

#230193

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: TED DUNLY  
Mailing Address: 2540 NW 53RD AVE. RD  
City: OCALA State: FL Zip Code: 34482  
Phone Number: 352-895-3701 Alternate Phone Number: 352-615-3345  
Email Address: tedcondunly@gmail.com Fax Number: NONE  
Ocala Electric Utility Customer Account Number: 552603-122345

**2. RGS Facility Information**

Facility Location: PDM Solar 625 NW 8th Ave, Ocala, FL 32601  
Ocala Electric Utility Customer Account Number: 552603-122345  
RGS Manufacturer: VSUN Solar  
Manufacturer's Address: 39899 Balentine Dr Ste 200,  
Newark, CA 94560  
Reference or Model Number: VSUN Solar 400-108BMH  
Serial Number: \_\_\_\_\_

(Continued on Sheet No.19.1)

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

Effective: October 1, 2019

### 3. Facility Rating Information

Gross Power Rating: 9.52kw ("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: \_\_\_\_\_

Anticipated In- Service Date: Installed 11/3/22

### 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.

(Continued on Sheet No. 19.2)

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

Effective: October 1, 2019

OCALA ELECTRIC UTILITY  
OCALA, FLORIDA  
(Continued from Sheet No. 19.1)

FIRST REVISED SHEET NO. 19.2  
CANCELS ORIGINAL SHEET NO. 19.2

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 3<sup>rd</sup> 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: \_\_\_\_\_  
(Print Name)

TED Dunlap

Date: 12/12/22

\_\_\_\_\_  
(Signature)



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

Effective: October 1, 2019

**GA:**  
CABRILLO COASTAL GENERAL INS AGENCY  
PO BOX 357965  
GAINESVILLE, FL 32635-7965

**Agent:** 700536 (352) 369-1919  
EMPIRE GENERAL INSURANCE AGCY INC  
2929 NE 3RD ST  
OCALA, FL 34470-7000

**NAMED INSURED AND ADDRESS**  
TED DUNLAP  
CONNIE DUNLAP  
2540 NW 53RD AVENUE RD  
OCALA, FL 34482-3276

**LOCATION OF RESIDENCE PREMISES**  
(if different from Insured Address)

**HOMEOWNER DECLARATIONS**

**POLICY NO:** SHO0056770 **Policy Period:** 11/02/2022 to 11/02/2023 12:01 AM standard time at insured location

COVERAGE IS PROVIDED WHERE A PREMIUM OR LIMIT OF LIABILITY IS SHOWN FOR THE COVERAGE.

COVERAGES AND LIMITS OF LIABILITY	SECTION I				SECTION II	
	A. DWELLING	B. OTHER STRUCTURES	C. PERSONAL PROPERTY	D. LOSS OF USE	E. PERSONAL LIABILITY	F. MEDICAL PAYMENTS
	418,000	0	153,000	41,800	300,000	5,000

FOR LOSS UNDER SECTION I, WE COVER ONLY THAT PART OF LOSS OVER THE DEDUCTIBLE STATED, UNLESS OTHERWISE STATED IN YOUR POLICY:

DEDUCTIBLE (Section I Only):

**CALENDAR YEAR HURRICANE DEDUCTIBLE IS 2% OF COVERAGE A = \$8,360**  
**THE ALL OTHER PERILS DEDUCTIBLE IS \$1,000**

<b>PREMIUM SUMMARY:</b>	<b>HURRICANE PREMIUM:</b>	\$399.00	<b>TOTAL PREMIUM:</b>	\$1332.00
	<b>NON-HURRICANE PREMIUM:</b>	\$933.00	<b>MGA FEE:</b>	\$25.00
			<b>EMERGENCY MGT FEE:</b>	\$2.00
			<b>FLORIDA HURRICANE CATASTROPHE FUND ASSESSMENT:</b>	\$ .00
			<b>FLORIDA INSURANCE GUARANTY ASSOCIATION 0.7% ASSESSMENT:</b>	\$9.32
			<b>FLORIDA INSURANCE GUARANTY ASSOCIATION 1.3% ASSESSMENT:</b>	\$17.32
			<b>CITIZENS PROPERTY INSURANCE CORPORATION ASSESSMENT:</b>	\$ .00
<b>ENDORSEMENT AMOUNT</b>	\$316.20		<b>TOTAL POLICY:</b>	\$1385.64

POLICY SUBJECT TO THE FOLLOWING SURCHARGES, CREDITS, ENDORSEMENTS AND FORMS:

FORM NO	EDITION	DESCRIPTION	LIMITS	PREMIUM
CC HO 0003	10/21	SPECIAL FORM		
SHPN-11	05/18	PRIVACY NOTICE		
CHO 422	10/21	POLICY JACKET		
CHO 429	12/17	OUTLINE OF COVERAGES		
CHO 412	01/17	HURRICANE DEDUCT-2%		
OIRB11670H		COVERAGE CHECKLIST		
CHO 420	02/07	ORDINANCE OR LAW	\$104,500	\$166
		25% OF COVERAGE A		
OIRB11655	02/10	LOSS MITIGATION NOT		
CHO 426	07/18	WATER BACKUP		\$50
		WIND MITIGATION CRDT		
CHO 449	09/13	COVERAGE B EXCLUSION		
HO 23 86	01/06	PERS PROP REPL COST		\$199
		ANIMAL LIAB EXCLUSN		
		MATURE HOMEOWNR DISC		

**DESCRIPTION: INCREASE DWELLING LIMIT**

**ROOF SURFACE: SHINGLES - ARCHITECTURAL** **ROOF AGE: 0** **ROOF VALUATION: \$20,929**  
**OCC: PRIMARY** **TER: 741** **BUILT: 1999** **CONST: MASONRY** **PRT CLS: 3** **#FAMILIES: 1**

**SHHO DEC 05 22** **PGM: HO3** **BCEG: 4** **Date Issued: 11/30/22**  
**INSURED 1 COPY**





CASTILLO ENGINEERING SERVICES, LLC  
 420 N. UNIVERSITY ROAD, SUITE 205  
 MAITLAND, FL 32751  
 (407) 899-9799, (407) 208-6600

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REVISIONS	DESCRIPTION	DATE	REV

PROJECT INSTALLER

**POWER**



PROJECT NAME  
 2540 NW 53RD AVENUE RD  
 OCALA, FL 34482

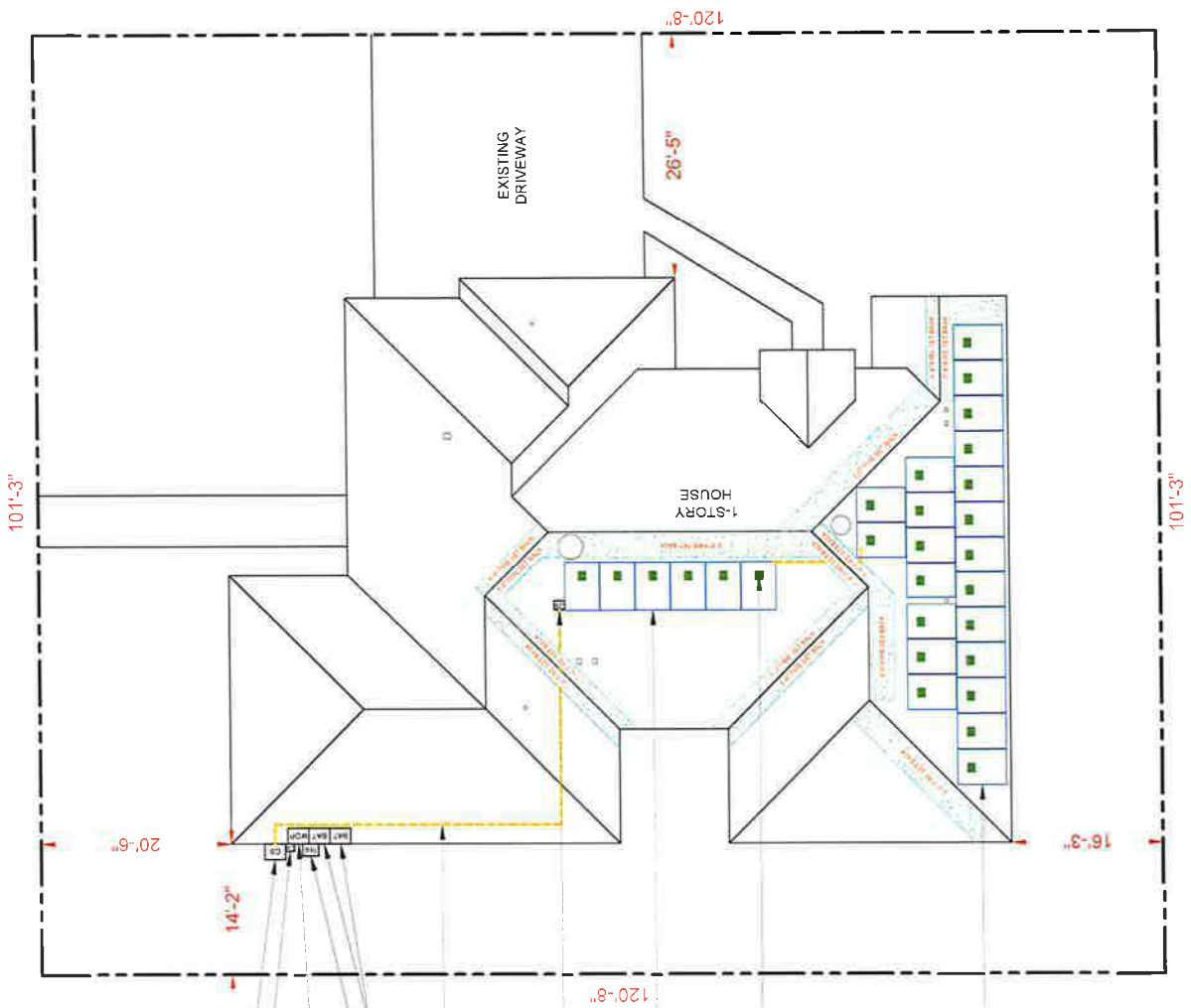
DUNLAP RESIDENCE

SHEET NAME  
 ROOF PLAN

SHEET SIZE  
 ANSI B  
 11" X 17"

SHEET NUMBER  
 A-01

NW 53RD AVENUE RD



- (N) PV COMBINER BOX
- (E) SERVICE POINT AND UTILITY METERING
- (E) MAIN SERVICE DISCONNECT/ MAIN DISTRIBUTION PANEL
- (N) TESLA BACKUP GATEWAY
- (N) (02) TESLA POWERWALL 2 BATTERIES

3/4" IMC, RMC, FMC, LFMC, FMT OR EMT CONDUIT RUN

(N) SOLADECK

ROOF #2  
 (06) VSUN: VSUN400-108M-BB (400W) MODULES

(N) (28) EMPHASE IQ7A-72-US MICROINVERTERS

ROOF #1  
 (22) VSUN: VSUN400-108M-BB (400W) MODULES

1 ROOF PLAN WITH PROPERTY LINES  
 SCALE: 5/64" = 1'-0"  
 A-01

REVISIONS	DATE	REV

PROJECT INSTALLER



PROJECT NAME

**DUNLAP RESIDENCE**  
 2540 NW 53RD AVENUE RD  
 OCALA, FL 34482

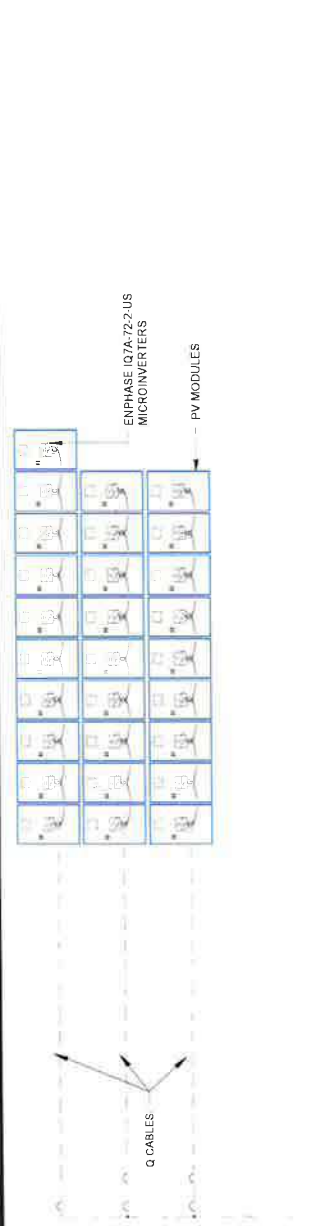
SHEET NAME  
**ELECTRICAL  
 LINE DIAGRAM**

SHEET SIZE  
**ANSI B  
 11" X 17"**

SHEET NUMBER  
**E-01**

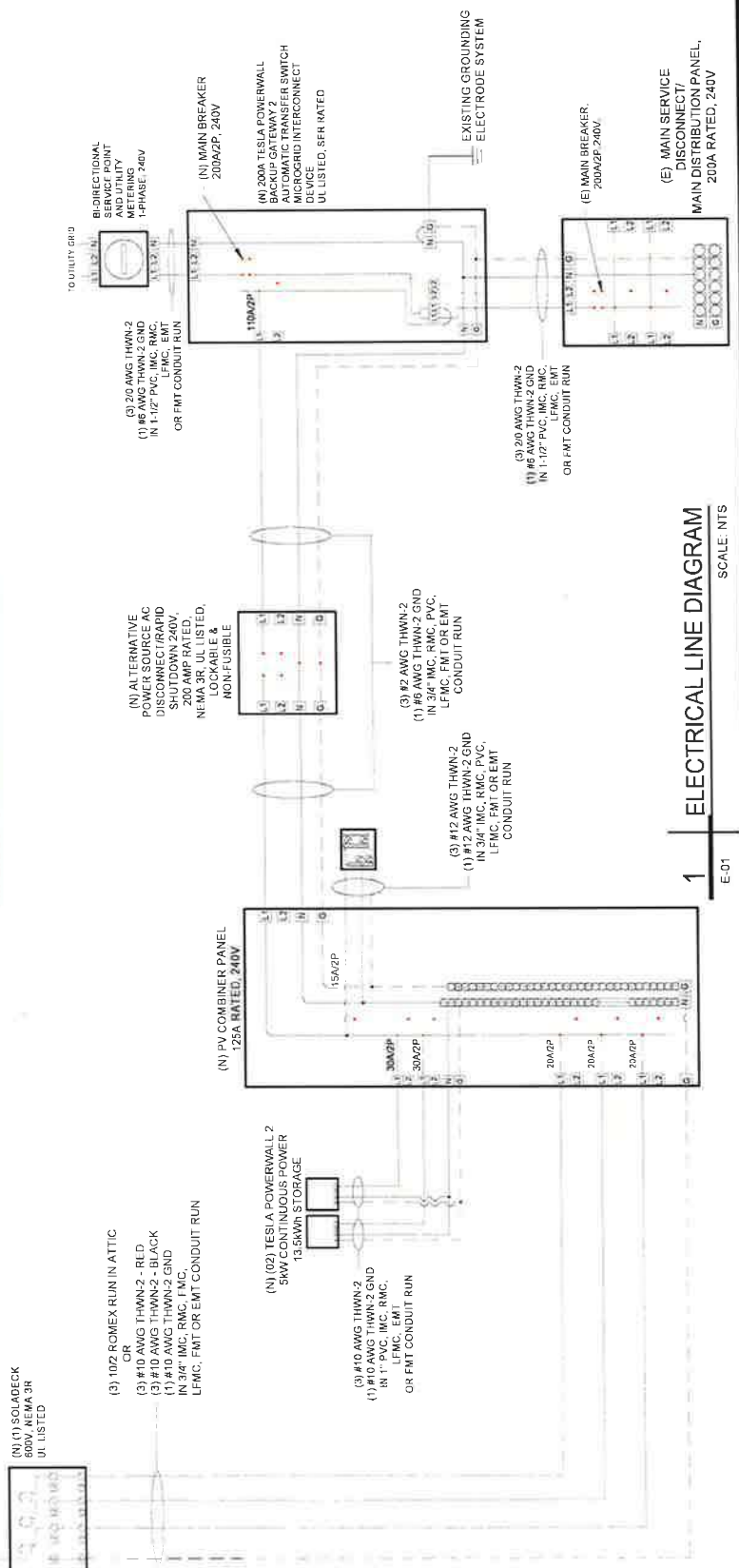
**SOLAR ARRAY (11,200 KW-DC STC - 9,772 KW-AC)**  
 (28) VSUN-V5UN400-105M-BB (400W) MODULES  
 (01) BRANCH OF 10 MODULES  
 (02) BRANCHES OF 09 MODULES

**NOTE:**  
 1. SUBJECT ESS & PV SYSTEMS HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE NEC 2017, AND THOSE SET FORTH BY THE FLORIDA SOLAR ENERGY CENTER CERTIFICATION, INCLUDING MAXIMUM NUMBER OF MODULE STRINGS, MAXIMUM NUMBER OF MODULES PER STRING, MAXIMUM OUTPUT, MODULE MANUFACTURER AND MODEL NUMBER, INVERTER MANUFACTURER AND MODEL NUMBER, AS APPLICABLE  
 2. MID INTERCONNECTION PER 705.12(B) & 705.170, AND COMPLIANT WITH NEC 690.10 AND 690.12 OF THE TESLA ENERGY STORAGE SYSTEM DOES NOT EXPORT POWER TO THE GRID IN ANY STORAGE MODE



#6 BARE CU WIRE PROTECTED PER NEC 250.64(B)

**Plans have not been reviewed for Electrical.  
 All Electrical work to be field verified.**



**1 ELECTRICAL LINE DIAGRAM**  
 SCALE: NTS  
 E-01

**VSUN**  
Innovative & Smart

MADE IN VIETNAM, manufacture by VIETNAM SUNERGY JOINT STOCK COMPANY

# VSUN405-108M-BB

**405W**

Highest power output

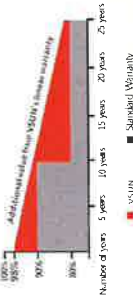
**20.75%**  
Module efficiency

**12 years**

Material & Workmanship warranty

**25 years**

Linear power output warranty



Standard Warranty

**Munich RE**

PERC MBB technology with Circular Ribbon

Higher output power

Half-cell Technology

Positive tolerance offer

- Micro Gap
- Better shading tolerance
- Fire safety: Class C
- Load certificates: wind to 2400Pa and snow to 5400Pa
- Beautiful appearance with black frame and black backsheet

VSUN, a BNEF Tier-1 PV module manufacturer invested by Fuji Solar, has been committed to providing greener, cleaner and more intelligent renewable energy solutions. VSUN is dedicated to bringing reliable, customized and high-efficient products into various markets and customers worldwide



Engineered in Japan  
www.vsun-solar.com

MADE IN VIETNAM, manufacture by VIETNAM SUNERGY JOINT STOCK COMPANY  
最も信頼出来る再エネパートナー

## Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN405-108M-BB	VSUN395-108M-BB	VSUN405-108M-BB	VSUN390-108M-BB
Maximum Power - Pmax (W)	405	400	395	390
Open Circuit Voltage - Voc (V)	37.26	37.03	37.03	36.94
Short Circuit Current - Isc (A)	13.08	13.68	13.59	13.5
Maximum Power Voltage - Vmp (V)	31.36	31.17	31	30.82
Maximum Power Current - Imp (A)	12.92	12.94	12.75	12.66
Module Efficiency	20.75%	20.09%	20.23%	19.98%

Standard Test Conditions (STC): irradiance 1000 W/m<sup>2</sup>, AM 1.5, module temperature 25°C, Power Scaling: 0-5W Measuring Tolerance: ±3%.  
Remark: Electrical data do not refer to a single module and they are not for comparison among different module types.

## Electrical Characteristics at Normal Operating Cell Temperature (NOCT)

Module Type	VSUN405-108M-BB	VSUN400-108M-BB	VSUN395-108M-BB	VSUN390-108M-BB
Maximum Power - Pmax (W)	402.1	398.4	394.7	387.3
Open Circuit Voltage - Voc (V)	35.1	34.9	34.8	34.5
Short Circuit Current - Isc (A)	11.19	11.13	11.05	10.91
Maximum Power Voltage - Vmp (V)	29.1	28.9	28.8	28.4
Maximum Power Current - Imp (A)	10.39	10.32	10.25	10.1

Normal Operating Cell Temperature (NOCT): irradiance 800W/m<sup>2</sup>, wind speed 1 m/s, ambient temperature 20°C, Measuring Tolerance: ±3%.

## Temperature Characteristics

NOCT	45°C (±2°C)	Maximum System Voltage (V)
Voltage Temperature Coefficient	-0.27%/°C	1000
Current Temperature Coefficient	-0.04%/°C	30
Power Temperature Coefficient	-0.32%/°C	

## Material Characteristics

- Dimensions: 1723±133±5±5mm (LxWxH)
- Weight: 21.8kg
- Frame: Black anodized aluminum profile
- Front Glass: White toughened safety glass 3.2 mm
- Cell Encapsulation: EVA (ethylene-vinyl-acetate)
- Back Sheet: Composite film
- Cells: 12x6 piece monocrystalline solar cells series strings
- Function Box: IP68, 3 diodes
- Cable/connector: Parafix 500mm (cable length can be customized), 1x4 mm<sup>2</sup> Connector: PV 2H20/20

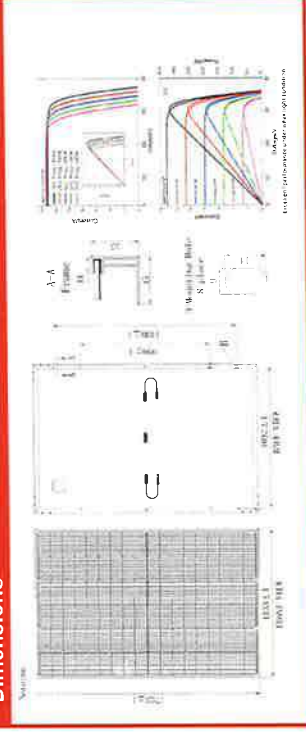
## Packaging

- Dimensions (WxH): 1760±128±125±5mm
- Quantity/20: 105
- Quantity/40: 403
- Container/40: 806

## System Design

- Temperature Range: -40°C to +85°C
- Withstanding hail: Maximum diameter of 25 mm with impact speed of 23 m/s-1
- Maximum Surface Load: 5400 Pa
- Application Class: Class A

## Dimensions



DUNLAP RESIDENCE  
2540 NW 53RD AVENUE RD  
OCALA, FL 34482

PROJECT NAME  
PROJECT INSTALLER  
POWER

Castillo Engineering  
CASTILLO ENGINEERING SERVICES, LLC  
601 W. UNIVERSITY ROAD, SUITE 200  
MAITLAND, FL 32751

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DESCRIPTION DATE REV

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Date: 2022.08.09 15:44:02

SHEET NAME: DATA SHEET  
SHEET SIZE: ANSI B 11" X 17"  
SHEET NUMBER: DS-01

**Plans have not been reviewed for Electrical.  
All Electrical work to be field verified.**

## Enphase IQ 7A Microinverter

The high-powered smart grid-ready **Enphase IQ 7A Micro™** dramatically simplifies the installation process while achieving the highest system efficiency for systems with 60-cell and 72-cell modules.

Part of the Enphase IQ System, the IQ 7A Micro integrates with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ Series Microinverters 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 of up to 25 years.

**High Power**

- Peak output power: 366 VA @ 240 VAC and 295 VA @ 208 VAC

**Easy to Install**

- Lightweight and simple
- Faster install on with improved lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014 & 2017)

**Efficient and Reliable**

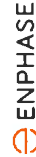
- Optimized for high-powered 60-cell and 72-cell modules
- Highest CEC efficiency of 97%
- More than a million hours of testing
- Class II double-enclosed enclosure
- UL listed

**Smart Grid Ready**

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Energy and Internet connect on request
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)



To learn more about Enphase offerings, visit [enphase.com](http://enphase.com)



### Enphase IQ 7A Microinverter

**INPUT (DC)**

10A/72-240V  
20A/480 V \*

Commodity input module ratings\*  
60 cell and 72 cell PV modules

Module compatibility

Maximum input DC voltage

Peak power tracking voltage

Operating range

Min/Max start voltage

Max DC load current (module I<sub>sc</sub>)

Overvoltage class DC port

DC port back-feed current

IV array configuration

1 x 1 ungrounded array; No additional DC side protection required.  
AC side protection requires max 20A per branch circuit

**OUTPUT (AC)**

366 VA @ 240 VAC

295 VA @ 208 VAC

Peak output power

Maximum continuous output power

Minimum (L-L) voltage range\*

Maximum continuous output current

Minimum frequency

Extended frequency range

AC short circuit fault current over 3 cycles

Maximum amps per 20 A (L-L) branch circuit

Overvoltage class AC port

AC port back-feed current

Power factor setting

0.95 leading @ 95 loading

**EFFICIENCY**

97.0 % @ 208 VAC

96.5 % @ 240 VAC

**MECHANICAL**

Ambient temperature range

Relative humidity range

Connector type DC (QTA-72-2 US)

Dimensions (WxHxD)

Weight

Cooling

Approved for wet locations

Resolution degree

Enclosure

Electromagnetic category / UV exposure rating

Class II double-insulated, corrosion resistant polymer enclosure

**FEATURES**

Power Line Communication (PLC)

Lighting Manager and MultiPhase monitoring options

Compatible with Lightem IQ Library

The AC and DC connections have been evaluated and approved by UL for use as the load break disconnect required by NEC 690.

CA Rule 21 (UL 1741-SA)

UL 62109-1, UL 1418, UL 1547, FCC Part 15 Class B, ICS 0003 Class B,

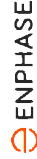
CAN/USA C22.2 NO. 107.1-01

This product is UL Listed as PV Rapid Shutdown Compliant and conforms with NEC 2014 and NEC 2017 Section 690.12 (b) for PV Rapid Shutdown Compliant PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.

1. The product is not a UL Listed product. See the manufacturer's website for the applicable product's subject to product compliance.
2. Under no circumstances shall the product be used in a manner not intended by the manufacturer.
3. The product is not a UL Listed product. See the manufacturer's website for the applicable product's subject to product compliance.
4. Units may vary. Refer to the requirements to determine the number of components per branch in your area.

To learn more about Enphase offerings, visit [enphase.com](http://enphase.com)

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**Castillo Engineering**  
SOLAR & ELEC. WORK  
CASTILLO ENGINEERING SERVICES, LLC  
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ENPHASE: CASTILLO@ENPHASE.COM

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DESCRIPTION	DATE	REV

PROJECT INSTALLER



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Date: 2022.09.09 15:44:02

PROJECT NAME

**DUNLAP RESIDENCE**  
2540 NW 53RD AVENUE RD  
OCALA, FL 34482

SHEET NAME  
DATA SHEET

SHEET SIZE  
ANSI B  
11" X 17"

SHEET NUMBER  
DS-02

**Plans have not been reviewed for Electrical.  
All Electrical work to be field verified.**

## Enphase IQ Envoy

The **Enphase IQ Envoy™** communications gateway delivers solar production and energy consumption data to Enphase Enlighten™ monitoring and analysis software for comprehensive, remote maintenance and management of the Enphase IQ System.

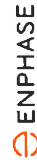
With integrated revenue-grade production metering and optional consumption monitoring, the Envoy IQ is the platform for total energy management and integrates with the Enphase IQ Battery™.



- Smart**
  - Enables web based monitoring and control
  - Bi-directional communications for remote upgrades
  - Supports power export limiting and zero-export applications
- Simple**
  - Easy system configuration using Enphase Installer Toolkit™ mobile app
  - Flexible networking with Wi-Fi, Ethernet, or cellular
- Reliable**
  - Designed for installation indoors or outdoors
  - Five year warranty



To learn more about Enphase offerings, visit [enphase.com](http://enphase.com)



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### Enphase IQ Envoy

<b>MODEL NUMBERS</b>	Enphase IQ Envoy™ ENV-IQ-AMT-240
<b>ACCESSORIES</b> (order separately)	Enphase IQ Envoy communications gateway with integrated revenue grade TV production metering (ANSI CT 2.20 +/- 0.5%) and optional consumption monitoring (+/- 2.5%) included with 200A continuous rated production CT
<b>Enphase Mobile Connect™</b>	Plug and play, industrial grade, cellular modem with data plan for systems up to 60 microinverters (60 / 1-year data plan)
<b>CELLMODEM-03 (60 / 5-year data plan)</b>	Cellular modem (60 / 5-year data plan) with 1-year warranty, available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.
<b>Consumption Monitoring CT</b>	Split core current transformers enable whole home metering.
<b>POWER REQUIREMENTS</b>	
Power requirements	120/240 VAC split phase Max. 20 A operational production required
<b>CAPACITY</b>	Up to 600
<b>MECHANICAL DATA</b>	
Dimensions (WHXD)	21.3 x 17.6 x 4.5 cm (8.4" x 5" x 1.8")
Weight	17.6 oz (499 g)
Ambient temperature range	-40° to 65° C (-40° to 149° F)
Environmental rating	-40° to 65° C (-40° to 149° F) if installed in an enclosure. IP30 for installation indoors or in an NRTL certified, NEMA type 3R enclosure.
Altitude	To 2000 metres (6,560 feet)
Production CT	Is limited to 200A of continuous current / 250A DC/PO - 72kW AC
Consumption CT	Internal shunt measures 100 amps to support 250kVCM THWN combiners (max)
	For electrical services to 250A with parallel runs up to 500A
	Internal aperture measures 0.84" x 0.95" (21.3mm x 24.38mm) to support 3/0 THWN conductor.
	CT wire insulation rating of 600V
<b>INTERNET CONNECTION OPTIONS</b>	
Integrated Wi-Fi	802.11b/g/n
Ethernet	802.3 Cat5e for Cat 6 UTP Ethernet cable, not included
Modem	Optional, CELLMODEM-01 (50) or CELLMODEM-03 (60), not included
<b>COMPLIANCE</b>	
Compliance	UL 916 UL 1818, C22.2 No. 61010-1 47 CFR, Part 15, Class B, ICES 003 IEC/EN 61010-1:2010 F60065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2 Metering, ANSI CT 2.20 accuracy class 0.5

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OCALA, FL 34482

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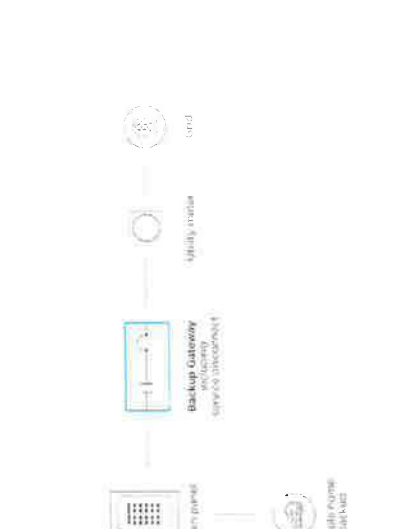
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SHEET NUMBER  
DS-03

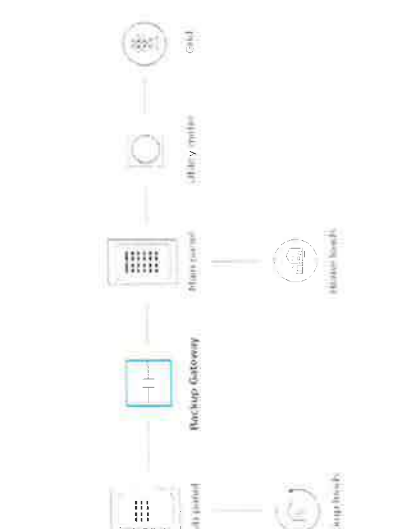


**TYPICAL SYSTEM LAYOUTS**

**WHOLE HOME BACKUP**



**PARTIAL HOME BACKUP**



**POWER WALL**

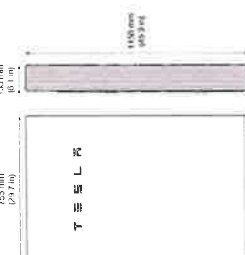
Tesla Powerwall is a fully-integrated AC battery system for residential or light commercial use. Its rechargeable lithium-ion battery pack provides energy storage for solar self-consumption, time-based control, and backup.

Powerwall's electrical interface provides a simple connection to any home or building. Its revolutionary, compact design achieves market-leading energy density and is easy to install, enabling owners to quickly realize the benefits of reliable, clean power.



**MECHANICAL SPECIFICATIONS**

Dimensions	1150 mm x 255 mm x 175 mm (45.3" x 10.0" x 6.9")
Weight	129 kg (285 lbs)
Mounting options	Flat or wall mount



**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Optimum Temperature	15°C to 30°C (59°F to 86°F)
Operating Humidity (RH)	10% to 90% (non-condensing)
Storage Conditions	-20°C to 50°C (-4°F to 122°F) up to 30% RH (non-condensing) Store in a clean, dry, well-ventilated area
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor use
Finish/Case Type	NER153je
Ingress Rating	IP65, Battery & Power Distribution Panel: IP67
Well Location Rating	Yes
Noise Level (1 m)	≤ 22 dBA at 20°C (68°F)

**PERFORMANCE SPECIFICATIONS**

AC Voltage (Nominal)	120/240 V
Form Factor	Stacked
Grid Frequency	60 Hz
Total Capacity	13.5 kWh
Usable Energy	11.7 kWh
Real Power, max continuous	9.6 kW (battery and inverter per 100% DoD)
Real Power, peak (10s, off-grid/backup)	7.4 kW (battery and inverter per 100% DoD)
Apparent Power, max continuous	9.6 kVA (battery and inverter per 100% DoD)
Apparent Power, peak (10s, off-grid/backup)	7.4 kVA (battery and inverter per 100% DoD)
Maximum Supply Fault Current	10 kA
Maximum Output Fault Current	10 kA
Overcurrent Protection Device	100 A
Interruption for Split-Phase Loads	120%
Power Factor Output Range	0.9 to 1.0 (variable)
Power Factor Range (labeled power)	0.9 to 1.0
Internal Battery DC Voltage	384 V
Rated Top Efficiency	92%
Warranty	10 years

**COMPLIANCE INFORMATION**

Canada	UL 1742, UL 1741, UL 1743
China	UL 1742, IEEE 1547, GB 1983
Europe	EN 50538, EN 50541
USA	IEEE 1547, IEEE 1547.4, IEEE 1547.7, IEEE 1547.9, IEEE 1548, IEEE 1549, IEEE 1552, IEEE 1553, IEEE 1554, IEEE 1555, IEEE 1556, IEEE 1557, IEEE 1558, IEEE 1559, IEEE 1562, IEEE 1563, IEEE 1564, IEEE 1565, IEEE 1566, IEEE 1567, IEEE 1568, IEEE 1569, IEEE 1570, IEEE 1571, IEEE 1572, IEEE 1573, IEEE 1574, IEEE 1575, IEEE 1576, IEEE 1577, IEEE 1578, IEEE 1579, IEEE 1580, IEEE 1581, IEEE 1582, IEEE 1583, IEEE 1584, IEEE 1585, IEEE 1586, IEEE 1587, IEEE 1588, IEEE 1589, IEEE 1590, IEEE 1591, IEEE 1592, IEEE 1593, IEEE 1594, IEEE 1595, IEEE 1596, IEEE 1597, IEEE 1598, IEEE 1599, IEEE 1600, IEEE 1601, IEEE 1602, IEEE 1603, IEEE 1604, IEEE 1605, IEEE 1606, IEEE 1607, IEEE 1608, IEEE 1609, IEEE 1610, IEEE 1611, IEEE 1612, IEEE 1613, IEEE 1614, IEEE 1615, IEEE 1616, IEEE 1617, IEEE 1618, IEEE 1619, IEEE 1620, IEEE 1621, IEEE 1622, IEEE 1623, IEEE 1624, IEEE 1625, IEEE 1626, IEEE 1627, IEEE 1628, IEEE 1629, IEEE 1630, IEEE 1631, IEEE 1632, IEEE 1633, IEEE 1634, IEEE 1635, IEEE 1636, IEEE 1637, 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IEEE 2912, IEEE 2913, IEEE 2914, IEEE 2915, IEEE 2916, IEEE 2917, IEEE 2918, IEEE 2919, IEEE 2920, IEEE 2921, IEEE 2922, IEEE 2923, IEEE 2924, IEEE

**Tier 1 – Standard Interconnection Agreement  
Customer-Owned Renewable Generation System**

This Agreement is made and entered into this 12<sup>th</sup> day of December, 20 22, by and between Lee Dunlap, (hereinafter called "Customer"), located at 2540 NW 53rd Avenue Ocala, Florida, and the City of Ocala doing business as Ocala Electric Utility (hereinafter called OEU), a body politic. Customer and OEU shall collectively be called the "Parties". The physical location/premise where the interconnection is taking place: 2540 NW 53rd Avenue Rd, Ocala, FL 34482

**WITNESSETH**

**Whereas**, a Tier 1 Renewable Generation System (RGS) is an electric generating system 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 as defined in Section 377.803, Florida Statutes, rated at no more than ten (10) kilowatts (10 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 the City of Ocala; and

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

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

(Continued on Sheet No. 21.1)

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

Effective: October 1, 2019

1. The Customer shall be required to enter into a Tri-Party Net-Metering Purchase Power Agreement with FMPA and the City of Ocala Electric Utility (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's 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 1 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. Increase in GPR above the ten kilowatt (10 kW) limit would necessitate entering into a new agreement at either Tier 2 or Tier 3 which may impose additional requirements on the Customer. In no case does the Tier 1, Tier 2 or Tier 3 agreement cover increases in GPR above two megawatts (2MW).
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 not be required to pay any special fees due solely to the installation of the RGS.
6. The Customer shall fully comply with OEU's Design Standards following NEC standards as those documents may be amended or revised by OUS 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*.
  - 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.

(Continued to Sheet No. 21.2)

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

Effective: October 1, 2019

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 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.

(Continued on Sheet No. 21.3)

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

Effective: October 1, 2019

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 an OEU interactive inverter or interconnection system equipment that ceases to interconnect with the OEU system upon a loss of OEU's electric 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 that (i) utilizes the same OEU interactive inverter for both systems, or (ii) utilizes a separate OEU interactive inverter for each system, 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' 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 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 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 system, such that back feed from the customer-owned renewable generation system to OEU's 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.

(Continued on Sheet No. 21.4)

Issued by: Michael Poucher, P.E.  
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 Section 18, 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 hundred thousand dollars (\$100,000.00).

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 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.

(Continued on Sheet No. 21.5)

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

Effective: October 1, 2019

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 OEU 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.

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 system emergencies, forced outages, uncontrollable forces or compliance with prudent electric OEU 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 system due to the operation of the Customer's generation or protective equipment as determined by OEU.
- d. Adverse electrical affects (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.

(Continued to Sheet No. 21.6)

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

Effective: October 1, 2019

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.
- 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, agents, contractors (and any subcontractor or material supplier thereof) 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.

(Continued on Sheet No. 21.7)

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

Effective: October 1, 2019

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 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 Agreement 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.

(Continued on Sheet No. 21.8)

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

Effective: October 1, 2019

OCALA ELECTRIC UTILITY  
OCALA, FLORIDA  
(Continued from Sheet No. 21.7)

FIRST REVISED SHEET NO. 21.8  
CANCELS ORIGINAL SHEET NO. 21.8

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 two and one-half percent (2.5%) of the aggregate customer peak demand on the OEU 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.

(Continued on Sheet No. 21.9)

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

Effective: October 1, 2019

OCALA ELECTRIC UTILITY  
OCALA, FLORIDA  
(Continued from Sheet No. 21.8)

FIRST REVISED SHEET NO. 21.9  
CANCELS ORIGINAL SHEET NO. 21.9

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 / 05 / 2023

Customer:

By: Ted Dunlap  
(Print Name)

[Signature]  
(Signature)

Date: 12-12-2022

City of Ocala Electric Utility Account Number:

552603 - 122345

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 12<sup>th</sup> day of December, 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 Ted Dunlap, 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.

(Continued on Sheet No. 20.1)

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

Effective: October 1, 2019

### **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.

(Continued on Sheet No. 20.2)

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

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

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 / 05 / 2023

**Florida Municipal Power Agency**

By: [Signature]

Title: Bus Dev & Sys Ops Director

Date: 02 / 05 / 2023

**Customer**

By: Ted Danley

(Print Name)

Date: 12-12-2020

[Signature]

(Signature)

Customer's City of Ocala Electric Utility Account Number: 552603-122345

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) FMPA 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 FMPA as soon as it becomes available, but no later than the second working day of every month. FMPA 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. FMPA will update the Quarterly Energy Rate every April 1, July 1, October 1 and January 1.**

- b) As part of the monthly bill adjustment, FMPA will also increase OEU's kWh billing amount by the same kWh amount as the customer-owned renewable generation purchased by FMPA. This adjustment is necessary because excess customer generation that flows onto OEU's electric system has been purchased by FMPA, 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 FMPA'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.

Title	FOR SIGNATURES - Application for Interconnection of.....
File name	#230193_Ted Dunlap.pdf
Document ID	c2f9c012509c7cc45e6587bc5a5dabefec55f22b
Audit trail date format	MM / DD / YYYY
Status	● Signed

### Document History

 SENT	<b>01 / 20 / 2023</b> 17:19:15 UTC-5	Sent for signature to William E. Sexton (wsexton@ocalafl.org), Ken Whitehead (kwhitehead@ocalafl.org) and Florida Municipal Power Agency (chris.gowder@fmpa.com) from slewis@ocalafl.org IP: 216.255.240.104
 VIEWED	<b>02 / 03 / 2023</b> 16:06:38 UTC-5	Viewed by William E. Sexton (wsexton@ocalafl.org) IP: 216.255.240.104
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 VIEWED	<b>02 / 05 / 2023</b> 13:48:45 UTC-5	Viewed by Ken Whitehead (kwhitehead@ocalafl.org) IP: 216.255.240.104
 SIGNED	<b>02 / 05 / 2023</b> 13:50:19 UTC-5	Signed by Ken Whitehead (kwhitehead@ocalafl.org) IP: 216.255.240.104

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### Document History



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(chris.gowder@fmpa.com)  
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SIGNED

**02 / 05 / 2023**  
19:03:35 UTC-5

Signed by Florida Municipal Power Agency  
(chris.gowder@fmpa.com)  
IP: 38.77.131.2



COMPLETED

**02 / 05 / 2023**  
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The document has been completed.