

230203

OCALA ELECTRIC UTILITY
OCALA, FLORIDA

FIRST REVISED SHEET NO. 19.0
CANCELS ORIGINAL SHEET NO. 19.0

**APPLICATION FOR INTERCONNECTION OF
CUSTOMER-OWNED RENEWABLE
GENERATION SYSTEMS**

TIER 1 - Ten (10) kW or Less

TIER 2 - Greater than 10 kW and Less Than or Equal to 100 kW

TIER 3 - Greater than 100 kW and Less Than or Equal to Two (2) MW

Note: These customer-owned renewable generation system size limits may be subject to a cumulative enrollment limit on net-metering customers located in the area served by the City of Ocala Electric Utility. Please refer to the Ocala Electric Utility Net-Metering Rate Schedule.

Ocala Electric Utility customers who install customer-owned renewable generation systems (RGS) and desire to interconnect those facilities with the Ocala Electric Utility system are required to complete this application. When the completed application and fees are returned to Ocala Electric Utility, the process of completing the appropriate Tier 1, Tier 2 or Tier 3 Interconnection Agreement can begin. This application and copies of the Interconnection Agreements may be obtained at Ocala Electric Utility, located at 201 SE 3rd Street, Ocala, Florida 34471, or may be requested by email from OEU@ocalafl.org.

1. Customer Information

Name: Virginia C Norris

Mailing Address: 901 SE 52nd Ct

City: Ocala, State: FL Zip Code: 34471

Phone Number: 859-230-4573 Alternate Phone Number:

Email Address: bassdarrin8@gmail.com Fax Number:

Ocala Electric Utility Customer Account Number: 513228-211492

2. RGS Facility Information

Facility Location: 901 SE 52nd Ct FL 34471

Ocala Electric Utility Customer Account Number: 513228-211492

RGS Manufacturer: Hanwha Q Cells

Manufacturer's Address: 400 Spectrum Center Dr. Suite 1400
Irvine, CA 92618

Reference or Model Number: Hanwha Q.peak duo blk ml-g10+ 400W

Serial Number: 2011223135784022775

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Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

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3. Facility Rating Information

Gross Power Rating: 24.480 ("Gross power rating" means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with Ocala Electric 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 0.85 in order to account for losses during the conversion from DC to AC.)

Fuel or Energy Source: Solar Photovoltaic

Anticipated In- Service Date: 08/30/2022

4. Application Fee

The application fee is based on the Gross Power Rating and must be submitted with this application. The non-refundable application fee is \$375 for Tier 2 and \$750 for Tier 3 installations. There is no application fee for Tier 1 installations.

5. Interconnection Study Fee

For Tier 3 installations, a deposit in the amount of the estimated costs of the study (to be determined at time of application) must be paid along with this application in addition to the application fee referenced in Article 4 above. This deposit will be applied toward the cost of an interconnection study. The customer will be responsible for the actual costs of the study. Should the actual cost of the study be less than the deposit, the difference will be refunded to the customer. Customer agrees to comply with all interconnection requirements identified in the interconnection study report.

6. Required Documentation

Prior to completion of the Interconnection Agreement, the following information must be provided to the Ocala Electric Utility by the customer.

- A. Documentation demonstrating that the installation complies with (or most current version at time of inspection approval):
1. IEEE 1547 (2018) Standard for Interconnecting Distributed Resources with Electric Power Systems.
 2. IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems.
 3. UL 1741 (2010) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.

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Issued by: Michael Poucher, P.E.
Electric Utility Director

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B. Documentation that the customer-owned renewable generation has been inspected and approved by local code officials prior to its operation in parallel with the Ocala Electric Utility system to ensure compliance with applicable local codes. OEU will also require proof of **commission** testing by a qualified 3rd party testing company (not affiliated in any way with the **manufacturer**, vendor or installation contractor), for compliance with all required and applicable codes, standards, and interconnection study requirements, prior to setting of OEU metering equipment.

C. Proof of insurance in the amount of:
Tier 1 - \$100,000.00
Tier 2 - \$1,000,000.00
Tier 3 - \$2,000,000.00

Customer

By: Virginia C Norris Date: 10-24-22
(Print Name)

Virginia C. Norris
(Signature)

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

OCALA ELECTRIC UTILITY
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FIRST REVISED SHEET NO. 22.0
CANCELS ORIGINAL SHEET NO. 22.0

Tier 2
Standard Interconnection Agreement
Customer-Owned Renewable Generation System

This **Agreement** is made and entered into this 14th day of October, 2022, by and between Virginia C Norris, (hereinafter called "**Customer**"), located at 901 SE 52nd Ct in Ocala, Florida, and the City of Ocala doing business as Ocala Electric Utility (hereafter called "**OEU**"), a body politic. Customer and OEU shall collectively be called the "**Parties**". The physical location/premise where the inter-connection is taking place: 901 SE 52nd Ct FL 34471.

WITNESSETH

Whereas, a Tier 2 Renewable Generation System (RGS) is an electric generating system that uses one or of more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power as defined in Section 377.803, Florida Statutes, rated at more than 10 kilowatts (10 kW) but not greater than 100 kilowatts (100 kW) alternating current (AC) power output and is primarily intended to offset part or all of the customer's current electric requirements; and

Whereas, OEU operates an electric system serving parts of the City of Ocala and Marion County; and

Whereas, Customer has made a written Application to OEU, a copy being attached hereto, to interconnect its RGS with OEU's electrical supply grid at the location indentified above; and

Whereas, the City of Ocala and the Florida Municipal Power Agency (hereinafter called "FMPA") have entered into the All-Requirements Power Supply Contract pursuant to which OEU has agreed to purchase and receive, and FMPA has agreed to sell and supply OEU with all energy and capacity necessary to operate OEU's electric system, which limits OEU's ability to directly purchase excess energy from customer-owned renewable generation; and

Whereas, in order to promote the development of small customer-owned renewable generation by permitting OEU to allow its customers to interconnect with OEU's electric system and to allow OEU customers to offset their electric consumption with customer-owned renewable generation, FMPA, in accordance with the terms and conditions of this agreement, has agreed to purchase excess customer-owned generation from OEU customers interconnected to OEU's electric system; and

Whereas, OEU desires to provide interconnection of a RGS under conditions which will insure the safety of OEU customers and employees, reliability and integrity of its distribution system;

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Electric Utility Director

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FIRST REVISED SHEET NO. 22.1
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NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein set forth, the parties hereto covenant and agree as follows:

1. The Customer shall be required to enter into a Tri-Party Net-Metering Purchase Power Agreement with FMPA and OEU.
2. "Gross power rating" (GPR) means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with OEU distribution facilities. For inverter-based systems, the GPR shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC.
3. This agreement is strictly limited to cover a Tier 2 RGS as defined above. It is the Customer's responsibility to notify OEU of any change to the GPR of the RGS by submitting a new application for interconnection specifying the modifications at least 30 days prior to making the modifications. In no case should modifications to the RGS be made such that the GPR increases above the 100 kilowatts (100 kW) limit.
4. The RGS GPR must not exceed 90 percent (90%) of the Customer's OEU calculated distribution service rating at the Customer's location (including shared electric facilities). If the GPR does exceed the 90 percent (90%) limit, the Customer shall be responsible to pay the cost of upgrades to the distribution facilities required to accommodate the GPR capacity and ensure the 90 percent (90%) threshold is not breached. OEU will not allow a RGS GPR greater than required to offset the customer's annual kWh energy consumption (based on customer's historical consumption data or by means of estimated usage of similar type of service as determined by OEU).
5. The Customer shall be required to pay a non-refundable application fee of \$375 for the review and processing of the application.
6. The Customer shall fully comply with OEU's Rules and Regulations and Electric Service Specifications as those documents may be amended or revised by OEU from time to time.
7. The Customer certifies that its installation, its operation and its maintenance shall be in compliance with the following standards (or most current version at time of inspection approval):
 - a. IEEE-1547 (2018) Standard for Interconnecting Distributed Resources with Electric Power System;
 - b. IEEE-1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnection Distributed Resources with Electric Power Systems;
 - c. UL-1741 (2010) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed *Energy Resources*.

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- d. The National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes;
 - e. The manufacturer's installation, operation and maintenance instructions.
8. The Customer is not precluded from contracting for the lease, operation or maintenance of the RGS with a third party. Such lease may not provide terms or conditions that provide for any payments under the agreement to any way indicate or reflect the purchase of energy produced by the RGS. Customer shall not enter into any lease agreement that results in the retail purchase of electricity; or the retail sale of electricity from the customer-owned renewable generation. Notwithstanding this restriction, in the event that Customer is determined to have engaged in the retail purchase of electricity from a party other than OEU, then Customer shall be in breach of this Agreement and may be subject to the jurisdiction of the Florida Public Service Commission and to fines/penalties.
9. The Customer shall provide a copy of the manufacturer's installation, operation and maintenance instructions to OEU. If the RGS is leased to the Customer by a third party, or if the operation or maintenance of the RGS is to be performed by a third party, the lease and/or maintenance agreements and any pertinent documents related to these agreements shall be provided to OEU.
10. Prior to commencing parallel operation with OEU's electric system, Customer shall have the RGS inspected and approved by the appropriate code authorities having jurisdiction. Customer shall provide a copy of this inspection and approval to OEU.
11. The Customer agrees to permit OEU, if it should so choose, to inspect the RGS and its component equipment and the documents necessary to ensure compliance with this Agreement both before and after the RGS goes into service and to witness the initial testing of the RGS equipment and protective apparatus. OEU will provide Customer with as much notice as reasonably possible, either in writing, email, facsimile or by phone as to when OEU may conduct inspections and or document review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Customer agrees to provide OEU access to the Customer's premises for any purpose in connection with the performance of the obligations required by this Agreement or, if necessary, to meet OEU's legal obligation to provide service to its customers. At least ten (10) business days prior to initially placing the customer-owned renewable generation system in service, Customer shall provide written notification to OEU advising OEU of the date and time at which Customer intends to place the system in service, and OEU shall have the right to have personnel present on the in-service date in order to ensure compliance with the requirements of this Agreement.

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Electric Utility Director

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12. The Customer's RGS must have an appropriately sized grid-tie inverter system that includes applicable protective systems. Customer certifies that the RGS equipment includes a utility-interactive inverter or interconnection system equipment that ceases to interconnect with the OEU system upon a loss of OEU power. The inverter shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing laboratory (NRTL) to comply with UL 1741. The NRTL shall be approved by the Occupational Safety & Health Administration (OSHA).

13. If Customer adds another RGS which (i) utilizes the same utility-interactive inverter for both systems; or (ii) utilizes a separate utility-interactive inverter for each system, then Customer shall provide OEU with sixty (60) days advance written notice of the addition.

14. The Customer shall not energize the OEU system when OEU's system is deenergized. The Customer shall cease to energize the OEU system during a faulted condition on the OEU system and/or upon any notice from OEU that the deenergizing of Customer's RGS equipment is necessary. The Customer shall cease to energize the OEU system prior to automatic or non-automatic reclosing of OEU's protective devices. There shall be no intentional islanding, as described in IEEE 1547, between the Customer's and OEU's systems.

15. The Customer is responsible for the protection of its generation equipment, inverters, protection devices, and other system components from damage from the normal and abnormal operations that occur on OEU's electric system in delivering and restoring system power. Customer agrees that any damage to any of its property, including, without limitation, all components and related accessories of its RGS system, due to the normal or abnormal operation of OEU's electric system, is at Customer's sole risk and expense. Customer is also responsible for ensuring that the customer-owned renewable generation equipment is inspected, maintained, and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.

16. The Customer must install, at their expense, a manual disconnect switch of the visible load break type to provide a separation point between the AC power output of the customer-owned renewable generation system and any Customer wiring connected to OEU's electric system such that back feed from the customer-owned renewable generation system to OEU's electric system cannot occur when the switch is in the open position. The manual disconnect switch shall be mounted separate from the meter socket on an exterior surface adjacent to the meter. The switch shall be readily accessible to OEU and capable of being locked in the open position with an OEU padlock. When locked and tagged in the open position by OEU, this switch will be under the control of OEU.

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Electric Utility Director

Effective: October 1, 2019

17. Subject to an approved inspection, including installation of acceptable disconnect switch, this Agreement shall be executed by OEU within thirty (30) calendar days of receipt of a completed application. Customer must execute this Agreement and return it to OEU at least thirty (30) calendar days prior to beginning parallel operations with OEU's electric system, subject to the requirements of Sections 18 and 19, below, and within one (1) year after OEU executes this Agreement.

18. Once OEU has received Customer's written documentation that the requirements of this Agreement have been met, all agreements and documentation have been received and the correct operation of the manual switch has been demonstrated to an OEU representative, OEU will, within fifteen (15) business days, send written notice that parallel operation of the RGS may commence.

19. OEU requires the Customer to maintain general liability insurance for personal injury and property damage in the amount of not less than one million dollars (\$1,000,000.00).

20. OEU will furnish, install, own and maintain metering equipment capable of measuring the flow of kilowatt-hours (kWh) of energy. The Customer's service associated with the RGS will be metered to measure the energy delivered by OEU to Customer, and also measure the energy delivered by Customer to OEU. Customer agrees to provide safe and reasonable access to the premises for installation, maintenance and reading of the metering and related equipment. The Customer shall not be responsible for the cost of the installation and maintenance of the metering equipment necessary to measure the energy delivered by the Customer to OEU.

21. The Customer shall be solely responsible for all legal and financial obligations arising from the design, construction, installation, operation, maintenance and ownership of the RGS.

22. The Customer must obtain all permits, inspections and approvals required by applicable jurisdictions with respect to the generating system and must use a licensed, bonded and insured contractor to design and install the generating system. The Customer agrees to provide OEU with a copy of the local building code official inspection and certification of installation. The certification shall reflect that the local code official has inspected and certified that the installation was permitted, has been approved, and has met all electrical and mechanical qualifications.

23. In no event shall any statement, representation, or lack thereof, either express or implied, by OEU, relieve the Customer of exclusive responsibility for the Customer's system. Specifically, any OUS inspection of the RGS shall not be construed as confirming or endorsing the system design or its operating or maintenance procedures or as a warranty or guarantee as to the safety, reliability, or durability of the RGS. OEU's inspection, acceptance, or its failure to inspect shall not be deemed an endorsement of any RGS equipment or procedure. Further, as set forth in Sections 15 and 26 of this Agreement, Customer shall remain solely responsible for any and all losses, claims, damages and/or expenses related in any way to the operation or misoperation of its RGS equipment.

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Effective: October 1, 2019

24. Notwithstanding any other provision of this Interconnection Agreement, OEU, at its sole and absolute discretion, may isolate the Customer's system from the distribution grid by whatever means necessary, without prior notice to the Customer. To the extent practical, however, prior notice shall be given. The system will be reconnected as soon as practical once the conditions causing the disconnection cease to exist. OEU shall have no obligation to compensate the Customer for any loss of energy during any and all periods when Customer's RGS is operating at reduced capacity or is disconnected from OEU's electrical distribution system pursuant to this Interconnection Agreement. Typical conditions which may require the disconnection of the Customer's system include, but are not limited to, the following:

- a. OEU utility system emergencies, forced outages, uncontrollable forces or compliance with prudent electric utility practice.
- b. When necessary to investigate, inspect, construct, install, maintain, repair, replace or remove any OEU equipment, any part of OEU's electrical distribution system or Customer's generating system.
- c. Hazardous conditions existing on OEU's utility system due to the operation of the Customer's generation or protective equipment as determined by OEU.
- d. Adverse electrical effects (such as power quality problems) on the electrical equipment of OEU's other electric consumers caused by the Customer's generation as determined by OEU.
- e. When Customer is in breach of any of its obligations under this Interconnection Agreement or any other applicable policies and procedures of OEU.
- f. When the Customer fails to make any payments due to OEU by the due date thereof.

25. Upon termination of services pursuant to this Agreement, OEU shall open and padlock the manual disconnect switch and remove any additional metering equipment related to this Agreement. At the Customer's expense, within thirty (30) working days following the termination, the Customer shall permanently isolate the RGS and any associated equipment from OEU's electric supply system, notify OEU that the isolation is complete, and coordinate with OEU for return of OEU's lock.

26. To the fullest extent permitted by law, and in return for adequate, separate consideration, Customer shall indemnify, defend and hold harmless OEU, any and all of their members of its governing bodies, and its officers, agents, and employees for, from and against any and all claims, demands, suits, costs of defense, attorneys' fees, witness fees of any type, losses, damages, expenses, and liabilities, whether direct, indirect or consequential, related to, arising from, or in any way connected with:

- a. Customer's design, construction, installation, inspection, maintenance, testing or operation of Customer's generating system or equipment used in connection with this Interconnection Agreement, irrespective of any fault on the part of OEU.

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Electric Utility Director

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- b. The interconnection of Customer's generating system with, and delivery of energy from the generating system to, OEU's electrical distribution system, irrespective of any fault on the part of OEU.
- c. The performance or nonperformance of Customer's obligations under this Interconnection Agreement or the obligations of any and all of the members of Customer's governing bodies and its officers, contractors (and any subcontractor or material supplier thereof), agents and employees.

Customer's obligations under this Section shall survive the termination of this Interconnection Agreement.

27. Customer shall not have the right to assign its benefits or obligations under this Agreement without OEU's prior written consent and such consent shall not be unreasonably withheld. If there is a change in ownership of the RGS, Customer shall provide written notice to OEU at least thirty (30) days prior to the change in ownership. The new owner will be required to assume, in writing, the Customer's rights and duties under this Agreement, or execute a new Standard Interconnection Agreement. The new owner shall not be permitted to net meter or begin parallel operations until the new owner assumes this Agreement or executes a new Agreement.

28. This Agreement supersedes all previous agreements and representations either written or verbal heretofore made between OEU and Customer with respect to matters herein contained. This Agreement, when duly executed, constitutes the only Agreement between parties hereto relative to the matters herein described. This Agreement shall continue in effect from year to year until either party gives sixty (60) days notice of its intent to terminate this Agreement.

29. This Agreement shall be governed by and construed and enforced in accordance with the laws, rules and regulations of the State of Florida and OEU's tariff as it may be modified, changed, or amended from time to time, including any amendments modification or changes to OEU's Net-Metering Service Rate Schedule, the schedule applicable to this Agreement. The Customer and OEU agree that any action, suit, or proceeding arising out of or relating to this Interconnection Agreement shall be initiated and prosecuted in the state court of competent jurisdiction located in Marion County, Florida, and OEU and the Customer irrevocably submit to the jurisdiction and venue of such court. To the fullest extent permitted by law, each Party hereby irrevocably waives any and all rights to a trial by jury and covenants and agrees that it will not request a trial by jury with respect to any legal proceeding arising out of or relating to this Interconnection Agreement.

None of the provisions of this Interconnection Agreement shall be considered waived by either Party except when such waiver is given in writing. No waiver by either Party of any one or more defaults in the performance of the provisions of this Interconnection Agreement shall operate or be construed as a waiver of any other existing or future default or defaults. If any one or more of the provisions of this Interconnection Agreement or the applicability of any provision to a

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Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

specific situation is held invalid or unenforceable, the provision shall be modified to the minimum extent necessary to make it or its application valid and enforceable, and the validity and enforceability of all other provisions of this Interconnection and all other applications of such provisions shall not be affected by any such invalidity or unenforceability. This Interconnection Agreement does not govern the terms and conditions for the delivery of power and energy to non-generating retail customers of OEU's electrical distribution system.

30. This Agreement incorporates by reference the terms of the tariff filed with the Florida Public Service Commission by OEU, including OEU's Net-Metering Service Rate Schedule, and associated technical terms and abbreviations, general rules and regulations and standard electric service requirements (as may be applicable) are incorporated by reference, as amended from time to time. To the extent of any conflict between this Agreement and such tariff, the tariff shall control.

31. OEU and Customer recognize that the Florida Statutes and/or the Florida Public Service Commission Rules, including those directly addressing the subject of this Agreement, may be amended from time to time. In the event that such statutes and/or rules are amended that affect the terms and conditions of this Agreement, OEU and Customer agree to supersede and replace this Agreement with a new Interconnection Agreement which complies with the amended statutes/rules.

32. Customer acknowledges that its provision of electricity to OEU hereunder is on a first-offered first-accepted basis and subject to diminution and/or rejection in the event the total amount of electricity delivered to OEU pursuant to the OEU's Net-Metering Service Rate Schedule (as filed with the Florida Public Service Commission), from all participating OEU customers, exceeds 2.5 percent (%) of the aggregate customer peak demand on OEU's electric system.

33. This Agreement is solely for the benefit of OEU and Customer and no right nor any cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than OEU or Customer, any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and, all provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and be binding upon OEU and Customer and their respective representatives, successors, and assigns. Further, no term or condition contained in this Agreement shall be construed in any way as a waiver by OEU of the sovereign immunity applicable to OEU as established by Florida Statutes, 768.28.

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Electric Utility Director

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OCALA ELECTRIC UTILITY
OCALA, FLORIDA
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FIRST REVISED SHEET NO. 22.8
CANCELS ORIGINAL SHEET NO. 22.8

IN WITNESS WHEREOF, Customer and OEU have executed this Agreement the day and year first above written.

OUS:

Customer:

By: Ken Whitehead

By: Virginia C Norris
(Print Name)

Title: Asst. City Manager

Virginia C. Norris
(Signature)

Date: 02 / 10 / 2023

Date: 10-24-22

City of Ocala Electric Utility Account Number:
513228-211492

Approved as to form and legality:

William E. Sexton
William E. Sexton
City Attorney

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

Tri-Party Net-Metering Power Purchase Agreement

This Tri-Party Net-Metering Power Purchase Agreement (this "Agreement") is entered into this 14th day of October, 2022, by and between the Florida Municipal Power Agency, a governmental joint action agency created and existing under the laws of the State of Florida (hereinafter "FMPA"), the City of Ocala doing business as Ocala Electric Utility, a body politic (hereinafter "OEU"), and Virginia C Norris, a retail electric customer of OEU (hereinafter "Customer").

Section 1. Recitals

1.01. OEU and Customer have executed OEU's Standard Interconnection Agreement for a Customer-Owned Renewable Generation System (RGS) pursuant to which OEU has agreed to permit interconnection of Customer's renewable generation to OEU's electric system at Customer's presently-metered location, and Customer has agreed to deliver excess electric energy generated by Customer's Renewable Generation System to OEU's electric distribution system;

1.02. The City of Ocala and FMPA have entered into the All-Requirements Power Supply Contract, dated as of May 1, 1986, (hereinafter the "ARP Contract") pursuant to which the City of Ocala has agreed to purchase and receive, and FMPA has agreed to sell and supply OEU with all energy and capacity necessary to operate the OEU electric system, which limits OEU's ability to directly purchase excess energy from customer-owned renewable generation.

1.03. In order to promote the development of small customer-owned renewable generation by permitting OEU to allow its customers to interconnect with OEU's electric system and to allow OEU's electric customers to offset their electric consumption with customer-owned renewable generation, FMPA, in accordance with the terms and conditions of this agreement, has agreed to purchase excess customer-owned generation from OEU's electric customers interconnected to OEU's electric system.

NOW THEREFORE, for and in consideration of the mutual covenants and agreements set forth herein, the Parties covenant and agree as follows:

Section 2. Interconnection

2.01. Customer shall not begin parallel operations with the OEU electric distribution system until Customer has executed OEU's electric Standard Interconnection Agreement for Small Customer-Owned Renewable Generation and is in compliance with all terms and conditions

OEU requires that the customer install and operate the RGS in accordance with all applicable safety codes and standards. OEU shall establish and enforce terms and conditions of operation and disconnection of all interconnected customer-owned renewable generation as it relates to the effect of the RGS on OEU's electric distribution system.

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Section 3. Metering

3.01 In accordance with the OEU's Standard Interconnection Agreement for Customer-Owned Renewable Generation, OEU shall install metering equipment at the point of delivery capable of recording two separate kWh meter readings: (1) the flow of electricity from OEU to the Customer (Delivered), and (2) the flow of excess electricity from the Customer to OEU. OEU shall take meter readings on the same cycle as the otherwise applicable rate schedule.

Section 4. Purchase of Excess Customer-Owned Renewable Generation

4.01. Customer-owned renewable generation shall be first used for Customer's own load and shall offset Customer's demand for OEU's electricity. All electric power and energy delivered by OEU to Customer shall be received and paid for by Customer to OEU (Received) pursuant to the terms, conditions and rates of the OEU otherwise applicable rate schedule.

4.02. Excess customer-owned renewable generation shall be delivered to the OEU Electric distribution system. For purposes of this Agreement, the term "excess customer-owned renewable generation" means any kWh of electrical energy produced by the customer-owned renewable generation system that is not consumed by Customer and is delivered to the OEU electric distribution system. FMPA agrees to purchase and receive, and Customer agrees to sell and deliver, all excess customer-owned renewable generation at the energy rate established by FMPA, which shall be calculated in accordance with Schedule A. Excess customer-owned renewable generation shall be purchased in the form of a credit on Customer's monthly energy consumption bill from OEU.

4.03. In the event that a given monthly credit for excess customer-owned renewable generation exceeds the total billed amount for Customer's consumption in any corresponding month, then the excess credit shall be applied to the subsequent month's bill. Excess energy credits produced pursuant to the preceding sentence shall accumulate and be used to offset Customer's energy consumption bill for a period of not more than twelve (12) months. At the end of each calendar year, any unused excess energy credits shall be paid by OEU to the Customer in accordance with the OEU Electric Net-Metering Service Rate Schedule.

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Issued by: Michael Poucher, P.E.
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Effective: October 1, 2019

4.04. FMPA and OEU shall not be required to purchase or receive excess customer-owned renewable generation, and may require Customer to interrupt or reduce production of customer-owned renewable generation, (a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any OEU equipment or part of OEU's system; or (b) if either FMPA or OEU determine, in their sole judgment, that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with any applicable electric code or standard.

4.05. Customer acknowledges that its provision of electricity to OEU hereunder is on a first-offered, first-accepted basis and subject to diminution and/or rejection in the event the total amount of electricity delivered to OEU pursuant to the Net-Metering Service Rate Schedule (as filed with the Florida Public Service Commission), from all participating OEU customers, exceeds two and one-half percent (2.5%) of the aggregate customer peak demand on the OEU electric system.

Section 5. Renewable Energy Credits

5.01. Customer shall offer FMPA a first right of refusal before selling or granting to any third party the right to the Green Attributes associated with its customer-owned renewable generation that is interconnected to OEU electric distribution system. The term "Green Attributes" shall include any and all credits, certificates, benefits, environmental attributes, emissions reductions, offsets, and allowances, however entitled, attributable to the generation of electricity from the customer-owned-renewable generation and its displacement of conventional energy generation.

5.02. Any additional meter(s) installed to measure total renewable electricity generated by the Customer for the purposes of measuring Green Attributes, including and renewable energy certificates (or similarly titled credits for renewable energy generated), shall be installed at the expense of the Customer, unless determined otherwise during negotiations for the sale of the Customer's credits to FMPA.

Section 6. Term and Termination

6.01. This Agreement shall become effective upon execution by all Parties, and shall remain in effect thereafter on a month-to-month basis until terminated by any Party upon thirty (30) days written notice to all other Parties.

6.02. This Agreement shall terminate immediately and without notice upon: (a) termination of the electric distribution service by OEU or (b) failure by Customer to comply with any of the terms and conditions of this Agreement or OEU's Standard Interconnection Agreement for Customer-Owned Renewable Generation.

(Continued on Sheet No. 20.3)

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

Section 7. Miscellaneous Provisions

7.01. Assignment. It is understood and agreed that no party may transfer, sell, mortgage, pledge, hypothecate, convey, designate, or otherwise assign this Agreement, or any interest herein or any rights or obligations hereunder, in whole or in part, either voluntarily or by operation of law, (including, without limitation, by merger, consolidation, or otherwise), without the express written consent of the other parties (and any such attempt shall be void), which consent shall not be unreasonably withheld. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the parties and their respective successors and permitted assigns.

7.02. Amendment. It is understood and agreed that FMPA and OEU reserve the right, on no less than an annual basis, to change any of the terms and conditions, including pricing, in this Agreement on sixty (60) days advance written notice. FMPA and OEU may make such changes on an immediate basis in the event any applicable law, rule, regulation or court order requires them. In such event, FMPA and OEU will give Customer as much notice as reasonably possible under the circumstances.

7.03. Indemnification. To the fullest extent permitted by laws and regulations, and in return for adequate, separate consideration, Customer shall defend, indemnify, and hold harmless FMPA and OEU, their officers, directors, agents, guests, invitees, and employees from and against all claims, damages, losses to persons or property, whether direct, indirect, or consequential (including but not limited to fees and charges of attorneys, and other professionals and court and arbitration costs) arising out of, resulting from, occasioned by, or otherwise caused by the operation or misoperation of the customer-owned renewable generation, or the acts or omissions of any other person or organization directly or indirectly employed by the Customer to install, furnish, repair, replace or maintain the customer-owned renewable generation system, or anyone for whose acts any of them may be liable.

7.04. Governing Law. The validity and interpretation of this Agreement and the rights and obligations of the parties shall be governed and construed in accordance with the laws of the State of Florida without regard for any conflicts of law provisions that might cause the law of other jurisdictions to apply. All controversies, claims, or disputes arising out of or related to this Agreement or any agreement, instrument, or document contemplated hereby, shall be brought exclusively in the County or Circuit Court for Marion County, Florida, or the United States District Court sitting in Marion County, Florida, as appropriate.

(Continued on Sheet No. 20.4)

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

OCALA ELECTRIC UTILITY
OCALA, FLORIDA
(Continued from Sheet No. 20.3)

FIRST REVISED SHEET NO. 20.4
CANCELS ORIGINAL SHEET NO. 20.4

7.05. Enforcement of Agreement. In the event that either party is required to enforce this Agreement by court proceedings or otherwise, the prevailing party shall be entitled to recover all fees and costs incurred, including reasonable attorney's fees and costs for trial, alternative dispute resolution, and/or appellate proceedings.

7.06. Severability. To the extent any provision of this Agreement is prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

7.07. Third Party Beneficiaries and Sovereign Immunity. This Agreement is solely for the benefit of FMPA, OEU, and Customer and no right nor shall any cause of action accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than FMPA, OEU, or Customer, any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and, all provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and be binding upon FMPA, OEU, and Customer and their respective representatives, successors, and assigns. Further, no term or condition contained in this Agreement shall be construed in any way as a waiver by either FMPA or OEU of the sovereign immunity applicable to either or both of them as established by Florida Statutes, 768.28.

(Continued on Sheet No. 20.5)

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

OCALA ELECTRIC UTILITY
OCALA, FLORIDA
(Continued from Sheet No. 20.4)

FIRST REVISED SHEET NO. 20.5
CANCELS ORIGINAL SHEET NO. 20.5

IN WITNESS WHEREOF, Customer and OEU have executed this Agreement the day and year first above written.

City of Ocala Electric Utility

By: Ken Whitehead

Title: Asst. City Manager

Date: 02 / 10 / 2023

Florida Municipal Power Agency

By: [Signature]

Title: VP of IT/OT and Sys Ops

Date: 02 / 13 / 2023

Customer

By: Virginia C Norris
(Print Name)

Date: 10-24-22

Virginia C. Norris
(Signature)

Customer's City of Ocala Electric Utility Account Number: 513228-211492

Approved as to form and legality:

William E. Sexton

William E. Sexton
City Attorney

(Continued on Sheet No. 20.6)

Issued by: Michael Poucher, P.E.
Electric Utility Director

Effective: October 1, 2019

**Tri-Party Net-Metering Power Purchase Agreement
Schedule A**

I. All-Requirements Project Calculation of Excess Customer-Owned Renewable Generation Credit

- a) FMPPA shall pay OEU for the excess kWh energy delivered by customer-owned renewable generation to OEU's electric system. Every month, OEU shall determine the total kWh of customer-owned renewable generation that is delivered to OEU's electric system, and shall send the information to FMPPA as soon as it becomes available, but no later than the second working day of every month. FMPPA will then provide a monthly payment to OEU in the form of a credit on the ARP power bill for the excess energy delivered to the distribution grid. The ARP Renewable Generation Credit will be calculated as follows:

ARP Renewable Generation Credit = Quarterly Energy Rate * Monthly kWh of excess customer-owned renewable generation

Quarterly Energy Rate = 3 month average of ARP energy rate. FMPPA will update the Quarterly Energy Rate every April 1, July 1, October 1 and January 1.

- b) As part of the monthly bill adjustment, FMPPA will also increase OEU's kWh billing amount by the same kWh amount as the customer-owned renewable generation purchased by FMPPA. This adjustment is necessary because excess customer generation that flows onto OEU's electric system has been purchased by FMPPA, but will remain on OEU's electric system and be used by OEU to meet its other customers' electric needs. As a result, OEU's monthly ARP bill will be adjusted accordingly to reflect FMPPA's subsequent sale of this energy to OEU.

II. Payment for Unused Excess Energy Credits

- a) Monthly excess energy credits shall accumulate and be used to offset the Customer's following month energy consumption bill for a period of not more than twelve (12) months.
- b) At the end of each calendar year, OEU shall pay the Customer for any unused excess energy credits in accordance with the OEU Electric Net-Metering Service Rate Schedule.



Scott E. Wyssling, PE
Coleman D. Larsen, SE, PE
Gregory T. Elvestad, PE

76 North Meadowbrook Drive
Alpine, UT 84004
office (201) 874-3483
swyssling@wysslingconsulting.com

December 29, 2022

Lumio Solar
12600 Challenger Parkway, Suite 200
Orlando, FL 32826

Scott
Wyssling, PE

Digitally signed by Scott Wyssling, PE
DN: C=US, S=Utah, L=Alpine, O=Wyssling
Consulting, OU=Engineering, CN="Scott Wyssling,
PE", E=swyssling@wysslingconsulting.com
Reason: I am the author of this document
Location: your signing location here
Date: 2022.12.29 14:14:54-07'00'
Foxit PDF Editor Version: 11.1.0

Re: Engineering Services
Hill Residence
901 Southeast 52nd Court, Ocala FL
28.800 kW System

To Whom It May Concern:

We have received information regarding solar panel installation on the roof of the above referenced structure. Our evaluation of the structure is to verify the existing capacity of the roof system and its ability to support the additional loads imposed by the proposed solar system.

A. Site Assessment Information

1. Site visit documentation identifying attic information including size and spacing of framing for the existing roof structure.
2. Design drawings of the proposed system including a site plan, roof plan and connection details for the solar panels. This information will be utilized for approval and construction of the proposed system.

B. Description of Structure:

Roof Framing: Prefabricated wood trusses at 24" on center. All truss members are constructed of 2 x 4 dimensional lumber.
Roof Material: Composite Asphalt Shingles
Roof Slopes: 27 +/- degrees
Attic Access: Accessible
Foundation: Permanent

C. Loading Criteria Used

- **Dead Load**
 - Existing Roofing and framing = 7 psf
 - New Solar Panels and Racking = 3 psf
 - TOTAL = 10 PSF
- **Live Load** = 20 psf (reducible) – 0 psf at locations of solar panels
- **Ground Snow Load** = 0 psf
- **Wind Load** based on ASCE 7-16
 - Ultimate Wind Speed = 130 mph (based on Risk Category II)
 - Exposure Category B

Analysis performed of the existing roof structure utilizing the above loading criteria is in accordance with the FBC 2020 7th Edition, including provisions allowing existing structures to not require strengthening if the new loads do not exceed existing design loads by 105% for gravity elements and 110% for seismic elements. This analysis indicates that the existing framing will support the additional panel loading without damage, if installed correctly.

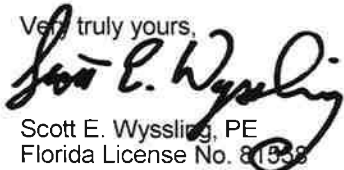
D. Solar Panel Anchorage

1. The solar panels shall be mounted in accordance with the most recent Unirac installation manual. If during solar panel installation, the roof framing members appear unstable or deflect non-uniformly, our office should be notified before proceeding with the installation.
2. The maximum allowable withdrawal force for a $\frac{5}{16}$ " lag screw is 235 lbs per inch of penetration as identified in the National Design Standards (NDS) of timber construction specifications. Based on a minimum penetration depth of $2\frac{1}{2}$ ", the allowable capacity per connection is greater than the design withdrawal force (demand). Considering the variable factors for the existing roof framing and installation tolerances, the connection using one $\frac{5}{16}$ " diameter lag screw with a minimum of $2\frac{1}{2}$ " embedment will be adequate and will include a sufficient factor of safety.
3. Considering the wind speed, roof slopes, size and spacing of framing members, and condition of the roof, the panel supports shall be placed no greater than 48" on center.
4. Panel supports connections shall be staggered to distribute load to adjacent framing members.

Based on the above evaluation, this office certifies that with the racking and mounting specified, the existing roof system will adequately support the additional loading imposed by the solar system. This evaluation is in conformance with the *FBC 2020 7th Edition*, current industry standards and practice, and is based on information supplied to us at the time of this report.

Should you have any questions regarding the above or if you require further information do not hesitate to contact me.

Very truly yours,


Scott E. Wyssling, PE
Florida License No. 81355

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND
SEALED BY SCOTT WYSSLING, PE USING A DIGITAL
SIGNATURE AND DATE. PRINTED COPIES OF THIS
DOCUMENT ARE NOT CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.



Wyssling Consulting, PLLC
26 N Meadowbrook Drive Alpine UT 84004
Florida License # 813472

Date Signed 12/29/2022



SCOPE OF WORK:
TO INSTALL A ROOF MOUNTED SOLAR PHOTOVOLTAIC SYSTEM AT THE OWNER RESIDENCE LOCATED AT 901 SE 52ND CT, OCALA, FL 34471

SYSTEM DC RATING: 28.80 KWDC
SYSTEM AC RATING: 20.91 KWAC

- GENERAL NOTES:**
- THESE CONSTRUCTION DOCUMENTS HAVE BEEN BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS.
 - ARCHITECT HAS NOT BEEN RETAINED TO SUPERVISE ANY CONSTRUCTION OR INSTALLATION OF ANY EQUIPMENT AT SITE.
 - CONTRACTOR HAS THE FULL RESPONSIBILITY TO CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY WORK STARTED BEFORE CONSULTATION AND ACCEPTANCE BY THE ENGINEER SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTION BY THEM WITHOUT ADDITIONAL COMPENSATION.
 - THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
 - THE CONTRACTOR SHALL PERFORM THE WORK IN STRICT CONFORMANCE WITH THE LOCAL LAWS, REGULATIONS AND THE NATIONAL ELECTRIC CODE.

- ELECTRICAL NOTES:**
- THE EQUIPMENT AND ALL ASSOCIATED WIRING AND INTERCONNECTION SHALL BE INSTALLED ONLY BY QUALIFIED PEOPLE. A QUALIFIED PERSON IS ONE WHO HAS SKILLS AND KNOWLEDGE RELATED TO THE CONSTRUCTION AND OPERATION OF THE ELECTRICAL EQUIPMENT AND INSTALLATIONS AND HAS RECEIVED SAFETY TRAINING TO RECOGNIZE AND AVOID THE HAZARDS INVOLVED. (NEC 690.4(C), NEC 2017).
 - NEW CONDUIT ROUTING SHOWN IS ESSENTIALLY SCHEMATIC. SUBCONTRACTOR SHALL LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES.
 - ARRAY WIRING SHOULD NOT BE READILY ACCESSIBLE EXCEPT TO QUALIFIED PERSONNEL.
 - ALL CONDUCTORS AND WIRE TIES EXPOSED TO SUNLIGHT ARE LISTED AS UV RESISTANT.
 - ALL CONDUIT SIZES AND TYPES SHALL BE LISTED FOR ITS PURPOSE AND APPROVED FOR THE SITE APPLICATIONS.

SHEET INDEX	
CS-0	COVER SHEET & BOM
E-1	STRING LAYOUT & SIGNAGE
E-2	ELECTRICAL DIAGRAM & CALCS.
E-3+	EQUIPMENT SPECIFICATIONS

GOVERNING CODES
2018 NFPA 70 (NEC CODE)
2017 NATIONAL ELECTRICAL CODE
2020 FLORIDA BUILDING CODE (7TH EDITION)

BILL OF MATERIALS		
EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULE	72	2 PEARL DUO BULK M-6015H-400W
MICROINVERTER	72	EV-PHASE IQBP1US-72-2-US
JUNCTION BOX	1	JUNCTION BOX, NEMA 3R, UL LISTED
LOAD CENTER	1	175A 120/240V NEMA 3R, UL LISTED
AC DISCONNECT	1	FUSED AC DISCONNECT, 240V, NEMA 3R, UL LISTED
POWER PERFECT BOX	1	120/240V NEMA 3X



Wyssling Consulting, PLLC
2111 Hendersonbrook Drive, Suite 101, Bldg. A
Florida, License # 61555
Date Signed 12/29/2022

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT WYSSLING ON THE DATE INDICATED TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEAL, AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

AKE SOLAR
ATLANTIC KEY ENERGY LLC
7006 STAPINT CT
STE B
WINTER PARK, FL 32782
+1 (407) 866 0273

PROJECT NAME & ADDRESS
DARRIN HILL
RESIDENCE
901 SE 52ND CT
OCALA, FL 34471

ENGINEER CONTACT INFORMATION
SCOTT WYSSLING
LICENSE # 61555
751 N. NEWCOMBSON DR.
ALPINE, UT 84004

SIGNATURE WITH SEAL

REVISIONS		
NO. DESCRIPTION	DATE	BY
1	12/29/22	A

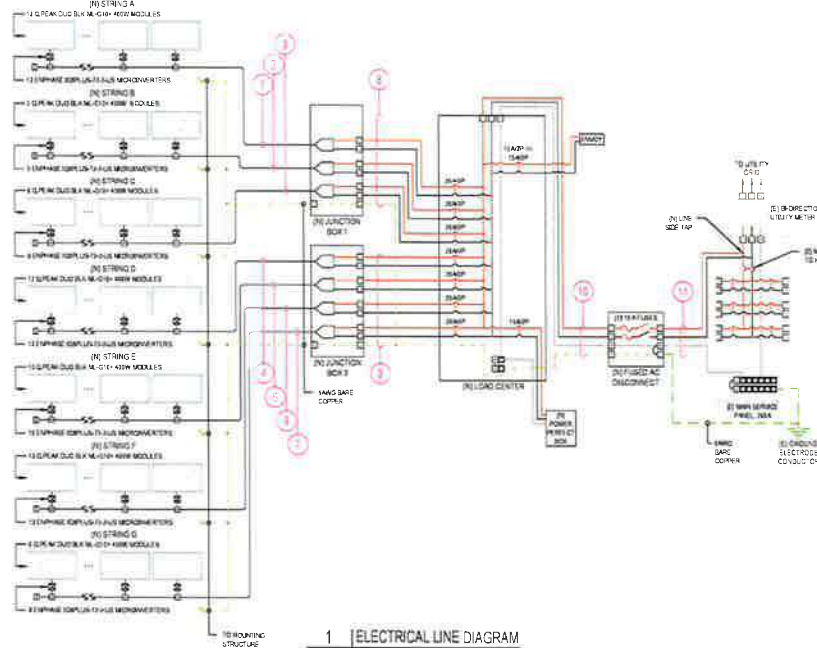
Drawn by: N/A
Checked by: JWB
Date: 12/29/22

SHEET NAME
COVER SHEET & BOM
SHEET NUMBER
CS-0

ID	INITIAL CONDUCTOR LOCATION	FINAL CONDUCTOR LOCATION	MIN CONDUCTOR SIZE (AWG)	MIN DIA CONDUIT SIZE (IN)	# OF PARALLEL CIRCUITS	CURRENT-CARRYING CONDUCTORS IN CONDUIT	OCPO (A)	MIN EGC SIZE (AWG)	TEMP. CORR. FACTOR	CONDUIT FILL FACTOR	CONT. CURRENT (A)	MAX. CURRENT (A)	BASE AMP. (A)	DERATED AMP. (A)	TERM AMP. RATING (A)	LENGTH (FT)	VOLTAGE DROP (%)			
1	STRING A	JUNCTION BOX 1	12	Q CABLE	N/A	2	N/A	6	BARE COPPER	0.76	55°C	N/A	15.73	19.66	30	N/A	57.00	0.76		
2	STRING B	JUNCTION BOX 1	12	Q CABLE	N/A	2	N/A	6	BARE COPPER	0.76	55°C	N/A	5.05	7.56	30	N/A	52.00	0.52		
3	STRING C	JUNCTION BOX 1	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	12.89	13.91	30	N/A	79.00	0.58	
4	STRING D	JUNCTION BOX 2	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	15.73	15.96	30	N/A	79.00	0.83	
5	STRING E	JUNCTION BOX 2	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	12.1	15.13	30	N/A	38.00	0.76	
6	STRING F	JUNCTION BOX 2	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	15.73	19.66	30	N/A	53.00	0.93	
7	STRING G	JUNCTION BOX 2	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	10.89	13.91	30	N/A	60.00	0.64	
8	JUNCTION BOX 1	LOAD CENTER	10	THWN-2 COPPER	0.75 LTM	3	6	20	10	THWN-2 COPPER	0.76	55°C	0.8	15.73	19.66	40	24.3	36.00	0.59	
9	JUNCTION BOX 2	LOAD CENTER	10	THWN-2 COPPER	0.75 LTM	4	8	20	10	THWN-2 COPPER	0.76	55°C	0.7	15.73	19.66	40	25.3	36.00	1.71	
10	LOAD CENTER	AC DISCONNECT	2	THWN-2 COPPER	1.25 LTM	1	3	110	10	THWN-2 COPPER	0.96	34°C	1	67.12	108.00	100	124.6	115	5.02	0.07
11	AC DISCONNECT	MSP	2	THWN-2 COPPER	1.25 LTM	1	3	N/A	33°C	1	67.12	108.00	130	124.6	115	5.00	0.07			

NOTE: LTM OR EQUIVALENT TYPE CONDUIT

NOTE: REGULATION PERMITS CONNECTIONS SHALL BE MADE FOR THE LINE SIDE TAP.



1 ELECTRICAL LINE DIAGRAM

52

SCOTT E. WYSSLING
LICENSED PROFESSIONAL ENGINEER
STATE OF FLORIDA
No. 15555

Wysling Consulting, PLLC
2511 Meadowbrook Drive, Suite 101, Tallahassee, FL 32310
Date Signed 12/29/2022



ATLANTIC KEY ENERGY LLC
7005 STAPPOINT CT
STE B
WINTER PARK, FL 32789
+1 (407) 898-0073

PROJECT NAME & ADDRESS

DARRIN HILL
RESIDENCE
901 SE 52ND CT
OCALA, FL 34471

OWNER CONTACT INFORMATION

SCOTT WYSSLING
LICENSE # 15555
76 N MEADOWBROOK DR
ALPHARETTA, GA 30004

SIGNATURE WITH SEAL

REVISIONS

NO.	DESCRIPTION	DATE	REV
1	ISSUED FOR PERMIT	12/29/2022	A
2	FOR REVIEW	12/29/2022	B
3	FOR REVIEW	12/29/2022	C

LEGEND

(E) - EXISTING
(N) - NEW

DESIGN TEMPERATURE SPECIFICATIONS	
RECORD LOW TEMP	-4°C
AMBIENT TEMP (HIGH TEMP 2%)	34°C
CONDUIT HEIGHT	1.0'
CONDUCTOR TEMPERATURE (90°C)	55°C

ELECTRICAL LINE DIAGRAM & CALCS

SHEET NUMBER

E-2

THIS SHEET HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT WYSSLING ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE AND SEAL ARE NOT VALID FOR ANY OTHER PROJECT.



Tarayn McLeod
1212 Ne 36th Ave
Ocala FL 34470



ALBERTINA AND DARRIN R
HILL
901 SE 52ND CT
OCALA FL 34471-5019

Information as of March 30, 2022

Policyholder(s) Page 1 of 2

Albertina Hill, Darrin R Hill

Policy number

988 152 404

Your Allstate agency is

Tarayn McLeod

(352) 236-2126

TaraynMcLeod@allstate.com

Thank you for being a loyal Allstate customer—we're happy to have you with us!

Here's your Personal Umbrella insurance renewal offer for the next 12 months. I've also included a guide to what's in this package and answers to some common questions.

Renewing your policy is easy

Keep an eye out for your bill, which should arrive in a couple of weeks. Just send your payment by the due date on your bill. If you're enrolled in the Allstate® Easy Pay Plan, you won't receive a bill—we'll send you a statement with your payment withdrawal schedule. You also won't receive a bill if a mortgage company or lienholder pays your insurance premium for you.

How to contact us

Give me a call at (352) 236-2126 if you have any questions. It's my job to make sure you're in good hands.

Sincerely,

Tarayn McLeod
Your Allstate Agent

RP378-4



Your Insurance Coverage Checklist

We're happy to have you as an Allstate customer! This checklist outlines what's in this package and provides answers to some basic questions, as well as any "next steps" you may need to take.

☐ **What's in this package?**

See the guide below for the documents that are included.

Next steps: review your *Policy Declarations* to confirm you have the coverages, coverage limits, premiums and savings that you requested and expected. Read any *Endorsements* or *Important Notices* to learn about new policy changes, topics of special interest, as well as required communications. Keep all of these documents with your other important insurance papers.

☐ **Am I getting all the discounts I should?**

Confirm with your Allstate Agent that you're benefiting from all the discounts you're eligible to receive.

☐ **What about my bill?**

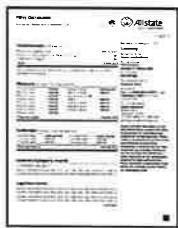
Unless you've already paid your premium in full, we'll send your bill separately. **Next steps:** please pay the minimum amount by the due date listed on it.

You can also pay your bill online at [Allstate.com/support](https://www.allstate.com/support) or through the Allstate mobile app. If you're enrolled in the Allstate® Easy Pay Plan, we'll send you a statement detailing your payment withdrawal schedule. Para español, llamar al 1-800-979-4285.

☐ **What if I have questions?**

Visit [Allstate.com/support](https://www.allstate.com/support) to browse our list of frequently asked questions and find information regarding billing or policy documents. You can also create an online account to access and manage your policies. Para español, llamar al 1-800-979-4285.

A guide to your renewal package



Policy Declarations*

The Policy Declarations lists policy details, such as your property details and coverages.



Important Notices

We use these notices to call attention to particularly important coverages, policy changes and discounts.



Insurance Made Simple

Insurance seem complicated? Our online guides explain coverage terms and features: www.allstate.com/madesimple
[Espanol.allstate.com/facildeentender](https://espanol.allstate.com/facildeentender)

* To make it easier to see where you may have gaps in your protection, we've highlighted any coverages you do not have in the Coverage Detail section in the enclosed Policy Declarations.

Renewal Personal Umbrella Policy Declarations



Your policy effective date is May 23, 2022

Page 1 of 4

Total Premium for the Premium Period (Your bill will be mailed separately)

Excess Liability	\$423.65
Watercraft	\$25.42
01/2007 Florida Hurricane Catastrophe Fund Emergency Assessment	\$0.00

Total	\$449.07
--------------	-----------------

Your bill will be mailed separately. Before making a payment, please refer to your latest bill, which includes payment options and installment fee information. If you do not pay in full, you will be charged an installment fee(s). If you do not pay your bill by the due date shown on your billing statement, you may be charged a late fee.

See the **Important Payment and Coverage Information** section for details about installment fees.

Uninsured Motorist Coverage Not Taken

Your policy premium has been developed using the following information:

- 2 Vehicles
- Supporting Allstate Home and/or Auto Policy(ies)
- 2 Operators in the household
- 1 Watercraft

Discount (included in your total premium)

Multiple Policy Discount - Auto	27%
---------------------------------	-----

Operators in the household*

Albertina Hill

Darrin Hill

*The operators named are currently listed on your auto policy. If there are any other operators in your household or if any of the operators named have left your household, please contact your agent or producer of record to have your policy updated.

Policy Coverages and Limits of Liability

Coverages	Limits of Liability
Excess Liability	\$1,000,000 each occurrence
Additional Dwelling Rented To Others	Not purchased*
Excess Uninsured Motorist	Not purchased*

* This coverage can provide you with valuable protection. To help you stay current with your insurance needs, contact your agent to discuss available coverage options and other products and services that can help protect you.

Information as of March 30, 2022

Summary

Named Insured(s)
Albertina Hill, Darrin R Hill

Mailing address
**901 SE 52nd Ct
Ocala FL 34471-5019**

Policy number
988 152 404

Your policy provided by
Allstate Indemnity Company

Policy period
Begins on **May 23, 2022**
Ends on **May 23, 2023**

Premium period
Beginning **May 23, 2022** through **May 23, 2023** at 12:01 A.M. standard time

Your Allstate agency is
Tarayn McLeod
1212 Ne 36th Ave
Ocala FL 34470
(352) 236-2126
TaraynMcLeod@allstate.com

Some or all of the information on your Policy Declarations is used in the rating of your policy or it could affect your eligibility for certain coverages. Please notify us immediately if you believe that any information on your Policy Declarations is incorrect. We will make corrections once you have notified us, and any resulting rate adjustments, will be made only for the current policy period or for future policy periods. Please also notify us immediately if you believe any coverages are not listed or are inaccurately listed.

FLO888BD 01/20



Policy number: **988 152 404**

Policy effective date: May 23, 2022

Required Underlying Insurance Limits

You must maintain the Required Underlying Insurance, at or above the limits as shown below at all times for each liability exposure any insured person has. Please refer to the "Required Underlying Insurance" provision of the policy.

Coverage	Required Underlying Limit
Personal Liability - Bodily Injury and Property Damage Liability	Combined Single Limit
1. Homeowners, Condominium, Renters, Mobilehome, Manufactured Home or other Personal Liability Policy	\$300,000 per occurrence
2. Incidental Office, Private School or Studio	
One, Two, Three or Four Family Residential Rental Property - Bodily Injury and Property Damage Liability	\$300,000 per occurrence
Automobiles and Motor Homes	Bodily Injury \$250,000 each person \$500,000 each occurrence Property Damage \$100,000 each occurrence or Combined Single Limit \$500,000 per occurrence
Motorcycles, Motor Scooters, Mopeds and Recreational Vehicles	Bodily Injury \$100,000 each person including Passenger Liability when available \$300,000 each occurrence Property Damage \$100,000 each occurrence or Combined Single Limit \$300,000 per occurrence Guest Passenger Liability \$100,000 each person (when available as a separate limit) \$300,000 each occurrence or Combined Single Limit \$300,000 per occurrence
Personal Watercraft such as jet skis and wet bikes	Bodily Injury \$100,000 each person \$300,000 each occurrence Property Damage \$100,000 each occurrence or Combined Single Limit \$100,000 per occurrence
Watercraft Liability Craft under 26 feet and up to 50 horsepower (U.S. horsepower)	Bodily Injury \$100,000 each person \$300,000 each occurrence Property Damage \$100,000 each occurrence or Combined Single Limit \$100,000 per occurrence
Watercraft Liability Craft 26 feet and over or greater than 50 horsepower (U.S. horsepower)	Bodily Injury \$250,000 each person \$500,000 each occurrence Property Damage \$100,000 each occurrence or Combined Single Limit \$250,000 per occurrence

(continued)

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Coverage

Required Underlying Limit

Uninsured Motorist Coverage

If Coverage ST - Excess Uninsured Motorist

Endorsement is purchased:

Automobiles, Trailers and Motorhomes

Bodily Injury \$250,000 each person
\$500,000 each occurrence
or

Combined Single Limit

\$300,000 per occurrence

Motorcycles, Motor Scooters and other Motor
Vehicles subject to Section 627.727 of the Florida
Statutes Annotated

Bodily Injury \$100,000 each person
\$300,000 each occurrence
or

Combined Single Limit

\$300,000 per occurrence

Employers' Liability - if Workers' Compensation or
similar coverage for Domestic Workers is required
or purchased voluntarily

\$300,000 each occurrence

\$300,000 each employee

\$500,000 policy aggregate

Your policy documents

Your Personal Umbrella policy consists of the Policy Declarations and the following documents. Please keep them together.

• Personal Umbrella Policy - AS82

• Florida Personal Umbrella Amendatory Endorsement - AS502

Important payment and coverage information

Here is some additional, helpful information related to your coverage and paying your bill:

- ▶ A \$10.00 late fee may be assessed if payment is received after the due date.
- ▶ Please note: This is not a request for payment. Your bill will be mailed separately.
- ▶ If you decide to pay your premium in installments, there will be a \$3.00 installment fee charge for each payment due. If you make 12 installment payments during the policy period, and do not change your payment plan method, then the total amount of installment fees during the policy period will be \$36.00.

If you are on the Allstate® Easy Pay Plan, there will be a \$1.50 installment fee charge for each payment due. If you make 12 installment payments during the policy period, and remain on the Allstate® Easy Pay Plan, then the total amount of installment fees during the policy period will be \$18.00.

If you change payment plan methods or make additional payments, your installment fee charge for each payment due and the total amount of installment fees during the policy period may change or even increase.

Please note that the Allstate® Easy Pay Plan allows you to have your insurance payments automatically deducted from your checking or savings account.

▶ If You Have a Question About Your Insurance...

If you wish to present an inquiry or obtain information about coverage, or if you need assistance in resolving a complaint, please call (352) 236-2126.



Renewal Personal Umbrella Policy Declarations

Policy number:

988 152 404

Policy effective date:

May 23, 2022

Page 4 of 4

Allstate Indemnity Company's Secretary and President have signed this policy with legal authority at Northbrook, Illinois. This policy is binding with the countersignature of an authorized Allstate Indemnity Company agent.

Julie Parsons

Julie Parsons
President

Susan L. Lees

Susan L. Lees
Secretary

Policy countersigned by Tarayn McLeod

Tarayn McLeod

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Important notices

Policy number: **988 152 404**
Policy effective date: May 23, 2022

Page 1 of 1



You May Request That We Reorder Your Credit Report

Like many insurance companies, when we consider your eligibility for coverage, we review your credit report and base your premium partly on this information.

We reorder your credit report(s) every two years, but if you would like us to use updated credit information to determine your premium, you can request that we order it sooner.

The rate for your premium will only decrease or remain the same if we reorder your credit report. If your credit history has improved, we will adjust your premium. Please be aware that, depending on when you request a credit reorder, we may not be able to apply any premium change to this policy renewal; if so, it will take effect at your next policy renewal. Several factors, including any policy changes you might make, can also affect the amount of your premium.

You can learn more by visiting allstate.com. If you'd like us to use updated credit information to determine your premium, please call your agent.

X67520-2

will be subject to the limits of liability for Coverage ST in your Personal Umbrella Policy.

You may keep your Uninsured Motorist Insurance at the same limit currently listed on your Policy Declarations. However, if you want to increase or lower those limits, or if you want to reject that coverage, you must make those changes in writing. To do so, just contact your Allstate Agent.

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Uninsured Motorist Coverage and Your Personal Umbrella Policy

Your Personal Umbrella Policy is being renewed with the Uninsured Motorist Insurance (Coverage ST) limits shown on your enclosed Policy Declarations unless you previously rejected this coverage in writing. Subject to the terms and conditions of your Personal Umbrella Policy, Excess Uninsured Motorists Protection can provide you with coverage for substantial damages arising from bodily injuries caused by a legally liable uninsured motorist including a hit-and-run driver.

However, please remember that your Personal Umbrella Policy is offered as part of a general insurance program in which you are required to keep underlying insurance limits of at least \$250,000 per person and \$500,000 per accident in your primary Auto Policy. If you fail to maintain these limits in your primary Auto Policy—that is, if you elect to purchase less than the required Coverage ST limits for your primary Auto Policy, or reject Coverage ST entirely for that Policy, coverage under your Personal Umbrella Policy will be limited to the difference between your covered damages and the required underlying limits for your primary Auto Policy. Of course, the coverage provided by your Personal Umbrella Policy for that difference



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Privacy Statement

Policy number: **988 152 404**
Policy effective date: May 23, 2022

Page 1 of 2



Thank you for choosing Allstate. We value you, respect your privacy and work hard to protect your personal information.

This statement is provided on behalf of Allstate Insurance Company and the affiliates ("Allstate") listed at the end of this notice. We would like to explain how we collect, use and share the information we obtain about you in the course of doing business.

Our Privacy Assurance

- We do not sell your personal or medical information to anyone.
- We do not share your information with non-affiliate companies that would use it to contact you about their own products and services, unless permitted pursuant to a joint marketing agreement.
- We require persons or organizations that represent or assist us in servicing your policy and claims to keep your information confidential.
- We require our employees to protect your personal information and keep it confidential.

As you can see, protecting your personal information is important to us. In addition to the practices described above, we use a variety of physical, technical and administrative security measures that help to safeguard your information. For Social Security Numbers (SSN), this includes restricting access to our employees, agents and others who use your SSN only as permitted by law: to comply with the law, to provide you with products and services, and to handle your claims. Also, our employees' and agents' access to and use of your SSN are limited by the law, our policies and standards, and our written agreements.

Our privacy practices continue to apply to your information even if you cease to be an Allstate customer.

What Personal Information Do We Have and Where Do We Get It

We gather personal information from you and from outside sources for business purposes. Some examples of the information we collect from you may include your name, phone number, home and e-mail addresses, driver's license number, Social Security Number, marital status, family member information and healthcare information. Also, we maintain records that include, but are not limited to, policy coverages, premiums, and payment history. We also collect information from outside sources including, but not limited to, insurance support organizations that assemble or collect information about individuals for the purpose of providing to insurance companies. This information may include, but is not limited to,

your driving record, claims history, medical information and credit information.

In addition, Allstate and its business partners gather information through Internet activity, which may include, for example, your operating system, links you used to visit allstate.com, web pages you viewed while visiting our site or applications, Internet Protocol (IP) addresses, and cookies. We use cookies, analytics and other technologies to help:

- Evaluate our marketing campaigns
- Analyze how customers use our website and applications
- Develop new services
- Know how many visitors have seen or clicked on our ads

Also, our business partners assist us with monitoring information including, but not limited to, IP addresses, domain names and browser data, which can help us to better understand how visitors use allstate.com.

How We Use and Share Your Personal Information

In the course of normal business activities, we use and share your personal information. We may provide your information to persons or organizations within and outside of Allstate. This would be done as required or permitted by law. For example, we may do this to:

- Fulfill a transaction you requested or service your policy
- Market our products
- Handle your claim
- Prevent fraud
- Comply with requests from regulatory and law enforcement authorities
- Participate in insurance support organizations

The persons or organizations with whom we may share your personal information may include, among others:

- Your agent, broker or Allstate-affiliated companies
- Companies that perform services, such as marketing, credit card processing, and performing communication services on our behalf
- Business partners that assist us with tracking how visitors use allstate.com
- Other financial institutions with whom we have a joint marketing agreement
- Other insurance companies that play a role in an insurance transaction with you
- Independent claims adjusters
- A business or businesses that conduct actuarial or research studies
- Those who request information pursuant to a subpoena or court order
- Repair shops and recommended claims vendors

The Internet and Your Information Security



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- 1) How we collect information such as IP address (the number assigned to your computer when you use the Internet), browser and platform types, domain names, access times, referral data, and your activity while using our site;
- 2) Who should use our website;
- 3) The security of information over the Internet; and
- 4) Links and co-branded sites.

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You can request to review your personal information contained in our records at any time. To do this, please send a letter to the address below requesting to see your information for the previous two years. If you believe that our information is incomplete or inaccurate, you can request that we correct it. Please note we may not be able to provide information relating to investigations, claims, litigation, and other matters. We will be happy to make corrections whenever possible.

Please send requests to:

Allstate Insurance Company Customer Privacy Inquiries
PO Box 660598
Dallas, TX 75266-0598

Your Preference for Sharing Personal Information

We would like to share your personal information with one or more Allstate affiliates in order to make you aware of different products, services and offers they can provide. However, you can request that Allstate and its affiliate companies not share your personal information with our affiliates for marketing products and services.

To request that we not allow other Allstate affiliates to use your personal information to market their products and services, you can contact us by calling 1-800-856-2518 twenty-four hours a day, seven days a week. Please keep in mind that it may take up to four weeks to process your request.

If you previously contacted us and asked us not to allow other Allstate affiliates to use your personal information, your previous choice still applies and you do not need to contact us again. If you would like to change your previous choice please call the number above at any time.

We Appreciate Your Business

Thank you for choosing Allstate. We understand your concerns about privacy and confidentiality, and we hope this notice has been helpful to you. We value our relationship with you and look forward to keeping you in Good Hands®.

If you have questions or would like more information, please don't hesitate to contact your Allstate agent or call the Allstate Customer Information Center at 1-800-ALLSTATE.

We reserve the right to change our Privacy practices, procedures, and terms.

Allstate Insurance Company

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The Allstate family of companies, LSA Securities, Deerbrook General Agency, Inc., Deerbrook Insurance Company, North Light Specialty Insurance Company, Northbrook Indemnity Company.

Please Note: Allstate affiliates American Heritage Life Insurance Company, Castle Key Insurance Company and Castle Key Indemnity Company participate in information sharing with the affiliates listed above, but have a separate privacy notice for their customers.

(ed. 10/2015)

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IQ8 and IQ8+ Microinverters

Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Battery, Enphase IQ Gateway, and the Enphase App monitoring and analysis software.



IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.



Connect PV modules quickly and easily to IQ8 Series Microinverters using the included Q-DCC-2 adapter cable with plug-n-play MC4 connectors.



IQ8 Series Microinverters are UL Listed as PV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer's instructions.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produce power even when the grid is down
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

IQ8 and IQ8+ Microinverters

INPUT DATA (DC)		IQ8-60-2-US	IQ8PLUS-72-2-US
Commonly used module pairings ¹	W	235 – 350	235 – 440
Module compatibility		60-cell/120 half-cell	60-cell/120 half-cell and 72-cell/144 half-cell
MPPT voltage range	V	27 – 37	29 – 45
Operating range	V	25 – 48	25 – 58
Min/max start voltage	V	30 / 48	30 / 58
Max input DC voltage	V	50	60
Max DC current ² [module Isc]	A		15
Overvoltage class DC port			II
DC port backfeed current	mA		0
PV array configuration		1x1 Ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit	
OUTPUT DATA (AC)		IQ8-60-2-US	IQ8PLUS-72-2-US
Peak output power	VA	245	300
Max continuous output power	VA	240	290
Nominal (L-L) voltage/range ³	V		240 / 211 – 264
Max continuous output current	A	1.0	1.21
Nominal frequency	Hz		60
Extended frequency range	Hz		50 – 68
Max units per 20 A (L-L) branch circuit ⁴		16	13
Total harmonic distortion			<5%
Overvoltage class AC port			III
AC port backfeed current	mA		30
Power factor setting			1.0
Grid-tied power factor (adjustable)			0.85 leading – 0.85 lagging
Peak efficiency	%	97.5	97.6
CEC weighted efficiency	%	97	97
Night-time power consumption	mW		60
MECHANICAL DATA			
Ambient temperature range		-40°C to +60°C (-40°F to +140°F)	
Relative humidity range		4% to 100% (condensing)	
DC Connector type		MC4	
Dimensions (HxWxD)		212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2")	
Weight		1.08 kg (2.38 lbs)	
Cooling		Natural convection – no fans	
Approved for wet locations		Yes	
Acoustic noise at 1 m		<60 dBA	
Pollution degree		PD3	
Enclosure		Class II double-insulated, corrosion resistant polymeric enclosure	
Environ. category / UV exposure rating		NEMA Type 6 / outdoor	
COMPLIANCE			
Certifications		CA Rule 21 (UL 1741-SA), UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.	

(1) No enforced DC/AC ratio. See the compatibility calculator at <https://link.enphase.com/module-compatibility> (2) Maximum continuous input DC current is 10.6A (3) Nominal voltage range can be extended beyond nominal if required by the utility. (4) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

IQ8SP-DS-0002-01-EN-US-2021-10-19

Enphase IQ 7, IQ 7+, and IQ 7X Microinverters

The high-powered smart grid-ready **Enphase IQ Series Micros™** achieve the highest system efficiency.

Part of the Enphase IQ System, the IQ 7, IQ 7+, and IQ 7X Micro integrate perfectly with the Enphase Envoy-S™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ Series Micros extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty.



Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling

Productive and Reliable

- Optimized for high powered 60-cell, 72-cell* and 96-cell* modules
- More than a million hours of testing
- Class II double-insulated enclosure

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles

* The IQ 7+ Micro is required to support 72-cell modules, and the IQ 7X is required to support 96-cell modules.

Enphase IQ 7, IQ 7+, and IQ 7X Microinverters

INPUT DATA (DC)	IQ7-60-2-INT	IQ7PLUS-72-2-INT	IQ7X-96-2-INT
Commonly used module pairings	235 W - 350 W + ¹	235 W - 440 W + ^{1,2}	320 W - 460 W + ^{1,2}
Module compatibility	60-cell PV modules only	60-cell & 72-cell PV modules	96-cell PV modules only
Maximum input DC voltage	48 V	60 V	79.5 V
Peak power tracking voltage	27 V - 37 V	27 V - 45 V	53 V - 64 V
Operating range	16 V - 48 V	16 V - 60 V	25 V - 79.5 V
Min/Max start voltage	22 V / 48 V	22 V / 60 V	33 V / 79.5 V
Max DC short circuit current (module Isc)	15 A	15 A	10 A
Overvoltage class DC port	II	II	II
DC port backfeed under single fault	0 A	0 A	0 A
OUTPUT DATA (AC)	IQ 7 Microinverter	IQ 7+ Microinverter	IQ 7X Microinverter
Peak output power	250 VA	295 VA	320 VA
Maximum continuous output power	240 VA	290 VA	315 VA
Nominal (L-N) voltage/range ³	230 V / 184-276 V	230 V / 184-276 V	230 V / 184-276 V
Maximum continuous output current	1.04 A	1.26 A	1.37 A
Nominal frequency	50 Hz	50 Hz	50 Hz
Extended frequency range	45 - 55 Hz	45 - 55 Hz	45 - 55 Hz
Maximum units per 20 A (L-N) branch circuit ⁴	16 (230 VAC)	13 (230 VAC)	12 (230 VAC)
Overvoltage class AC port	III	III	III
AC port backfeed current	0 A	0 A	0 A
Power factor setting	1.0	1.0	1.0
Power factor (adjustable)	0.8 leading ... 0.8 lagging	0.8 leading ... 0.8 lagging	0.8 leading ... 0.8 lagging
EFFICIENCY	@230 V	@230 V	@230 V
EN 50530 (EU) weighted efficiency	96.5 %	96.5 %	96.5 %
MECHANICAL DATA			
Ambient temperature range	-40°C to +65°C	-40°C to +65°C	-40°C to +60°C
Relative humidity range	4% to 100% (condensing)		
Connector type	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)		
Dimensions (WxHxD)	212 mm x 175 mm x 30.2 mm (without bracket)		
Weight	1.08 kg		
Cooling	Natural convection - No fans		
Approved for wet locations	Yes		
Pollution degree	PD3		
Enclosure	Class II double-insulated, corrosion resistant polymeric enclosure		
Environmental category / UV exposure rating	Outdoor - IP67		
FEATURES			
Communication	Power Line Communication (PLC)		
Monitoring	Enlighten Manager and MyEnlighten monitoring options Compatible with Enphase Envoy-S		
Compliance (pending)	AS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2		

1. No enforced DC/AC ratio in NZ. In Australia, CEC design guidelines state inverter continuous AC power output cannot be less than 75% of the array peak power.

2. Maximum DC input limited to 350 W at 25°C as per AU/NZS 5033:2014 4.3.12(d).

3. Nominal voltage range can be extended beyond nominal if required by the utility.

4. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

To learn more about Enphase offerings, visit enphase.com/au

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2018-11-28



Title	FOR SIGNATURES - Application for Interconnection of.....
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Sent for signature to William E. Sexton (wssexton@ocalafl.org), Ken Whitehead (kwhitehead@ocalafl.org) and Florida Municipal Power Agency (chris.gowder@fmpa.com) from slewis@ocalafl.org
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The document has been completed.