has not relied on any statement, warranty or other representations (other than those set out in this Agreement) made or information supplied by or on behalf of the other Party.
- 30.8 Governing Law, Jurisdiction and Venue. Interpretation and performance of this Agreement shall be in accordance with, and shall be controlled by, the laws of the State of Hawaii, other than the laws thereof that would require reference to

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the laws of any other jurisdiction. By entering into this Agreement, Seller submits itself to the personal jurisdiction of the courts of the State of Hawaii and agrees that the proper venue for any civil action arising out of or relating to this Agreement shall be Honolulu, Hawaii.

- 30.9 <u>Limitations</u>. Nothing in this Agreement shall limit Company's ability to exercise its rights as specified in Company's Tariff as filed with the PUC, or as specified in General Order No. 7 of the PUC's Standards for Electric Utility Service in the State of Hawaii, as either may be amended from time to time.
- 30.10 <u>Further Assurances</u>. 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.
- 30.11 Facsimile Signatures and Counterparts. This Agreement may be executed and signatures transmitted electronically via the Internet or facsimile. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. For all purposes, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.
- 30.12 <u>Definitions</u>. Capitalized terms used in this Agreement not otherwise defined in the context in which they first appear are defined in the Definitions Section.
- 30.13 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, and the Parties will take all commercially reasonable steps, including modification of the Agreement, to preserve the economic "benefit of the bargain" to both Parties notwithstanding any such aforesaid invalidity or unenforceability.

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- 30.14 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 Article 28 (Dispute Resolution) of this Agreement.
- 30.15 Environmental Credits. To the extent not prohibited by law, any Environmental Credit shall be the property of Company; provided, however, that such Environmental Credits shall be to the benefit of Company's ratepayers in that the value must be credited "above the line". Seller shall use all commercially reasonable efforts to ensure such Environmental Credits are vested in Company, and shall execute all documents, including, but not limited to, documents transferring such Environmental Credits, without further compensation; provided, however, that Company agrees to pay for all reasonable costs associated with such efforts and/or documentation.
- 30.16 <u>Attachments</u>. Each Attachment constitutes an essential and necessary part of this Agreement.
- 30.17 Proprietary Rights. 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, trademark, copyright or trade secret ("Proprietary Rights"). Seller agrees to indemnify, defend and hold harmless 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 Company for infringement of Third Party Proprietary Rights arising out of Seller's performance under this Agreement, including but not limited to patent infringement due to the use of technical features of the Facility to meet the Performance Standards specified in the Agreement.
- 30.18 Negotiated Terms. The Parties agree that the terms and conditions of this Agreement are the result of negotiations between the Parties and that this Agreement shall not be construed in favor of or against any Party by reason of the extent to which any Party or its professional advisors participated in the preparation of this Agreement.
- 30.19 Computation of Time. In computing any period of time prescribed or allowed under this Agreement, the Day of the HAWAII ELECTRIC LIGHT COMPANY, INC.

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act, event or default from which the designated period of time begins to run shall not be included. If the last Day of the period so computed is not a Business Day, then the period shall run until the end of the next Day which is a Business Day.

- 30.20 Change in Standard System or Organization.
 - (A) Consistent With Original Intent.

If, during the Term, any standard, system or organization referenced in this Agreement should be modified or replaced in the normal course of events, such modification or replacement shall from that point in time be used in this Agreement in place of the original standard, system or organization, but only to the extent such modification or replacement is generally consistent with the original spirit and intent of this Agreement.

- (B) Eliminated or Inconsistent With Original Intent.
 - If, during the Term, any standard system or organization referenced in this Agreement should be eliminated or cease to exist, or is modified or replaced and such modification or replacement is inconsistent with the original spirit and intent of this Agreement, then in such event the Parties will negotiate in good faith to amend this Agreement to a standard, system or organization that would be consistent with the original spirit and intent of this Agreement.
- 30.21 <u>Headings</u>. The Table of Contents and headings of the various sections have been inserted in this Agreement as a matter of convenience for reference only and shall not modify, define or limit any of the terms or provisions hereof and shall not be used in the interpretation of any term or provision of this Agreement.
- 30.22 No Third Party Beneficiaries. Nothing expressed or referred to in this Agreement will be construed to give any person or entity other than the Parties any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement. This Agreement and all of its provisions and conditions are for the sole and exclusive benefit of the Parties and their successors and permitted assigns.

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- Hawaii General Excise Tax. Seller shall, when making payments to Company under this Agreement, pay such additional amount as may be necessary to reimburse Company for any tax liability imposed on Company as a result of the receipt of such payment (including receipt of any payment made under this Section 30.24 (Hawaii General Excise Tax)). By way of example and not limitation, as of the Execution Date, all payments subject to the 4.5% Hawaii general excise tax on Oahu would include an additional 4.71% so that the underlying payment will be net of such tax liability.
- 30.24 <u>Survival of Obligations</u>. The rights and obligations that are intended to survive a termination of this Agreement are all of those rights and obligations that this Agreement expressly provides shall survive any such termination and those 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, without limitation:
 - (A) The obligation to pay Daily Delay Damages under <u>Section</u> 13.4 (Damages and Termination);
 - (B) The obligation to pay Termination Damages under <u>Article</u>
 <u>16</u> (Damages in the Event of Termination by Company);
 - (C) The indemnity obligations under <u>Article 17</u> (Indemnification);
 - (D) The dispute resolution provisions of $\underline{\text{Article 28}}$ (Dispute Resolution); and
 - (E) Section 30.3 (Notices), Section 30.5 (Non-Waiver), Section 30.8 (Governing Law, Jurisdiction and Venue), Section 30.9 (Limitations), Section 30.13 (Severability), Section 30.14 (Settlement of Disputes), Section 30.15 (Environmental Credits), Section 30.17 (Proprietary Rights), Section 30.19 (Computation of Time), Section 30.22 (No Third Party Beneficiaries), Section 30.23 (Hawaii General Excise Tax), and Section 30.24 (Survival of Obligations).
- 30.25 Certain Rules of Construction.

For purposes of this Agreement:

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- (A) "Including" and any other words or phrases of inclusion will not be construed as terms of limitation, so that references to "included" matters will be regarded as non-exclusive, non-characterizing illustrations.
- (B) "Copy" or "copies" means that the copy or copies of the material to which it relates are true, correct and complete.
- (C) When "Article," "Section," "Schedule," or "Attachment" is capitalized in this Agreement, it refers to an article, section, schedule or attachment to this Agreement.
- (D) "Will" has the same meaning as "shall" and, thus, connotes an obligation and an imperative and not a futurity.
- (E) Titles and captions of or in this Agreement, the cover sheet and table of contents of this Agreement, and language in parenthesis following Section references are inserted only as a matter of convenience and in no way define, limit, extend or describe the scope of this Agreement or the intent of any of its provisions.
- (F) Whenever the context requires, the singular includes the plural and plural includes the singular, and the gender of any pronoun includes the other genders.
- (G) Any reference to any statutory provision includes each successor provision and all applicable Laws as to that provision.

[Signatures for Tier 3 Feed-In Tariff Power Purchase Agreement appear on the following page]

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IN WITNESS WHEREOF, Company and Seller have executed this Agreement as of the day and year first above written.

Ву	
Name:	
Its:	
Ву	
Name:	
Its:	
	("Company")
By	
Name: Its:	
105:	
Ву	
Name:	
Its:	
	("Seller")

ATTACHMENT A DESCRIPTION OF GENERATION AND CONVERSION FACILITY

1.	Name	of Facility:		
	(A)	Location:		
	(B)	Telephone number (for system emergencies):		
		() –		
	(C)	Facsimile number: () -		
2.	Owner (If different from Seller):			
	cert a co good	xecution Date, Seller shall provide Company with a ified copy of a certificate warranting that the owner is rporation, partnership or limited liability company in standing with the Hawaii Department of Commerce and umer Affairs.		
3.	Oper	rator:		
4.	Name	of person to whom payments are to be made:		
	(A)	Mailing address:		
	(B)	Hawaii Gross Excise Tax License number:		
5.	Equi	pment:		
	(A)	Type of facility and conversion equipment:		
		[For example: Small power production facility designated as a Qualifying Facility that produces electric energy using]		
	(B)	Design and capacity		
		Total Facility Capacity AC ("Contract Capacity"):kW		
		Total Number of Generators:		

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Description of Equipment:

[For example: Describe the type of energy conversion equipment, capacity, and any special features.]

kW	kVAR Consumed	kVAR Produced
Full load Startup	Consumed	rioduced
Generator:		
Type		
Rated Power	kW	
Voltage	V, _ p	hase
Frequency	HZ	
Class of Protection		
Number of Poles,		
if applicable		
Rated Speed,		
if applicable	rpm	
Rated Current	A	
Uncorrected Power Fact	or	
Corrected Power Factor		
Corrected Current	A	

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- (C) Single or 3 phase: phase
- (D) Name of manufacturer:
- (E) The "Allowed Capacity" of this Agreement shall be the lower of (i) Contract Capacity or (ii) the net nameplate capacity (net for export) of the Facility installed on the In-Service Date.
- 6. Insurance carrier(s):
- 7. If Seller is not the operator, Seller shall provide a copy of the agreement between Seller and the operator which requires the operator to operate the Facility and which establishes the scope of operations by the operator and the respective rights of Seller and the operator with respect to the sale of electric energy from Facility no later than the In-Service Date. Seller shall provide a certified copy of a certificate warranting that the operator is a corporation, partnership or limited liability company in good standing with the Hawaii Department of Commerce and Consumer Affairs.
- 8. If Seller is the operator, Seller shall provide a certified copy of a certificate warranting that Seller is a corporation, partnership or limited liability company in good standing with the Hawaii Department of Commerce and Consumer Affairs.
- 9. Seller, owner and operator shall provide Company a description of their ownership structures.
- 10. Any certificate or description of ownership structure required under this Attachment A (Description of Generation and Conversion Facility) shall be provided to Company by the Execution Date. In the event of a change in ownership or identity of Seller, owner or operator, such entity shall provide within 30 Days thereof, a certified copy of a new certificate and a revised ownership structure.

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ATTACHMENT B FACILITY OWNED BY SELLER

1. The Facility

- Three-Line Diagram, Relay List, Relay Settings and Trip (A) Scheme. A preliminary Three-Line diagram, relay list, relay settings, and trip scheme of the Facility shall, after Seller has obtained prior written consent from Company, be attached to this Agreement on the Execution Date as Attachment E (Three-Line Drawing) and Attachment F (Relay List and Trip Scheme). A final Three-Line drawing, relay list and trip scheme of the Facility shall, after having obtained prior written consent from Company, be attached as labeled "Final" Attachment E (Three-Line Drawing) and Attachment F (Relay List and Trip Scheme) to this Agreement and made a part hereof on the In-Service Date. After the In-Service Date, no changes shall be made to the "Final" Attachment E (Three-Line Drawing) and Attachment F (Relay List and Trip Scheme) without the prior written consent of Seller and Company. The Three-Line diagrams shall expressly identify the Point of Interconnection of Facility to Company System. Seller agrees that no material changes or additions to Facility as reflected in the final Three-Line diagram, relay list and trip scheme shall be made without Seller first having obtained prior written consent from Company. If any changes in or additions to the Facility, records and operating procedures are required by Company, Company shall specify such changes or additions to Seller in writing, and, except in the case of an emergency, Seller shall have the opportunity to review and comment upon any such changes or additions in advance.
- (B) Certain Specifications for the Facility.
 - (i) Seller shall furnish, install, operate and maintain the Facility including breakers, relays, switches, synchronizing equipment (if applicable), monitoring equipment and control and protective devices approved by Company as suitable for parallel operation of the Facility with Company System. The Facility shall be accessible at all times to authorized Company personnel.

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(ii) The Facility shall include:

[LIST OF THE FACILITY

Examples may include, but not limited to:

- Seller-Owned Interconnection Facilities
- Substation
- Control and monitoring facilities
- Transformers
- Generators (as described in Attachment A)
- "lockable" cabinets or housings suitable for the installation of the Company-Owned Interconnection Facilities located on the Site
- relays and other protective devices
- leased telephone line and/or equipment to facilitate microwave communication]
- (iii) The Facility will comply with the following [includes excerpts of language that may be requested by Company]:
 - Company will install as part of Company-Owned Interconnection the Facilities to be constructed by Company and reimbursed by Seller, a manually operated, lockable, disconnect switch located on the pole adjacent to the Facility switching station. Company will install a ____ kV drop into Seller-provided metering structure. Seller will install a kV disconnect switch and all other items for its switching station (relaying, control power transformers, high voltage circuit breaker). Bus connection will be made to a manually and automatically (via protective relays) operated highvoltage circuit breaker. The high-voltage circuit breaker will be fitted with bushing style current transformers for metering and relaying. Downstream of the high-voltage circuit breaker, a structure will be provided for metering transformers. From the high-voltage circuit breaker, another bus connection will be made to another pole mounted disconnect switch, with surge protection.

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- (b) Seller will provide within the Seller-Owned Interconnection Facilities a separate, fenced area with separate access for Company. Seller will provide revenue metering PTs and CTs (as specified by Company) and all conduits and accessories necessary for Company to install Companysupplied revenue meters. Seller will also provide within such area, space for Company to install its communications, supervisory control and data acquisition ("SCADA") remote terminal unit ("RTU") and certain relaying if necessary for the interconnection. Seller will also provide AC and DC source lines as specified later by Company. Seller will provide a telephone line for Company-Owned meters. Seller will work with Company to determine an acceptable location and size of the fenced-in area. Seller shall provide an acceptable demarcation cabinet on its side of the fence where Seller and Company wiring will connect/interface.
- (c) Seller shall ensure that the Seller-Owned Interconnection Facilities has a lockable cabinet for switching station relaying equipment. Seller shall select and install relaying equipment acceptable to Company. At a minimum the relaying equipment will provide over and under frequency (81) negative phase sequence (46), under voltage (27), over voltage (59), ground over voltage (59G), over current functions (50/51) and direct transfer trip. Seller shall install protective relays that operate a lockout relay, which in turn will trip the main circuit breaker.
- (d) The relay protection system will be configured to provide overpower protection to enable Facility to comply with the Allowed Capacity limitation.
- (e) Seller's equipment also shall provide at a minimum:

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- i. Interface with Company's RTU to provide telemetry of electrical quantities such as total Facility net MW, MVar, and power factor, voltages, currents, and other quantities as identified by the Company;
- ii. Interface with Company's RTU to provide status for circuit breakers, reactive devices, switches, and other equipment as identified by the Company;
- iii. Interface with Company's RTU to provide
 control to incrementally raise and lower
 the voltage target at the Point of
 Interconnection (if voltage regulation is
 required) or change the power factor
 control (if power factor control is
 required);
 - iv. Interface with Company's RTU to provide curtailment control to incrementally limit (curtail) Actual Output from the Facility and to incrementally remove the limit (curtail) of the Actual Output of the Facility. The incremental size will be determined as part of the Interconnection Requirements Study taking into account the size of the Facility;
 - v. For Wind Facilities: Interface with Company's RTU to provide telemetry of environmental data such as measured wind speed and direction and the Facility's calculated available power based on Wind Turbine availability and turbine status; and
- vi. For PV Facilities: Interface with Company's RTU to provide telemetry of insolation measurements and calculated available power based on PV panel and/or inverter availability and status of PV panel and/or inverter availability.
- (f) If Seller adds, deletes and/or changes any of its equipment, or changes its design in a manner that would change the characteristics of the equipment and specifications used in

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the IRS, Seller will be required to obtain Company's prior written approval. If an analysis to revise parts of the IRS is required, Seller will be responsible for the cost of revising those parts of the IRS, and modifying and paying for the cost of the modifications to the Facility and/or the Company-Owned Interconnection Facilities based on the revisions to the IRS.

- Design Drawings, Bill of Materials, Relay Settings and (C) Fuse Selection. Seller shall provide to Company for its review the design drawings, Bill of Material, relay settings and fuse selection for the Facility and Company shall have the right, but not the obligation, to specify the type of electrical equipment, the interconnection wiring, the type of protective relaying equipment, including, but not limited to, the control circuits connected to it and the disconnecting devices, and the settings that affect the reliability and safety of operation of Company's and Seller's interconnected system. Seller shall provide the relay settings, fuse selection, and AC/DC Schematic Trip Scheme (part of design drawings) for the Facility to Company at least sixty (60) Days prior to the Acceptance Test. Company, at its option, may, with reasonable frequency, witness Seller's operation of control, synchronizing, and protection schemes and shall have the right to periodically re-specify the settings. Seller shall utilize relay settings prescribed by Company, which may be changed over time as Company System requirements change.
- (D) <u>Disconnect Device</u>. Seller shall provide a manually operated disconnect device which provides a visible break to separate Facility from Company System. Such disconnect device shall be lockable in the OPEN position and be readily accessible to Company personnel at all times.
- (E) Other Equipment. Seller shall furnish, install and maintain in accordance with Company's requirements all conductors, service switches, fuses, meter sockets, meter (includes revenue metering structure, CT(s) and PT(s) and accessories) and instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connections and meter installations at the Site.

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(F) <u>Maintenance Plan</u>. Seller shall maintain Seller-Owned Interconnection Facilities in accordance with the following maintenance plan:

Transmission line:	
kV Facility swit	ching station:
Relay protection equ	ipment:
Revenue Metering PTs and CTs: every 5 years	
Other equipment as i	dentified:

Seller shall furnish to Company a copy of records documenting such maintenance, within thirty (30) Days of completion of such maintenance work.

- (G) Curtailment Control Interface.
 - Seller shall provide and maintain in good working (i) order all equipment, computers and software associated with the control system (the "Curtailment Control Interface") necessary for real power control of the facility. The Curtailment Control Interface will be used to control the maximum level of the Actual Output from the Facility when required under this Attachment B (Facility Owned by Seller). implementation of the Curtailment Control Interface will allow Company System Operator to initiate the curtailment, vary the level of curtailment, and remove the curtailment remotely from Company System Operations Control Center through control signals from Company's computerized control system (SCADA/EMS). If the Curtailment Control Interface fails, the Facility shall automatically fully curtail itself.
 - (ii) Company shall review and provide prior written approval of the design for the Curtailment Control Interface to ensure compatibility with Company's SCADA/EMS system. If Seller materially changes the approved design, such changes will also require Company's review and prior written approval.

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- (iii) The Curtailment Control Interface shall include, but not be limited to, a demarcation cabinet, ancillary equipment and software necessary for Seller to connect to Company's RTU, located in Company's portion of the Facility switching station which shall provide the control signals to the Facility and send feedback status to the Company System Operations Control Center. types of controls presently supported by Company's SCADA/EMS system include fixed-length digital output controls, variable length digital output (pulse-width output) controls, and analog output (set point) controls. [NOTE: SPECIFIC TYPE OF CONTROL USED FOR THE FACILITY WILL BE DETERMINED BY THE COMPANY AS PART OF THE IRS.1
- (iv) The Curtailment Control Interface shall also include provision for a feedback point from the Facility indicating when curtailment is in effect and the analog value of the curtailment MW limit.
- The Curtailment Control Interface shall provide (∇) for remote control of the real-power output of the Facility by the Company at all times. If the Curtailment Control Interface is unavailable or disabled, the Facility shall not export electric energy to Company, unless the Company, in its sole discretion, agrees to accept electric energy and Seller and Company agree on an alternate means of curtailment. Notwithstanding the foregoing, if Seller fails to provide such remote control features (whether temporary or throughout the Term) and fails to discontinue exporting electric energy to Company as required by this Section 1(G)(v), then, notwithstanding any other provision of this Attachment B (Facility Owned by Seller), Company shall have the right to curtail the entire Facility during those periods that such control features are not provided.
- (vi) The rate at which the Facility reduces Actual Output shall not exceed the ramp rate specified in Section 3(C) of Attachment B (Facility Owned by Seller). The Facility's Curtailment Control Interface will control the rate at which electric energy is reduced to achieve the curtailment limit. The Facility will respond to the

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- curtailment request immediately and within minimum rate response of $0.5~\mathrm{MW/min}$.
- (vii) The requirements of the Curtailment Control
 Interface may be modified as mutually agreed upon
 in writing by the Parties.
- (H) Control System Acceptance Test Procedures. Following the successful completion of the Acceptance Test, the Control System Acceptance Test(s) shall be conducted on the centralized control system of the Facility as each generator is designated by Seller to be ready to generate and deliver electric energy to Company, before that generator is included in Facility. No later than thirty (30) Days prior to conducting the Control System Acceptance Test, Company and Seller shall agree on a written protocol setting out the detailed procedure and criteria for passing the Control System Acceptance Test. Attachment O (Control System Acceptance Test Criteria) provides general criteria to be included in the written protocol for the Control System Acceptance Test. Within fifteen (15) Business Days of successful completion of the Control System Acceptance Test, Company shall notify Seller in writing that the Control System Acceptance Test(s) has been passed and the date upon which such Control System Acceptance Test(s) was passed.
- 2. Operating Procedures [NOTE: NUMERICAL SPECIFICATIONS IN THIS SECTION 2 MAY VARY DEPENDING ON THE SPECIFIC PROJECT AND THE RESULTS OF THE PROJECT SPECIFIC INTERCONNECTION REQUIREMENT STUDY.]
 - (A) Reviews of the Facility. Company may require periodic reviews of the Facility, maintenance records, available operating procedures and policies, and relay settings, and Seller shall implement changes Company deems necessary for parallel operation or to protect the Company System from damages resulting from the parallel operation of the Facility with the Company System.
 - (B) <u>Separation</u>. Seller must separate from Company System whenever requested to do so by the Company System Operator pursuant to <u>Article 8</u> (Continuity of Service) and <u>Article 9</u> (Personnel and System Safety) of the Agreement.
 - (C) <u>Seller Logs</u>. Logs shall be kept by Seller for information on unit availability including reasons for

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planned and forced outages; circuit breaker trip operations, relay operations, including target initiation and other unusual events. Company shall have the right to review these logs, especially in analyzing system disturbances. Seller shall maintain such records for a period of not less than thirty-six (36) months.

(D) Reclosing. Under no circumstances shall Seller, when separated from the Company System for any reason, reclose into the Company System without first obtaining specific approval to do so from the Company System Operator.

(E) Direct Transfer Trip.

If the direct transfer trip is unavailable, due to loss of communication link, RTU failure, or other event resulting in the loss of the remote control by the Company, provisions must be made for the Seller to trip the main circuit breaker.

(F) Curtailment Methodology.

Pursuant to Article 8 (Continuity of Service), (i) and Article 9 (Personnel and System Safety), of the 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 by the Facility through the Curtailment Control Interface, 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.

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- (ii) 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 asavailable 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.
- (iii) Small generation projects (such as photovoltaic net energy metering projects, certain feed-in tariff projects, etc.) that are allowed to be installed without curtailment controls would not be curtailed before the Facility. 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.
- (iv) The Company shall not be liable to the Seller for any such curtailments unless they were in violation of Article 8 (Continuity of Service) or Article 9 (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.
- (v) 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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3. Performance Standards

(A) Reactive Power Control.

Company may designate voltage control, constant Mvar, or power factor control. If constant voltage control is specified Seller shall regulate the voltage at the Point of Interconnection to a voltage specified by Company System Operator. If power factor control is required, the power factor at which energy is to be delivered by Seller to Company shall be adjustable and adjusted as necessary, to the specified power factor. The reactive power range will be determined by the Interconnection Requirements Study. The design for the voltage regulation/power factor control will be reviewed and approved by Company.

(B) Reactive Amount [THESE REQUIREMENTS MAY BE CHANGED BY THE COMPANY UPON COMPLETION OF THE IRS.]

- (i) The Facility will provide reactive power for the range of 0.85 export to 0.90 import, or the requirement specified by the Interconnection Requirements Study, which ever range is greater.
- (ii) Company will not be obligated to purchase reactive power from Seller. The Facility shall contain equipment able to continuously and actively control the output of reactive power, based on the control mode designated by the Company and to react to system fluctuations. The reactive response speed at the Point of Interconnection shall be able to achieve [__%] of its final value within [__] following a step change in voltage. [REACTIVE POWER REQUIREMENTS WILL BE DETERMINED BY THE COMPANY UPON COMPLETION OF THE IRS.]
- (iii) If the Facility does not operate in accordance
 with Section 3(B)(i) of this Attachment B
 (Facility Owned by Seller), Company may
 disconnect all or a part of Facility from Company
 System until Seller corrects its operation (such
 as by installing capacitors at Seller's expense).
- (C) Ramp Rates [TO BE DETERMINED BY THE COMPANY UPON COMPLETION OF THE IRS]

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Seller shall ensure that the ramp rate of the Facility are less than the following limits for all conditions including start up, normal operations, and shut down (including high wind speed shut down in the case of Wind Facilities) for the following periods. Note that time periods are subject to seasonal variations and typical times of day/night are provided for general planning purposes only.

- Maximum Ramp Rate Upward of [TBD] MW/minute for all periods except during Early Morning Low-Load Periods (typically Midnight to 4:00 am) where Maximum Ramp Rate Upward is [TBD] MW/minute.
- Maximum Ramp Rate Downward of [TBD] MW/minute for all periods except during Evening Periods (typically 4:00 pm to 8:00 pm) where Maximum Ramp Rate Downward is [TBD] MW/minute.

(D) Power Fluctuation Rate

Seller shall ensure that the power fluctuation rate of the Facility is less than the following limit for all conditions including start up, normal operations, and shut down:

Instantaneous: 1 megawatt/2-second scan

Subminute Average: an average of 0.3 megawatt/2-second

scan for any 60-second period

(E) Undervoltage Ride-Through

The Facility (as a whole) will meet the following undervoltage ride-through requirements during low voltage affecting one or more of the three voltage phases ("V" is the voltage of any three voltage phases at the point of interconnection). [THESE VALUES MAY BE CHANGED BY THE COMPANY UPON COMPLETION OF THE IRS.]:

 $V \ge 0.80 \text{ pu}$ The Facility remains connected to the Company System.

0.75 pu \leq V \leq 0.80 pu The Facility may initiate disconnection from the Company System if the voltage remains

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in this range for more than 2 seconds.

 $0.00 \text{ pu} \leq V \leq 0.75 \text{ pu}$

The Facility may initiate disconnection from the Company System if voltage remains in this range for more than 600 milliseconds.

(F) Over voltage ride-through

The overvoltage protection equipment at the Facility shall be set so that the Facility will meet the following overvoltage ride-through requirements during voltage affecting one or more of the three voltage phases (as described below) ("V" is the voltage of any of the three voltage phases at the point of interconnection). [THESE VALUES MAY BE CHANGED BY THE COMPANY UPON COMPLETION OF THE IRS.]

$1.00 \text{ pu} \leq V < 1.10 \text{ pu}$	The Facility remains connected
	to the Company System.

1.10 pu \leq V < 1.15 pu The Facility may initiate disconnection from the Company System if voltage remains in this range for more than 3 seconds.

1.15 pu \leq V < 1.175 pu The Facility may initiate disconnection from the Company System if voltage remains in this range for more than 2 seconds.

1.175 pu \leq V < 1.2 pu The Facility may initiate disconnection from the Company System if voltage remains in this range for more than 1 second.

1.2 pu < V The Facility may initiate disconnection from the Company System immediately.

(G) Transient ride-through

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The Facility remains connected

The Facility shall be designed such that the transient stability of Company System is maintained for (1) three-phase fault located anywhere on the Company System and lasting up to ___ cycles; and (2) a single line to ground fault located anywhere on the Company System and lasting up to ___ cycles. [RIDE-THROUGH REQUIREMENTS WILL BE DETERMINED BY THE COMPANY UPON COMPLETION OF THE IRS.]

(H) Fault Ride Through

f > 57.0 Hz

For fault-related voltage dips at the Point of Interconnection that stay within the limits of the under voltage ride-through requirements in <u>Section 3(E)</u> above, upon clearing of the fault, Seller shall within 1 second of restoration, provide at least 90% of the real power output at the point of interconnection immediately before the fault. This does not apply if the Facility was operating at less than 5% of its rated MW capacity.

(I) Underfrequency ride-through

The Facility shall meet the following underfrequency ride-through requirements during an underfrequency disturbance ("f" is the Company System frequency at the Point of Interconnection): [THESE VALUES MAY BE CHANGED BY THE COMPANY UPON COMPLETION OF THE IRS]

T = 07.0 HZ	to the Company System.
56.0 Hz ≤ f < 57.0 Hz	The Facility may initiate disconnection from the Company System if frequency remains in this range for more than 6 seconds.

f < 56.0 Hz

The Facility may initiate disconnection from the Company System immediately.

(J) Overfrequency ride-through And Disconnection Requirements

The Facility will behave as specified below for overfrequency conditions ("f" is the Company System frequency at the Point of Interconnection): [THESE

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VALUES MAY BE CHANGED BY THE COMPANY UPON THE COMPLETION OF THE IRS]

 $f \ge 61.5 \text{ Hz}$ The Facility remains connected to the Company System.

61.5 Hz < f \le 63.0 Hz The Facility will initiate disconnection from the Company

System or begin an immediate reduction in Actual Output if frequency remains in this range

for more than 6 seconds.

 $f \ge 63.0 \text{ Hz}$ The Facility will initiate

disconnection from the Company

System immediately.

(K) Voltage Flicker

Any voltage flicker at the Point of Interconnection caused by the Facility shall not exceed the limits defined by the "Borderline of Visibility Curve" identified in IEEE Standard 519-1992, or latest version "Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems".

(L) Harmonics

Harmonic distortion at the Point of Interconnection caused by the Facility shall not exceed the limits stated in IEEE Standard 519-1992, or latest version "Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems". Seller shall be responsible for the installation of any necessary controls or hardware to limit the voltage and current harmonics generated from the Facility to defined levels.

(M) Frequency Regulation

Seller shall provide a droop response consistent with the droop response of the system as determined by Company (typically 4% or 5% droop) in the event of a system overfrequency disturbance. The droop characteristic will be verified during the testing of the Facility and based on the type of generation being proposed. The Facility shall have the capability to set droop response as specified by the Company.

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4. Maintenance of Seller-Owned Interconnection Facilities

- Seller must address any Disconnection (as defined below) (A) according to the requirements of this Section 4 (Maintenance of Seller-Owned Interconnection Facilities) of Attachment B (Facility Owned by Seller). For this purpose, a Disconnection is a disconnection from Company System of at least MW [TO BE DETERMINED BY THE COMPANY UPON COMPLETION OF THE IRS] from the Facility over a "rolling 120-second period", if such disconnection is due to a defect in or a failure of Seller-Owned Interconnection Facilities. A "rolling 120-second period" means a period that is comprised of 120 seconds and such rolling period will change as each new one (1) second elapses. With the elapse of each new one (1) second, the newest one (1) second would be added to the 120-second period, and the oldest one (1) second would no longer be included in the rolling 120-second period.
- (B) For every disconnection from the Company System of at least MW [TO BE DETERMINED BY THE COMPANY UPON COMPLETION OF THE IRS] from Facility over a rolling 120-second period ("Disconnection Event"), Seller shall investigate the cause of the Disconnection Event, and determine if it is a Disconnection as defined in Section 4(A) of this Attachment B (Facility Owned by Seller). Within three (3) Business Days of the Disconnection Event, Seller shall provide, in writing to Company, an incident report that summarizes the sequence of events and probable cause of the Disconnection Event, and states whether the Seller believes the Disconnection Event is a Disconnection.
- (C) Within forty-five (45) calendar Days of a Disconnection, Seller shall provide, in writing to Company, Seller's findings, data relied upon for such findings, and proposed actions to prevent reoccurrence of a Disconnection ("Proposed Actions"). Company may assist Seller in determining the causes of and recommendations to remedy or prevent a Disconnection ("Company's Recommendations"). Seller shall implement such Proposed Actions (as modified to incorporate the Company's Recommendations, if any) and Company's Recommendations (if any) in accordance with the time period agreed to by the Parties.

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- (D) In the event Seller and Company disagree as to (i) whether a Disconnection Event occurred, (ii) the sequence of events and/or probable cause of the Disconnection Event, (iii) whether the Disconnection Event is a Disconnection, (iv) the Proposed Actions, (v) Company's Recommendations, and/or (vi) the time period to implement the Proposed Actions and/or Company's Recommendations, then the Parties shall follow the procedure set forth in Section 5 (Expedited Dispute Resolution) of this Attachment B (Facility Owned by Seller).
- Upon the fourth (4th) Disconnection (and each subsequent (E) Disconnection) within any Contract Year, the Parties shall follow the procedures set forth in Section 4(B) and Section 4(D) of Attachment B (Facility Owned by Seller), to the extent applicable. If after following the procedures set forth in this Section 4 (Maintenance of Seller-Owned Interconnection Facilities) of Attachment B (Facility Owned by Seller), Seller and Company continue to have a disagreement as to (1) the probable cause of the Disconnection, (2) the Proposed Actions, (3) the Company's Recommendations, and/or (4) the time period to implement the Proposed Actions and/or the Company's Recommendations, then the Parties shall commission a study to be performed by a qualified independent Third-Party consultant ("Qualified Consultant") chosen from the Qualified Independent Third-Party Consultants List ("Consultants List") attached to the Agreement as Attachment D (Consultants List). Such study shall review the design of, review the operating and maintenance procedures dealing with, recommend modifications to, and determine the type of maintenance that should be performed on Seller-Owned Interconnection Facilities ("Study"). Seller and Company shall each pay for one-half of the total cost of the Study. The Study shall be completed within ninety (90) Days from such fourth Disconnection (and each subsequent Disconnection) within any Contract Year, unless otherwise agreed to in writing by Seller and Company. The Qualified Consultant shall send the Study to Company and Seller. Seller (and/or its Third-Party consultants and contractors), at Seller's expense, shall change the design of, change the operating and maintenance procedures dealing with, implement modifications to, and/or perform the maintenance on Seller-Owned Interconnection Facilities recommended by

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the Study. Such design changes, operating and maintenance procedure changes, modifications, and/or maintenance shall be completed no later than forty-five (45) Days from the Day the completed Study is issued by the Qualified Consultant, unless otherwise agreed to in writing by Company. In the event the time requirement for the (i) commissioning of the Study, (ii) completion of the Study, or (iii) completion of the design change, operating and maintenance procedure change, modifications, and/or maintenance recommended by the Study is not achieved, Company may limit the total Allowed Capacity to MW for the period that such requirement has not been achieved. Nothing in this provision shall affect Company's right to curtail the Facility as provided for in this Agreement.

The Consultants List attached hereto as Attachment D (F) (Consultants List) contains the names of engineering firms which both Parties agree are fully qualified to perform the Study. At any time, except when a Study is being conducted, either Party may remove a particular consultant from the Consultants List by giving written notice of such removal to the other Party. However, neither Party may remove a name or names from the Consultants List without approval of the other Party if such removal would leave the list without any names. Intended deletions shall be effective upon receipt of notice by the other Party, provided that such deletions do not leave the Consultants List without any names. Proposed additions to the Consultants List shall automatically become effective thirty (30) Days after notice is received by the other Party unless written objection is made by such other Party within said thirty (30) Day period. By mutual agreement between the Parties, a new name or names may be added to the Consultants List at any time.

5. Expedited Dispute Resolution

If there is a disagreement between Company and Seller regarding (i) Seller's compliance with the standards set forth in Section 3 (Performance Standards) of this Attachment B (Facility Owned by Seller), and/or (ii) Section 4 (Maintenance of Seller-Owned Interconnection Facilities) of this Attachment B (Facility Owned by Seller) such as (aa) whether a Disconnection Event occurred, (bb) the sequence of events and/or probable cause of the Disconnection Event, (cc) whether the Disconnection Event is a Disconnection, (dd) the

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Proposed Actions, (ee) the Company's Recommendations, and (ff) the time period to implement the Proposed Actions and/or the Company's Recommendations, then authorized representatives from Company and Seller, having full authority to settle the disagreement, shall meet in Hawaii (or by telephone conference) and attempt in good faith to settle the disagreement. Unless otherwise agreed in writing by the Parties, the Parties shall devote no more than five (5) Business Days to settle the disagreement in good faith. In the event the Parties are unable to settle the disagreement after the expiration of the time period, then either Party may pursue the dispute resolution procedure set forth in Article 28 (Dispute Resolution) of this Agreement.

6. Modeling

Seller shall provide all of the data to allow the modeling of the generators, transformers and control systems within the Facility. Seller shall validate or update the modeling data as requested by Company.

7. Testing Requirements

Seller shall coordinate periodic testing of the Facility with Company to ensure that the Facility is meeting the performance standards specified under this Agreement. Immediately following the initial connection of the Facility, Seller shall test the voltage regulation capability, reactive power response, reactive power capability, harmonic and flicker limits, and any other testing as determined by Company.

8. Data and Forecasting

Seller shall provide data and/or a power forecast in accordance with the terms of $\underline{\text{Article 6}}$ (Forecasting) of this Agreement.

9. Technology Specific Requirements:

(A) Three-Phase Synchronous Generators:

The generating facility circuit breakers shall be 3-phase devices with electronic or electromechanical control. The Seller shall be responsible for properly synchronizing its generating facility with the Company System by means of either a manual or automatic synchronizing function. Automatic synchronizing is

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required for all synchronous generators which have an SCCR greater than 5%. For a generating facility whose SCCR exceeds 5%, the Facility shall provide protective equipment suitable for detecting loss of synchronism and automatically disconnecting the generating facility from the Company System. Unless otherwise agreed to between the Company and Seller, synchronous generators shall automatically regulate power factor, not voltage, while operating in parallel with the Company System.

(B) Induction Generators:

- (i) Induction generators may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured at the Point of Interconnection is within the visible flicker limits as defined by IEEE 519-1992 (or latest version). The same requirements also apply to induction generation connected at or near synchronous speed because a similar voltage dip is present due to an inrush magnetizing current. The Facility shall submit number of starts per specific time period and maximum starting kVA draw data for the utility to verify that the voltage dip due to starting is within the visible flicker limits and does not degrade the normal voltage provided by the utility.
- (ii) Induction generators do not require separate synchronizing equipment. Starting or rapid load fluctuations on induction generators can adversely impact the Company System voltage. Corrective step-switched capacitors or other techniques may be necessary if the voltage fluctuations measured at the Point of Interconnection are not within the visible flicker limits as defined by IEEE 519-1992 (or latest version). These measures can, in turn, cause ferroresonance. If these measures (additional capacitors) are installed on Seller's side of the Point of Interconnection, the Company will review these measures and may require Seller to install additional protective relaying equipment. Company will determine whether additional equipment is required to protect the Company System.

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(C) Inverter Systems:

- (i) Direct current generators and non-power (i.e. other than 60 Hertz) alternating current generators can only be installed in parallel with the Company System using a non-islanding synchronous inverter. The design shall comply with the requirements of IEEE Std 1547-2003 (or latest version) such that the synchronous inverter will automatically disconnect upon an interruption on the Company System.
- (ii) Self-commutated inverters of the Companyinteractive type shall synchronize to the Company
 System. Inverters capable of stand-alone
 operation shall not attempt to control the
 voltage while operating in parallel with the
 Company System. Line-commutated, thyristor-based
 inverters are not recommended and will require
 additional technical study to determine harmonic
 and reactive power requirements. All
 interconnected inverter systems shall comply with
 the harmonic current limits of IEEE Std 519-1992
 (or latest version).

ATTACHMENT C METHODS AND FORMULAS FOR MEASURING PERFORMANCE STANDARDS

- 1. Performance Standards as defined below shall be used, in part, to govern actions by Company to curtail the electric output of the Facility for purposes of maintaining power quality on Company System. Specific standards are defined for:
 - Ramp Rate (RR)
 - Instantaneous Power Fluctuation Rate
 - Sub-minute Power Fluctuation Rate
- 2. Formulas for measuring the performance standards are presented below, and assume that the power fluctuations will be monitored on the SCADA/EMS system. These formulas are based on the periodicity at which analog data is retrieved from the RTU. This periodicity is called the "scan rate". Company presently uses a two-second analog scan rate. The formulas below are based on the two-second scans. [FOR WIND PROJECTS ADD: The transducer used to obtain the instantaneous power (MW) output from a wind farm is accurate to +/- 0.1%]. The two-second scan rate, characteristics of transducers and RTU reporting, and SCADA method of calculation, were considered and included in the proposed values for the performance standards.

3. Ramp Rate Calculation:

$$RR = |MW_{s-30} - MW_s|$$

Where:

RR = Ramp Rate, may be calculated once every scan

 MW_{s-30} = The instantaneous MW analog value 30 scans (60 seconds) prior the present scan

 MW_{s} = The instantaneous MW analog value for the present scan

4. Power Fluctuation Rate Calculations:

a. Instantaneous

$$I = |MW_{s-1} - MW_s|$$

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Where:

I = Instantaneous Power Change, calculated once every scan MW_{s-1} = The instantaneous MW analog value for the previous scan MW_s = The instantaneous MW analog value for the present scan

b. Subminute Average:

$$A_{1} = \frac{\sum_{s=1}^{30} |MW_{s-1} - MW_{s}|}{30}$$

Where:

 $A_{\rm I}$ = Subminute Average, calculated once every 30 scans

 $MW_{\rm s-1}$ = The instantaneous MW analog value for the previous scan

 $MW_{\scriptscriptstyle s}$ = The instantaneous MW analog value for the present scan

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ATTACHMENT D CONSULTANTS LIST

(To be completed prior to the In-Service Date)

SHEET NO. 88.1CR Effective December 30, 2011

ATTACHMENT E THREE-LINE DRAWING

(To be attached as per <u>Section 1(A)</u> of <u>Attachment B</u>)

SHEET NO. 88.1CS Effective December 30, 2011

ATTACMENT F RELAY LIST AND TRIP SCHEME

(To be attached as per Section 1(A) of Attachment B.)

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ATTACHMENT G COMPANY-OWNED INTERCONNECTION FACILITIES

1. Description of Company-Owned Interconnection Facilities

- (A) General. Company shall furnish or construct (or may have Seller furnish or construct, in whole or in part), own, operate and maintain all Interconnection Facilities required to interconnect Company System with Facility at volts, up to the Point of Interconnection (collectively, the "Company-Owned Interconnection Facilities").
- (B) <u>Site</u>. Where any Company-Owned Interconnection Facilities are to be located on the Site, Seller shall provide, at no expense to Company, a location and access acceptable to Company for all such Company-Owned Interconnection Facilities, as well as an easement, license or right of entry to access such Company-Owned Interconnection Facilities. If power sources (120/240VAC) are required, Seller shall provide such sources, at no expense to Company.
- (C) <u>IRS</u>. An IRS addressing Facility requirements was completed for the project in accordance with the IRS Letter Agreement, and the results have been incorporated in this <u>Attachment G</u> (Company-Owned Interconnection Facilities) as appropriate.
- Interconnection Facilities, for which Seller has agreed to pay, in accordance with Section 2 (Seller Payment to Company for Company-Owned Interconnection Facilities and Review of Facility) of this Attachment G (Company-Owned Interconnection Facilities), include [ADD LIST OF COMPANY-OWNED INTERCONNECTION FACILITIES THAT ARE REQUIRED PURSUANT TO THE RESULTS OF THE IRS. THE FOLLOWING IS AN EXAMPLE OF THE TYPES OF FACILITIES THAT COULD BE LISTED:

(i) [Line extension];

(ii) Substation additions and/or modifications of Company's existing structures as necessary. This would include but not be limited to protective relaying and setting changes;

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- (iii) Supervisory control and communications equipment (including but not limited to, SCADA/RTU, microwave, satellite, dedicated phone line(s) and/or any other acceptable communications means (determined by Company), fiber optics, copper cabling, installation of batteries and charger system, etc.);
- (iv) Revenue meter support infrastructure;
- (v) Any additional Interconnection Facilities needed to be installed as a result of final determination of Facility switching station site, final design of Facility to enable Company to complete the Interconnection Facilities and be compatible with Good Engineering and Operating Practices.
- (E) Construction By Seller. Seller (and/or its third Party consultants or contractors (collectively,

 "Contractors")) will install, test and place in service, at Seller's expense, the [LIST COMPANY-OWNED INTERCONNECTION FACILITIES TO BE CONSTRUCTED BY SELLER].
- Coordination of Construction. Prior to Seller engaging the Contractors, Seller shall obtain Company's written approval, which approval shall not be unreasonably withheld. Prior to Seller and/or its Contractors first starting to work on the construction plans for Company-Owned Interconnection Facilities to be constructed by Seller (and/or its Contractors), such as the civil, structural, and construction drawings, specifications to vendors, vendor approved final drawings and materials lists (collectively, the "Plans"), Seller and/or its Contractors shall meet with Company to discuss the construction of such Company-Owned Interconnection Facilities, including but not limited to subjects concerning coordination of construction milestone dates, agreement on areas of interface design, and Company's design/drawing layout and symbols standards, equipment specifications and construction specifications and standards. Company will provide the design and specifications information so Seller can incorporate such information in its bid documents.
- (G) Plans. No later than sixty (60) Days before Seller and/or its Contractors first start to order materials and equipment for Company-Owned Interconnection

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Facilities to be constructed by Seller and/or its Contractors, Seller shall provide Company with the Plans. The Plans for Company-Owned Interconnection Facilities to be constructed by Seller (and/or its Contractors) shall comply with (i) all applicable Laws; (ii) Company's design/drawing layout and symbol standards, equipment specifications, and construction specifications and standards; and (iii) Good Engineering and Operating Practices (collectively, the "Standards").

- (H) Company's Review of the Plans. Unless otherwise agreed to by the Parties, Company shall have thirty (30) Days following receipt of the Plans for it to review and comment on the Plans, and verify in writing to Seller that the Plans comply with the Standards, which verification shall not be unreasonably withheld. If Company reasonably determines that the Plans are not in accordance with the Standards, then it may request in writing a response from Seller to its comments and Seller shall respond in writing within thirty (30) Days of such request by providing (i) its justification for why its Plans conform to the Standards or (ii) changes in the Plans responsive to Company's comments and in accordance with the Standards.
- (I) Company Inspection. Construction work will be subject to Company inspections to ensure that construction is done in accordance with the Standards. Company inspectors will be allowed access to the construction sites for inspections and to monitor construction work. The inspector shall have the authority to work with the appropriate construction supervisor to stop any work that does not meet the Standards. All equipment and materials used in Company-Owned Interconnection Facilities to be constructed by Seller and/or its Contractors shall meet the Standards.
- (J) Acceptance Test Procedures.
 - (i) Seller shall provide Company with at least seven (7) Days advance written notice of the Acceptance Test. No electric energy will be delivered from Seller to Company during this Acceptance Test. No later than thirty (30) Days prior to conducting the Acceptance Test, Company and Seller shall agree on a written protocol setting out the detailed procedure and criteria for passing the Acceptance Test. Attachment N

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(Acceptance Test General Criteria) provides general criteria to be included in the written protocol for the Acceptance Test. Within fifteen (15) Business Days of successful completion of the Acceptance Test, Company shall notify Seller in writing that the Acceptance Test has been passed and the date upon which the Acceptance Test was passed.

- (ii) Company will be present when the Acceptance Test is conducted, and Seller shall timely correct any deficiencies identified during the Acceptance Test. Seller will be responsible for the cost of Company personnel (and/or Company contractors) performing the duties (such as reviewing the Plans and reviewing the construction) necessary for Company-Owned Interconnection Facilities to be constructed by Seller (and/or its Contractors). If Company (aa) does not make any inspection or test, (bb) does not discover defective workmanship, materials or equipment, or (cc) accepts Company-Owned Interconnection Facilities (that were constructed by Seller and or its Contractors), such action or inaction shall not relieve Seller from its obligation to do and complete the work in accordance with the Plans approved by Company.
- 2. <u>Seller Payment to Company for Company-Owned Interconnection</u>
 Facilities and Review of Facility
 - (A) Seller Payment to Company
 - For Company-Owned Interconnection Facilities to (i) be designed, engineered and constructed by Company, Seller shall pay the Total Estimated Interconnection Cost which is comprised of the estimated costs of (aa) acquiring and installing such Company-Owned Interconnection Facilities, (bb) the engineering and design work (including but not limited to Company, affiliated Company and contracted engineering and design work) associated with (i) developing such Company-Owned Interconnection Facilities and (ii) reviewing and specifying those portions of Facility which allow interconnected operations as such are described in Attachment B(Facility Owned by Seller), and (cc) conducting the Acceptance Test and Control

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System Acceptance Test. The Total Actual Interconnection Cost (the actual cost of items (aa) through (cc)), together with the cost of the IRS (which will be paid pursuant to the IRS Letter Agreement), are the "Total Interconnection Cost".

(ii) Summary List of Company-Owned Interconnection Facilities and Related Services:

[THIS LIST SHOULD GENERALLY INCORPORATE THE LIST IN ATTACHMENT G, SECTION 1(D), PLUS TESTING.]

(iii) The following summarizes the Total Estimated Interconnection Cost:

[THIS LIST SHOULD INCLUDE ESTIMATED COSTS FOR THE ITEMS LISTED IN ATTACHMENT G, SECTION 2(A)(ii).]

The Total Estimated Interconnection Cost is \$_____.

- (B) Total Estimated Interconnection Costs. The Total Estimated Interconnection Cost, which, except as otherwise provided herein, is non-refundable, shall be paid in accordance with the following schedule:
 - (i) On the Execution Date, \$10,000.00 is due and payable by Seller to Company;
 - (ii) Thirty (30) Days after the Execution Date, the additional amount in excess of \$10,000.00, up to that portion of the Total Estimated Interconnection Cost described in Section2(a) (i) (B) of this Attachment G (Company-Owned Interconnection Facilities), is due and payable by Seller to Company;
 - (a) Company shall not be obligated to perform engineering and design work on Company-Owned Interconnection Facilities until Seller pays the amounts in Section2 (B) (i) and Section2 (B) (ii) of this Attachment G (Company-Owned Interconnection Facilities); and
 - (iv) Fourteen (14) Days after receipt of an invoice from Company, which shall be provided not less than thirty (30) Days prior to start of

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procurement of Company-Owned Interconnection Facilities, the difference between the portion of the Total Estimated Interconnection Cost paid to date and the Total Estimated Interconnection Cost is due and payable by Seller to Company.

- (a) Company shall not be obligated to procure and construct Company-Owned Interconnection Facilities until Seller pays the amount in <u>Section 2(B)(iii)</u> of this <u>Attachment G</u> (Company-Owned Interconnection Facilities).
- (C) True-Up. Within thirty (30) Days of the final accounting, which shall take place within thirty (30) Days of completion of construction of Company-Owned Interconnection Facilities, Seller shall remit to Company the difference between the Total Estimated Interconnection Cost paid to date and the Total Actual Interconnection Cost, which is the final accounting of the Total Interconnection Costs. If in fact the Total Actual Interconnection Cost is less than the payments received by Company as the Total Estimated Interconnection Cost, Company shall repay the difference to Seller within thirty (30) Days of the final accounting.
- (D) Termination of the Agreement. If any Event of Default by Seller occurs such that termination of the Agreement results, or as otherwise provided herein, Seller shall pay to Company the actual costs and cost obligations reasonably incurred by Company for Company-Owned Interconnection Facilities as of the date the Agreement is terminated. Such payment shall be made within thirty (30) Days of receipt of an invoice from Company.
- (E) Ownership. All Company-Owned Interconnection Facilities including those portions, if any, provided, or provided and constructed, by Seller shall be the property of Company.

3. Ongoing Operation and Maintenance Charges

(A) Prior to the Transfer Date. Seller shall operate and maintain, at its cost, Company-Owned Interconnection Facilities that it or its Contractors constructed, if any, prior to the Transfer Date.

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- (B) On or After the Transfer Date. On and after the Transfer Date, Company shall own, operate and maintain Company-Owned Interconnection Facilities.
- (C) Monthly Bill. Company shall bill Seller monthly for any costs incurred in operating, maintaining and replacing (to the extent not covered by insurance) Company-Owned Interconnection Facilities. Company's costs will be determined on the basis of, but not limited to, direct payroll, material costs, applicable overheads at the time incurred, consulting fees and applicable taxes. Seller shall, within thirty (30) Days after the billing date, reimburse Company for such monthly billed operation and maintenance charges.

4. Relocation of Company-Owned Interconnection Facilities

Company shall bill Seller for any costs incurred in relocating Company-Owned Interconnection Facilities in the event that the applicable Land Rights include a relocation clause and such clause is exercised or if Company-Owned Interconnection Facilities must be relocated for any other reason not caused by Company. Seller shall, within thirty (30) Days after the billing date, reimburse Company for such billed relocation charges.

5. Guarantee for Interconnection Costs

- (A) Standby Letter of Credit. To ensure that Company is paid by Seller for Company-Owned Interconnection Facilities to be provided and/or constructed by Company described in Section 2 (Seller Payment to Company for Company-Owned Interconnection Facilities and Review of Facility) of this Attachment G (Company-Owned Interconnection Facilities), Seller shall obtain an Irrevocable Standby Letter of Credit with no Documentary Requirement ("Standby Letter of Credit"), wherein Company shall receive payment from the bank upon request by Company.
- (B) Requirements of the Standby Letter of Credit. The Standby Letter of Credit shall be (i) at least in the amount of twenty-five percent (25%) of the Total Estimated Interconnection Cost, (ii) issued by a bank in Hawaii which is reasonably acceptable to Company, and (iii) in form and substance reasonably acceptable to Company. The Standby Letter of Credit shall be effective from the earlier of (aa) thirty (30) Days

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following the Execution Date, or (bb) the date that Seller requests Company to order equipment or commence construction on Company-Owned Interconnection Facilities. The Standby Letter of Credit shall be in effect through the earlier of forty-five (45) Days after the final accounting or seventy-five (75) Days after the Contract is terminated. Seller shall provide to Company within fourteen (14) Days of the date the Standby Letter of Credit is to be effective as aforesaid, a document from the bank which indicates that such a Standby Letter of Credit has been established.

(C) Other Form of Security. Notwithstanding the foregoing, in lieu of a Standby Letter of Credit, Seller may provide such other form of security as is agreed to by Company in writing.

6. Land Restoration

- (A) <u>Definition of "Land"</u>. For the purposes of this <u>Attachment G</u> (Company-Owned Interconnection Facilities), "<u>Land</u>" means the Site and any other real property where any Company-Owned Interconnection Facilities are located.
- (B) Removal of Interconnection Facilities. After termination of this Agreement, Seller shall, at its expense, remove all (i) Company-Owned Interconnection Facilities from the Land and (ii) Seller-Owned Interconnection Facilities from the Land, as designated by Company; provided, however, that, Company may elect to remove all or part of the Company-Owned Interconnection Facilities and/or Seller-Owned Interconnection Facilities from the Land because of operational concerns over the removal of such Interconnection Facilities, in which case Seller shall reimburse Company for its costs to remove such Company-Owned Interconnection Facilities and/or Seller-Owned Interconnection Facilities.
- (C) Restoration of the Land. After the termination of this Agreement, Seller shall, at its expense, restore the Land to its condition prior to construction of such Company-Owned Interconnection Facilities or Seller-Owned Interconnection Facilities. Land restoration shall be completed within ninety (90) Days of termination of this Agreement, or as otherwise agreed to by both Parties in writing.

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7. Transfer of Ownership/Title

- (A) Transfer of Ownership and Title. On the Transfer Date, Seller shall transfer to Company all right, title and interest in and to Company-Owned Interconnection Facilities to the extent such facilities were designed and constructed by Seller and/or its Contractors. In connection with the transfer of Company-Owned Interconnection Facilities, Seller shall transfer and assign to Company all applicable manufacturers' or Contractors' warranties which are assignable. Seller shall provide a written list of the manufacturers' and Contractors' warranties which will be assigned to Company and the expiration dates of such warranties no later than thirty (30) Days before the Transfer Date.
- (B) No Liens or Encumbrances. Company's title to and ownership of Company-Owned Interconnection Facilities that were designed and constructed by Seller and/or its Contractors shall be free and clear of liens and encumbrances.
- (C) <u>Land Rights</u>. In connection with the transfer of Company-Owned Interconnection Facilities to Company, Seller shall grant, transfer or assign to Company, such Land Rights, necessary to operate and maintain Company-Owned Interconnection Facilities on and after the Transfer Date.
- (D) Form of Documents. The transfers to be made to Company pursuant to this Section 7 (Transfer of Ownership/Title) of Attachment G (Company-Owned Interconnection Facilities) shall not require any further payment by Company. The form of the document to be used to convey title to the Company-Owned Interconnection Facilities that were designed and constructed by or on behalf of Seller shall be substantially in the form set forth in Attachment H (Form of Bill of Sale and Assignment). form of the document(s) to be used to assign leases shall be substantially in the form set forth in Attachment I (Form of Assignment of Lease and Assumption). To the 7extent Land Rights other than leases are transferred to Company, appropriate modifications will be made to Attachment I (Form of Assignment of Lease and Assumption) to effectuate the transfer of such Land Rights.

HAWAII ELECTRIC LIGHT COMPANY, INC.

8. Government Approvals for Any Company-Owned Interconnection Facilities Constructed by Seller

Seller shall obtain all required permits, licenses, approvals, certificates, entitlements and other authorizations issued by Governmental Authorities (the "Government Approvals") required to construct, own, operate and maintain the Company-Owned Interconnection Facilities that Seller and/or its Contractors will construct and shall provide these prior to the Transfer Date. On or before the Transfer Date, Seller shall provide Company with (i) copies of all such Governmental Approvals obtained by Seller regarding the construction, ownership, operation and maintenance of Company-Owned Interconnection Facilities that Seller and/or its Contractors constructed and (ii) documentation that all such Governmental Approvals have been closed with the issuing Governmental Authority.

9. <u>Land Rights</u>

Seller shall obtain all Land Rights for the Land which are required to construct, maintain and operate the Company-Owned Interconnection Facilities. Seller shall use commercially reasonable efforts to obtain perpetual Land Rights. Such Land Rights shall contain terms and conditions which are acceptable to Company and shall be provided in advance to Company for its review. For so long as Seller has the right under this Agreement to sell electric energy to Company, Seller shall pay for any rents and other payments due under such Land Rights that are associated with Company-Owned Interconnection Facilities.

10. Contracts for Company-Owned Interconnection Facilities

For all contracts entered into by or on behalf of Seller for Company-Owned Interconnection Facilities to be designed, engineered and constructed, in whole or in part, by or on behalf of Seller, the following shall apply: (i) Company shall be made an intended third-party beneficiary of such contracts; and (ii) Company shall be provided with copies of such executed contracts, including the commercial terms.

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DD Effective December 30, 2011

ATTACHMENT H BILL OF SALE AND ASSIGNMENT

	THIS	BILL	OF	SALE	AND	ASSIGNMENT	('' E	sill	of	Sale"),	made	as
of the	day	y of				, 20 ,	by					
("Transfer	<u>cor</u> ")	and _								_(" <u>Trans</u>	feree'	").

WITNESSETH:

- Bill of Sale. In consideration of TEN DOLLARS (\$10.00) and other good and valuable consideration paid to Transferor by Transferee, the receipt and sufficiency of which are hereby acknowledged, Transferor does hereby sell, assign and transfer over to Transferee all of Transferor's right, title and interest, in and to (i) all the tangible personal property and fixtures (including but not limited to the items set forth in Schedule H-1 (Description of Tangible Personal Property and Fixtures) attached hereto and incorporated herein), that constitutes what is referred to as the "Company-Owned Interconnection Facilities to be installed by or on behalf of Seller" (or words to similar effect) as set forth in Attachment G (Company-Owned Interconnection Facilities) to the Power Purchase Agreement for As-Available Renewable Energy dated , 20 between [Transferor and Transferee] and (ii) the intangible personal property (including but not limited to the intangible personal property set forth in Schedule H-2 (Description of Intangible Personal Property) attached hereto and incorporated herein) owned by Transferor and used or to be used in the ownership, operation and maintenance of the aforesaid tangible personal property, to the extent assignable by Transferor, including without limitation, certificates of occupancy, permits, licenses, transferable warranties and guaranties, instruments, documents of title, and general intangibles pertaining to the aforesaid tangible personal property.
- 2. <u>Warranty of Title</u>. Transferor hereby warrants to Transferee that Transferor is the legal owner of the aforesaid tangible personal property and the aforesaid intangible personal property (including but not limited to the property set forth in <u>Schedule H-1</u> (Description of Tangible Personal Property and Fixtures) and <u>Schedule H-2</u> (Description of Intangible Personal Property), and that said property is being sold, assigned and transferred to Transferee free and clear of all liens and encumbrances.
- 3. <u>Governing Law</u>. This Bill of Sale shall be governed by, and construed and interpreted in accordance with, the laws of the State of Hawaii.

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DE Effective December 30, 2011

[Signatures for Bill of Sale and Assignment]

executed	•	ransieror and Transieree nave day and year first above writter
CACCUCCU	child linderamente on the	day and year first above written
a		a Hawaii corporation
		Ву
Ву		Its
Its	 "Transferor"	By
	Transferor	"Transferee"

SHEET NO. 88.1DF Effective December 30, 2011

SCHEDULE H-1

DESCRIPTION OF TANGIBLE PERSONAL PROPERTY AND FIXTURES

SHEET NO. 88.1DG Effective December 30, 2011

SCHEDULE H-2

DESCRIPTION OF INTANGIBLE PERSONAL PROPERTY

SHEET NO. 88.1DH Effective December 30, 2011

LAND COURT SYSTEM	REGULAR SYSTEM
Return by Mail () Pickup () To:	
Tax Map Key Nos.:	Total pages:
አ ጥጥ	ACHMENT I
	LEASE AND ASSUMPTION

THIS ASSIGNMENT is made as of this _____ day of ____, a ____ , 20 , by ____ the "Assignor," and ______
corporation who corporation, whose principal place of business and post office address is ____, Honolulu, HI 968 , hereinafter called the "Assignee",

WITNESSETH:

THAT the Assignor, for and in consideration of the sum of TEN DOLLARS (\$10.00) and other good and valuable consideration to it paid by the Assignee, the receipt and sufficiency of which are hereby acknowledged, and of the covenants and agreements of the Assignee hereinafter contained and on the part of the Assignee to be faithfully kept and performed, does hereby sell, assign, delegate, transfer, set over and deliver unto the Assignee, and its successors and assigns, all of Assignor's right, title and interest in and to the lease described in Schedule 1 (the "Lease"); together with HAWAII ELECTRIC LIGHT COMPANY, INC.

all interests thereto appertaining, and together with the personal property located on the land thereby demised.

And all of the estate, right, title and interest of the Assignor in and to the land thereby demised, and all buildings, improvements, rights, easements, privileges and appurtenances thereunto belonging or appertaining or used, occupied and enjoyed in connection with said Lease and the land thereby demised.

TO HAVE AND TO HOLD the same unto Assignee and its successors and assigns, for and during the respective unexpired term of said Lease, and as to said personal property (if any) absolutely and forever.

AND, in consideration of the premises, the Assignor does hereby covenant with the Assignee that the Assignor is the lawful owner of the herein described real property; that said Lease is in full force and effect and is not in default; that said real property is free and clear of and from all liens and encumbrances, except for the lien of real property taxes not yet by law required to be paid; that the Assignor is the lawful owner of said personal property (if any) and that Assignor's title thereto is free and clear of and from all liens and encumbrances, that the Assignor has good right to sell and assign said real property and personal property (if any) as aforesaid; and, that the Assignor will WARRANT AND DEFEND the same unto the Assignee against the lawful claims and demands of all persons, except as aforesaid.

AND, in consideration of the foregoing, the Assignee does hereby promise, covenant and agree to and with the Assignor and to and with said Lessor, that the Assignee will, effective as of and from the date of the execution and delivery of this instrument and during the residue of the term of said Lease, pay the rents thereby reserved as and when the same become due and payable pursuant to the provisions of said Lease, and will also faithfully observe and perform all of the covenants and conditions contained in said Lease which from and after the date hereof are or ought to be observed and performed by the lessee therein named, and will at all times hereafter indemnify and save harmless the Assignor from and against the nonpayment of said rent and the nonobservance or nonperformance of said covenants and conditions and each of them.

The terms "Assignor" and "Assignee", as and when used herein, or any pronouns used in place thereof, shall mean and include the masculine, feminine or neuter, the singular or

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DJ Effective December 30, 2011

plural number, individuals, partnerships, trustees or corporations and their and each of their respective successors, heirs, personal representatives, successors in trust and assigns, according to the context hereof. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed elsewhere herein. The term "Lease", as and when used herein, means the lease or sublease demising the leasehold estate described in Schedule 1, together with all recorded amendments thereof, if any, whether or not listed in Schedule 1. The term "rent", as and when used herein, means and includes all rents, taxes, assessments and any other sums charged pursuant to the Lease.

This instrument may be executed in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute one instrument binding on all the Parties hereto, notwithstanding that all the Parties are not signatory to the original or the same counterpart.

[Signatures for Assignment of Lease and Assumption are on following page.]

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DK Effective December 30, 2011

IN WITNESS WHEREOF, Company and Assignor have executed this instrument as of the date first above written.

By	
ivanic.	
Title:	
Ву	
Name:	
Title:	"Assignor"
	
Ву	
Name:	
Title:	
Ву	
Name:	
Title:	U 3
	"Assignee"

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DL Effective December 30, 2011

STATE OF HAWAII)) SS:
CITY AND COUNTY OF HONOLULU)
me personally appeared	
	Signature:
(Official Stamp or Seal)	Print Name: Notary Public, State of Hawaii My commission expires:
NOTARY CERTIFICATION STATEMENT	<u> </u>
Document Identification or Description:	
Assignment of Lease and Assumption	
Doc. Date: No. of Pages:	
Jurisdiction: Circuit	
(in which notarial act is	s performed
	(Official Stamp or Seal) Notarization and eation Statement
Printed Name of Notary	

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DM Effective December 30, 2011

STATE OF HAWAII)
CITY AND COUNTY OF HONOLULU) SS:)
described in and who executed acknowledged that such persons act and deed of such persons a shown, having been duly author	, 200, before meand, to me known to be the persons the foregoing instrument, and executed such instrument as the free and if applicable in the capacity rized to execute such instrument in
such capacity.	
	Signature:
(Official Stamp or Seal)	Print Name: Notary Public, State of Hawaii
	My commission expires:
NOTARY CERTIFICATION STATEMENT	
Document Identification or Description:	
Assignment of Lease and Assumption	
Doc. Date: No. of Pages:	
Jurisdiction: Circuit	
(in which notarial act is	performed
2 9	(Official Stamp or Seal) Notarization and ation Statement

HAWAII ELECTRIC LIGHT COMPANY, INC.

Order No. 30074 Dated December 30, 2011, Docket No. 2008-0273 Transmittal Letter Dated December 30, 2011.

Printed Name of Notary

SHEET NO. 88.1DN Effective December 30, 2011

SCHEDULE 1

Description of Lease To Be Attached

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DO Effective December 30, 2011

ATTACHMENT J ENERGY PURCHASES BY COMPANY

- Price for Purchase and Rate of Delivery. Subject to the provisions of this Agreement, Company shall accept and pay for Actual Output at the applicable rates set forth in the Schedule FIT Tier 3 beginning on the In-Service Date. Provided, however, that in any Contract Year, if the Actual Output for such Contract Year is in excess of 120% of the Annual Contract Energy for such Contract Year (as determined pursuant to Section 2.2 (Payments for Actual Output) of the Agreement), the price paid for electric energy in excess of such Annual Contract Energy shall be 75% of the otherwise applicable Contract Price for such electric energy.
- 2. Test Energy. Company shall use reasonable efforts to accept test energy that is delivered as part of the normal testing for generators (such as energy delivered to Company during the Control System Acceptance Test but not during the Acceptance Test), provided Seller shall use reasonable efforts to coordinate such normal testing with Company so as to minimize adverse impacts on the Company System and operations. Company shall compensate Seller for test energy as provided in Section 2.5 (Payments Prior to In-Service Date) of the Agreement

SHEET NO. 88.1DP Effective December 30, 2011

ATTACHMENT K GUARANTEED PROJECT MILESTONES

Guaranteed Project

Milestone Date Description of Each Guaranteed Project

Milestone

[Date] Guaranteed In-Service Date

HAWAII ELECTRIC LIGHT COMPANY, INC.

ATTACHMENT L REPORTING MILESTONES

Reporting Milestone Date	Description of Each Reporting Milestone
[Date]	Permit Application Filing Date (as defined in the Definitions section of the Agreement).
[Date]	Seller shall provide Company with a copy of the executed Facility equipment, engineering, procurement and construction ("EPC"), or other general contractor, agreements.
[Date]	Seller shall provide Company with copies of executed purchase orders/contracts for the delivery and installation of Facility turbine(s)/generator(s) and the step-up transformer(s).
[Date]	Seller shall provide Company with copies, as applicable, of executed Facility operating agreements, [electric transmission and/or interconnection agreements (?).]
[Date]	Seller shall provide Seller with documentation that all governmental Permits have been obtained or will be obtained by the time needed to meet all Construction Milestones.
[Date]	Seller shall provide Company with documentation of having achieved closing on financing for the Facility or provided Company with proof of financial capability to construct the Facility. ("Construction Financing Closing Milestone").

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DR Effective December 30, 2011

[Date] Construction Start Date (as defined in

the Definitions section of the

Agreement).

[Date] Seller shall have laid the foundation for

all Facility buildings, generating facilities and step-up transformer

facilities.

[Date] The turbine(s)/generator(s) shall have

been installed at the Site.

[Date] The step-up transformer shall have been

installed at the Site.

[Date] Seller shall have constructed Seller's

Interconnection Facilities and such facilities are capable of being

energized.

[Date] The Acceptance Test of the Facility

commences.

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DS Effective December 30, 2011

ATTACHMENT M FORM OF LETTER OF CREDIT

Page 1 of 2

[Bank Letterhead]

[Date]

Beneficiary: [Hawaiian Electric Company Address]

[Bank's Name] [Bank's Address]

Re: [Beneficiary's Name]
[Beneficiary's Address]

We hereby establish, in your favor, our irrevocable Letter of Credit Number ____ for the account of [Applicant's Name] and [Applicant's Address] in the initial amount of \$___ [dollar value] and authorize you, Hawaiian Electric Company ("Beneficiary"), to draw at sight on [Bank's Name].

Subject to the terms and conditions hereof, this Letter of Credit secures [Account Party]'s certain obligations to Beneficiary under the Power Purchase Agreement dated as of ______ between [Account Party] and Beneficiary.

Partial draws of this Letter of Credit are permitted. This Letter of Credit is not transferable. Drafts on us at sight shall be accompanied by a Beneficiary's signed statement signed by a representative of Beneficiary substantially as follows:

The undersigned hereby certifies that (i) I am duly authorized to execute this document on behalf of Hawaiian Electric Company, and (ii) the amount of the draft accompanying this certification is due and owing to Hawaiian Electric Company under the terms of the Power Purchase Agreement dated as of ______, between _____, and Hawaiian Electric Company.

The amounts of any drafts drawn under this credit are to be endorsed on the reverse side hereof. Such drafts must bear the clause "Drawn under [Bank's Name and Letter of Credit Number and date of Letter of Credit.]"

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 88.1DT Effective December 30, 2011

This letter of credit shall expire one year from the date hereof. Notwithstanding the foregoing, however, this letter of credit shall be automatically extended (without amendment of any other term and without the need for any action on the part of the undersigned or Beneficiary) for one year from the initial expiration date and each future expiration date unless we notify you in writing at least thirty (30) days prior to any such expiration date that this letter of credit will not be so extended. Any such notice shall be delivered by registered or certified mail, or by FedEx, both to [name and address of Beneficiary's Purchased Power Group contact], and to [name and address of Finance Department contact].

We hereby agree with drawers that drafts and documents as specified above will be duly honored upon presentation to [Bank's Name] and [Bank's Address] if presented on or before the thencurrent expiration date hereof.

Payment of any amount under this Letter of Credit by [Bank] shall be made as the Beneficiary shall instruct on the next Business Day after the date the [Bank] receives all documentation required hereunder, in immediately available funds on such date.

Unless otherwise expressly stated herein, this irrevocable standby letter of credit is issued subject to the Uniform Customs and Practice for Documentary Credits, 1993 revision, International Chamber of Commerce publication no. 500.

[Bank's Name]:

By:			
	[Authorized	Signature]	

HAWAII ELECTRIC LIGHT COMPANY, INC.

ATTACHMENT N ACCEPTANCE TEST GENERAL CRITERIA

[THIS ATTACHMENT WILL NEED TO BE MODIFIED BASED ON THE TYPE AND DESIGN OF THE FACILITY]

Upon final completion of Company review of the Facility's drawings, final test criteria and procedures shall be agreed upon by Company and Seller no later than thirty (30) Days prior to conducting the Acceptance Test in accordance with the Agreement. The Acceptance Test may include the following:

1. Interconnection:

- (A) Based on manufacturer's specification, test the local operation of the Facility's ____kV breakers, which connect the Facility to Company System must open and close locally using the local controls. Test and ensure that the status shown on the Energy Management System (EMS) is the same as the actual physical status in the field.
- (B) Remotely test the operation of the Facility's ___kV breakers which connect the Facility to Company System must open and close remotely from Company's EMS. Test and ensure that the status shown on the EMS is the same as the actual physical status in the field.
- (C) Relay test engineers to connect equipment and simulate certain inputs to test and ensure that the protection schemes such as any under/over frequency and under/over voltage protection or the Direct Transfer Trip operate as designed. (For example, a fault condition may be simulated to confirm that the breaker opens to sufficiently clear the fault. Additional scenarios may be tested and would be outlined in the final test criteria and procedures.) Seller to also test the synchronizing mechanisms to which the Facility would be synchronizing and closing into the Company System to ensure correct operation. Other relaying also to be tested as specified in the protection review of the IRS and on the single line diagram, Attachment E (Three-Line Diagram) for the Facility.

HAWAII ELECTRIC LIGHT COMPANY, INC.

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- (D) All ___kV breaker disconnects and other high voltage switches will be inspected to ensure they are properly aligned and operated manually or automatically (if designed).
- (E) Switching Station inspections The Switching Station may be inspected to test and ensure that the equipment that Seller has installed is installed and operating correctly based upon agreed-to design. Wiring may be field verified on a sample basis against the wiring diagrams to ensure that the installed equipment is wired properly. The grounding mat at the Switching Station may be tested to make sure there is adequate grounding of equipment.
- (F) Communication testing Communication System testing to occur to ensure correct operation. Detailed scope of testing will be agreed by Company and Seller to reflect installed systems and communication paths to tie the Facility to Company's communications system.
- (G) Various contingency scenarios to be tested to ensure adequate operation, including testing contingencies such as loss of communications, and fault simulations to ensure that the Facility's ___kV breakers open as they are designed to open. (Back up relay testing)
- 2. Witness of Facility protection scheme testing:
 - (A) Company may have someone on-site when Seller performs any testing dealing with Seller's protection schemes such as any under/over voltage or under/over frequency protection schemes to ensure they meet the performance requirements of this Agreement and the IRS.
- 3. Telephone Communication
 - (A) Test to confirm Company has a direct line to the Facility control room at all times and that it is programmed correctly.
 - (B) Test to confirm that the Facility operators can sufficiently reach Company System Operator.

HAWAII ELECTRIC LIGHT COMPANY, INC.

ATTACHMENT O CONTROL SYSTEM ACCEPTANCE TEST CRITERIA

[THIS ATTACHMENT WILL NEED TO BE MODIFIED BASED ON THE TYPE AND DESIGN OF THE FACILITY]

Final test criteria and procedures shall be agreed upon by Company and Seller no later than thirty (30) Days prior to conducting the Control System Acceptance Test in accordance Good Engineering and Operating Practices and with the terms of this Agreement. The Control System Acceptance Test may include, the following:

1. Ramp Rate Tests

[TO BE DETERMINED.]

2. SCADA Tests

[TO BE DETERMINED.]

- 3. Voltage regulation testing Based on the IRS, test the Facility to hold the ___kV bus voltage as Company System conditions permit.
- 4. Curtailment Control Interface Tests: With the Facility online, test may include the operation and response to setpoint signals to test and ensure that the Facility decreases to the appropriate levels. Testing may also occur to confirm that when the curtailment is lifted, Facility is aware that the curtailment was lifted. Detailed testing steps and procedures will be agreed to by Company and Seller prior to said testing. As an example, Company may send the setpoint signal, verify that the Facility received the signal, determine the setpoint value the Facility received and determine where the Facility settled once it received the signal. Company may verify that the Facility did decrease to the level that was initiated on the EMS.
- 5. Anunciator Tests

[TO BE DETERMINED.]

6. RTU testing to ensure correct operations (note: prior to testing with the actual breaker equipment described above,

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SHEET NO. 88.1DX Effective December 30, 2011

initial testing will most likely be performed at the RTU level) (The RTU is the interface between the EMS and the physical equipment at the Site). Detailed scope and procedures will be agreed to by Seller and Company.

- 7. Analog outputs from Facility to Company:
 - (A) Test in increments without the Facility on-line to determine what analog signals are observed (MW, MVAR, AMPS, KV) and appropriateness of same. (More RTU testing)
 - (B) With the Facility on-line, at various generation levels, test to verify and ensure that what the Facility output shows is identical to the output shown on the EMS.

HAWAII ELECTRIC LIGHT COMPANY, INC.