Residential Net Energy Billing Program for Customer-Sited Solar Photovoltaic Systems

This Agreement is made and entered into this _____day of____, 20___ , ("Effective Date") by and between the Virgin Islands Water and Power Authority ("WAPA" or "Company"), a semi-autonomous agency existing under the laws of the United States Virgin Islands, whose address is P.O. Box 5997 Christiansted, St. Croix, U.S. Virgin Islands 00823, and _____("Customer Address").

1. **REPRESENTATIONS.** The Customer makes the following representations:

   a) Customer owns the home and solar system(s) at the Service Address set forth above.

   b) The solar photovoltaic system(s) for consideration under this agreement is/are:

      Size: _____ KW (DC capacity)

2. **PURCHASE AND SALE.** To support the local production of renewable energy, WAPA desires to purchase, and Customer agrees to sell, any excess Solar Energy production produced at the homeowner's deeded location, at a rate of 75% of the current Levelized Energy Adjustment Clause. This purchase will be compensated in the form of a credit against the energy supplied by the Authority and consumed at the customer's Solar installation service location. This credit will reset to zero at the end of each month.

3. **TERM.** The term of this Agreement shall commence on the Effective Date and shall continue for a period of five (5) years from the date of the first utility bill ("Bill Date") where the Purchase and Sale of Solar Exports have been initiated. This Agreement shall automatically renew for successive Terms of five (5) years hence, unless terminated by written notice of such intention from either party to the other at least sixty (60) days prior to expiration date of the initial Term or subsequent Terms. The Agreement may also be terminated if the customer moves out of the premise and therefore closes the account with WAPA.

Customer initial___

4. TERMS AND CONDITIONS.

a) Customer shall be solely responsible for ensuring that the solar system(s) equipment installed for this program meets all applicable codes, standards, and regulatory requirements.

b) Once approved by WAPA, the system to be installed is enrolled in the NEB Program. The application should include a receipt for Electrical Permit submittal from the Department of Planning and Natural Resources (DPNR) along with all items attached and incorporated herein as Exhibit B.

c) The System will not be eligible for the Net Energy Billing Program classification and meter reprogramming until the final electrical certificate from DPNR is received.

d) Once the final electrical certificate is issued, the items outlined in Exhibit C must be submitted in the NEB application portal.

e) The Customer must receive electric power from WAPA and maintain an account in the Customer's name throughout the term of this Agreement.

f) The Customer must provide WAPA with a copy of the system plans being filed with the Department of Planning and Natural Resources (DPNR) with an engineering stamp.

g) The Customer shall complete a PV Interconnection Application and Compliance Form attached and incorporated herein as Exhibit A and be granted permission by WAPA to interconnect to its electric distribution system prior to the operation of the proposed PV system. The Customer agrees to maintain compliance with all of WAPA's interconnection requirements.

h) If any excess energy is generated by the PV system at the Service Address, WAPA shall receive this excess energy. The Customer will receive compensation for any excess energy in the form of a consumption offset to the Customer's energy consumption as shown on the next billing cycle as set forth in the Company's Net Energy Billing Program. This rate of offset will be 75% of the currently billed Levelized Energy Adjustment Clause. The Customer's "Billed Energy" shall be applied to the applicable standard tariff energy rate and shall be calculated as the difference between the WAPA supplied energy and the energy exported to the WAPA grid from the Customer's PV system.

i) Under the terms of this Agreement, WAPA does not imply any representation or warranty by WAPA of the design, installation or operation of the solar equipment, and WAPA expressly disclaims any and all warranties of the equipment as to workmanship, quality, or performance, including the fitness of the equipment for the purpose intended.

j) WAPA shall not be responsible or liable for any personal injury or property damage caused by the solar system(s) or any individual component equipment of the system(s).

k) Customer shall indemnify, defend, and hold WAPA, its employees, agents, successors, assigns, subsidiaries and affiliates harmless against any and all claims, demands, liens, lawsuits, judgments or actions of whatsoever nature that may be brought on account of the installation, maintenance, operation, repair, or replacement of the Solar system or any component equipment of the system.

l) If any of the representations of the Customer are false or incorrect, such false or incorrect representation shall constitute a material breach of this Agreement.

m) This Agreement shall be exclusively governed by and interpreted in accordance with the laws of the USVI.

n) Customer hereby grants to WAPA, its employees, agents, and contractors a non-exclusive license of free access to all areas where the solar system is installed for any purpose necessary or appropriate to exercise any rights secured to or performance of any obligations imposed by this Agreement.

I acknowledge that I have read the above explanation and understand the content of this agreement.

_____ _____

Customer Signature Effective Date

This document must be completed and signed by the person whose name is on WAPA account._____

Exhibit A Interconnection Application and Compliance Form

A. APPLICANT INFORMATION

* Name: _____ *WAPA Account No.: _____

*Service Rating _____*Mailing Address: _____

*City, State & Zip: _____

Street Address (if different from above): _____

_____City, State & Zip: *Contact Name_____

*Daytime Phone: _____ Fax: _____ Email: _____

B. PHOTOVOLTAIC INFORMATION

*Array DC Power (Watts) _____ * California (CEC) listed equipment .: Yes ☐ No ☐

*Array AC Power (Watts) _____

List Manufacturer/Model No. for *Modules: _____ *Inverter: _____ Batteries (if applicable)_____

Number of batteries_____

*System Location: _____ *Inverter Location: _____Total KWH_____

*AC Disconnect Location: _____

C. INSTALLATION CONTRACTOR INFORMATION

*Installation Contractor Name: _____ *Virgin Islands License No.: _____

*Address: _____

*City, State & Zip: _____

*Daytime Phone: _____ Fax: _____ *Email: _____

Proposed Installation Date:_____*Lic. Electrician name and Lic #_____

D. HARDWARE AND INSTALLATION COMPLIANCE

1. The system hardware is in compliance with Underwriters Laboratories (UL) Standard 1741 SA, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems and UL 1703, Standard for Safety: Flat-Plate Photovoltaic Modules and Panels.
2. The system has/will been/be installed in compliance with IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems the currently adopted National Electrical Code (NEC), and local building codes. As installed, the system meets the technical requirements of the WAPA Interconnection Requirements.
3. All manufacturers' warranties are in effect, and the systems electrical permits have been applied for. Yes ☐ No☐

*Signed (Contractor): _____ *Date: _____

*Name (Print): _____ *Company: _____ *Permit No. _____

E. OWNER ACKNOWLEDGEMENT

I have been given system warranty information, and an operation manual. I have read and agree to comply with WAPA's Interconnection Requirements attached herein as Appendix A. Also, I have been instructed in the operation of the system.

*Signed (Owner): _____ *Date: _____

F. UTILITY APPROVAL

1. Satisfies WAPA's Interconnection Requirements

WAPA's Representative Name (Print): _____

WAPA's Representative Signature: _____ Date: _____

2. System is safe to interconnect

Inspector Name (Print): _____

Inspector Signature: _____ Date: _____

* All areas designated with an * are required. The application will automatically be returned if incomplete.

Appendix A Interconnection Requirements
Renewable Generation Systems

A. Definitions

1. **"**Customer-owned renewable generation system" (RGS) means an electric generating system located on a customer's premise that is primarily intended to offset part or all of the customer's electricity requirements with renewable energy. The term "customer-owned renewable generation" does not preclude the customer of record from contracting for the purchase, lease, operation, or maintenance of an on-site renewable generation system with a third-party under terms and conditions that do not include the retail purchase of electricity from the third-party.

2. "Renewable energy", as defined means electrical, mechanical, or thermal energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power.

3. Photovoltaic (PV) system is a solar electric generator. The array rating is under standard operating conditions (SOC) of 1000 watts/m2 solar irradiance, nominal operating cell temperature, air mass 1.5, and ASTM standard solar spectrum.

4. Inverter, also referred to as a power conditioner, is a DC to AC device that converts PV energy to AC energy for utility interconnection. The inverter contains many control functions, such as voltage and frequency monitoring and protection against islanding.

5. "Gross Power Rating" (GPR) means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generating system that will be interconnected to and operate in parallel with the utility's distribution facilities. For inverter-based systems, the AC nameplate generating capacity shall be calculated by multiplying the total installed DC nameplate generating capacity by .80 in order to account for losses during the conversion from DC to AC.

6. "Non Export" means a photovoltaic system, with or without batteries, that does not generate more electricity than the home and storage device are capable of using, at that moment. Zero export is often used interchangeably with the intent to indicate that no energy is moving from the system to the grid.

B. Standards and Codes

1. Inverters, PV Modules and Panels
   a. Inverter(s) must be listed and in compliance with Underwriters Laboratories (UL) Subject 1741 SA, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems. Utility-interactive inverters that pass the tests of the UL 1741 standard will be, by definition, "non-islanding" inverters and will comply with the IEEE 1547-2003 interconnection standard.

   b. Multiple inverter units. For multiple inverter units, verification that the photovoltaic system ceases to energize within 0.16 seconds (per IEEE 1547-2003), upon loss of sensed voltage, is required. This is verified with on-site testing.

   c. PV modules must be listed and be in compliance with Underwriters Laboratories (UL) Standard 1703, Standard for Safety: Flat-Plate Photovoltaic Modules and Panels and certified as such by a nationally recognized testing lab.

   d. PV modules must be in compliance with IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules.

2. System Installation. Customers certify that the RGS installed shall be in compliance with the following standards:

    a. IEEE-1547 (2017) Standard for Interconnecting Distributed Resources with Electric Power Systems

    b. IEEE-1547.1 (2017) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

    c. UL-1741SA Inverters, Converters, Controllers and Interconnection System Equipment for use with Distributed Energy Resources

    d. Currently adopted National Electric Code, all relevant articles (or subsequent revisions) and local building codes

    e. All storage system installations are to adhere to NFPA 855.

    f. All systems will have a red safety placard with white lettering, at least 5" x 5", indicating all generation resources, their location, and their disconnects, mounted on or at the main meter or breaker. The system disconnect need to be accessible to first responders, the fire department, and WAPA personnel.

    g. All locations with a Solar and Storage system will have a Service weather head that's painted green.

3. GPR

    a. The GPR shall not exceed 100% of the Customer's utility distribution service rating at the Customer's location. If the GPR does exceed that 100% limit, the Customer shall be responsible to pay the cost of upgrades for that distribution service to accommodate the GPR capacity and ensure the 100% threshold is not breached.

    b. It is the Customer's responsibility to notify WAPA of any change to the GPR by submitting a new Interconnection Application and Compliance Form specifying the modifications at least 30 days prior to making the modifications.

4. WAPA Inspection and Approval.

    a. After the initial application is approved by WAPA, the Customer shall have the RGS inspected and approved by the appropriate local code authorities having jurisdiction.
    b. Once a final electrical certificate is received from DPNR this along with photographic evidence of the safety placard and physical address, on or in immediate proximity to the main meter, and green painted weather head , as outlined in Act 7075, will be relayed to the VIEnergize program managers for confirmation and and subsequent work order for meter reprogramming or replacement under the NEB tariff structure. (Exhibit C)
    c. Prior to operation, WAPA reserves the right to inspect the RGS installation to ensure compliance with the standards and codes noted in the previous sections. If WAPA chooses to exercise this option, it agrees to inspect and, if the system is in compliance, provide written approval of the interconnection (using the Interconnection Application and Compliance Form) within 30 working days following the request for inspection and approval. Parallel operation of the RGS with the grid shall not begin without the approval of WAPA. The customer must notify WAPA of any modifications at least 30 days prior to making the modifications.

5. Islanding. The Customer shall not energize WAPA's system when it is de-energized. The Customer shall cease to energize WAPA's system during a faulted condition on WAPA's system. The Customer shall cease to energize WAPA's system prior to the automatic or non-automatic reclosing of WAPA's protective device(s). There shall be no intentional islanding, as described in IEEE 1547, between the Customer's and WAPA's systems.

6. Extreme Conditions. WAPA reserves the right to refuse to accept electric power from the PV system under extreme conditions as described below. If WAPA chooses to exercise this option, which may involve physically disconnecting from the PV system, it agrees to notify the Customer when such conditions exist or are anticipated, and to reconnect when the adverse conditions no longer exist. Examples of conditions that may lead to disconnection include:

    a. WAPA system emergencies and/or maintenance requirements,

    b. Hazardous conditions existing on the RGS or its protective equipment,

    c. Adverse effects of the RGS operation on other WAPA customers, or failure of the RGS complying with regulations, rules, orders or decisions of any government or regulatory authority having jurisdiction over the generating equipment or operation.

7. External Disconnect Switch.

    a. For all RGS, WAPA requires an isolation device or means to disconnect, to isolate the system from the grid.

8. Testing of Protective Relays. WAPA reserves the right to review periodic test reports as required per IEEE 1547-2003.

9. RGS Equipment Protection. It is the responsibility of the Customer to protect its generating equipment, inverters, protection devices, and other system components from damage by the normal conditions and operations that occur on the part of WAPA in delivering and restoring system power. The customer is also responsible for ensuring that its RGS equipment is inspected, maintained and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.

10. If your system was installed between 2/01/2024 and now, and you have the final electrical certificate from DPNR, then refer to Exhibit C.

11. All Photovoltaic systems over 15kwdc, with or without storage, will require a grid hosting capacity analysis. If larger than 250kwdc, an interconnection feasibility study agreement will also be required. This is to ensure grid stability and provide access to all ratepayers in the territory. Please contact the VIEnergize Office at brian.walden@viwapa.vi if you are proposing a system larger than 250kwdc.

12. In the event the grid hosting capacity analysis indicates a transformer is not capable of safely interconnecting to the increased export in a given area, then the authority reserves the right to allow interconnection only in a "NON EXPORT" configuration.

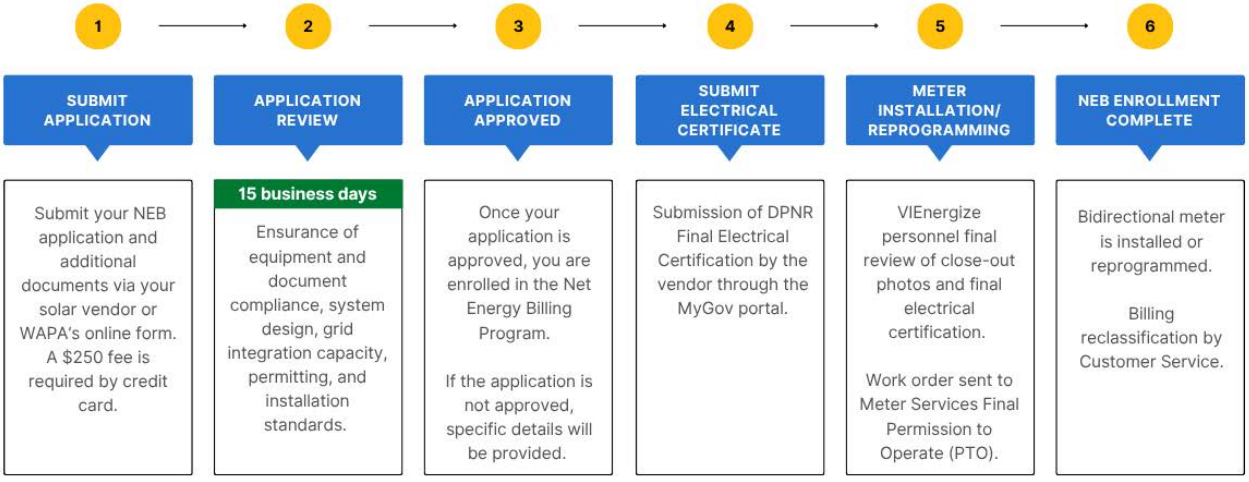
14. List of documents required for initial approval:

- ☐ WAPA bill
- ☐ Deed
- ☐ Screen shot of Application fee payment through the traditional means of payment to the Authority
- ☐ Stamped Engineering Drawings with Single Line Drawing (SLD)
- ☐ Copy of the DPNR Electrical permit application receipt
- ☐ Equipment Specification Sheets (Racking and Attachments, Solar panels, Storage device, Inverters)
- ☐ Picture of the Meter and Main breaker from approx. 6' away
- ☐ Picture of the interior of the main breaker enclosure with the terminals and wire visible (you must be a qualified electrical worker to remove the enclosure cover)
- ☐ Picture of the Roof projection/s to be used for installation of panels
- ☐ Picture of where the battery and switchgear are to be located
- ☐ Picture of interconnection location (Please note that any new structures constructed to facilitate the solar and storage equipment installation will have different DPNR permitting and inspection requirements.)

VIEnergize
Be Empowered.

Getting Started with Net Energy Billing (NEB)

Thinking about powering your home or business with solar? We're here to help! Below is a step-by-step overview of the Net Energy Billing (NEB) application process, from application to enrollment — so you'll know exactly what to expect. Let's get started on your path to cleaner, more sustainable energy!



Applications and all required supporting documentation may be submitted electronically via email to NEBapply@viwapa.vi.

SUBMIT

Exhibit B List of Required Documents for WAPA NEB Application and Interconnection Agreement (System is not installed yet)

- ☐ WAPA bill
- ☐ Deed
- ☐ Screen shot of Application fee payment through PayPal
- ☐ Stamped Engineering Drawings with Single Line Drawing (SLD)
- ☐ Copy of the DPNR Electrical permit application receipt
- ☐ Equipment Specification Sheets (racking and attachments, Solar panels, Storage device, Inverters)
- ☐ Picture of the Meter and Main breaker from approx. 12’ away (to determine access, condition, and suitability)
- ☐ Picture of the interior of the main breaker enclosure with the terminals and wire visible(Must be a qualified electrical worker to remove the front)
- ☐ Picture of the Roof projection/s to be used for installation of panels
- ☐ Picture of where the battery and switchgear are to be located
- ☐ Picture of interconnection location (Please note that any new structures constructed to facilitate the solar and storage equipment installation will have different DPNR permitting and inspection requirements.)

Applications and all required supporting documentation may be submitted electronically via email to NEBapply@viwapa.vi.

SUBMIT

Exhibit C Final Inspection Items
(You have the final electrical certificate from DPNR)

☐ Copy of the final electrical certificate from DPNR

☐ Picture of the safety placard and address on the meter monument or meter can from 10' away (All systems will have a red safety placard with white lettering, at least 5” x 5”, legibly indicating all generation resources, their location, and their disconnects, mounted on or at the main meter or breaker. System disconnects need to be accessible to first responders, the fire department, and WAPA personnel.)

☐ Picture of the green painted weather head

☐ NEB application and Interconnection agreement completed in MyGov

*NOTE: The address should consist of lettering at least 1 inch tall, oriented in a left to right horizontal manner. The access to the meter socket should be clear of all debris and vegetation to allow easy access.

Applications and all required supporting documentation may be submitted electronically via email to NEBapply@viwapa.vi.

SUBMIT