

Application ID (CORE use only): \_\_\_\_\_ Received: \_\_\_\_\_

## Level 1 Application and/or Energy Storage Application

Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than  
Twenty-five (25) kW for Residential or Twenty-five (25) kW for Commercial

### Interconnection Customer Information

Name: George Washington Contact Person: George Washington

Account Number: 12345678

Address: 1600 Pennsylvania Ave

City: Washington State: D.C. Zip: 20500

Phone Number: (202) 456-1111 E-Mail gwash76@revolutionary.com

### Equipment Installation Contractor/Electrical Contractor (If different from above)

Contact Name: Benedict Arnold

Company Name: Redcoat Solar Inc.

Contact Phone Number: (202) 456-1414 E-Mail Address: contractor@redcoatsolar.com

### Small Generating Facility Information

☒ New ☐ Existing System Size AC: \_\_\_\_\_ Total System Size AC: 6.0 (kW)

Inverter Manufacturer: Delta Model: E6-TL-US

Inverter Nameplate AC Rating: 6 (kW) System DC Rating: 5.5 (kW)

Inverter Output AC settings Rating: 6 (kW) (supporting documents required for export limiting)

Projected Annual Energy Production: 9160 (kWh)

Service Voltage: ☒ 120/240 ☐ 120/208 ☐ 277/480

Power must be exported to the grid at a power factor of .95 or higher

### Energy Storage Information:

☒ New ☐ Existing ☐ Not Applicable

Energy Storage Inverter Manufacturer: Delta Model: E6-TL-US

Total Energy Storage Size: 5 kW 9.3 kWh

Batteries are subject to no-export restrictions.

**Please include the following documentation: one-line diagram, site plan (showing all equipment location and fencing), specification sheets for modules, batteries, and inverter(s). \$195 Application Processing Fee**

Application ID (CORE use only): \_\_\_\_\_

This Application shall be deemed complete when the Interconnection Customer provides all applicable and correct information required below, as well as any additional information required by CORE to evaluate the Request. The terms of this Application are governed by the provisions applicable to the Level 1 Process of CORE's Small Generation Interconnection Procedures and/or Energy Storage Procedure, as the same may be amended, modified, or restated from time to time.

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than twenty-five (25) kW for residential or twenty-five (25) kW for commercial and return the Certificate of Completion when the Small Generating Facility has been installed. I further agree that CORE shall be entitled to any renewable energy credits or other similar attributes associated with the production of electricity by the equipment referred to in this application upon interconnection of that equipment, until such time as CORE is notified in writing of the transfer or assignment of such credits or attributes to a third party.

**I UNDERSTAND THAT ONLY SYSTEMS UP TO LESSER OF 200% OF THE 12 MONTH HISTORICAL USAGE AT THE METER LOCATION, OR 10 KW FOR RESIDENTIAL, OR 25 KW FOR COMMERCIAL ARE ELIGIBLE FOR NET METERING.**

**I UNDERSTAND THAT CORE HAS THE RIGHT TO CHANGE ITS RATES AT ANY TIME AND THAT FUTURE REVISIONS MAY INCLUDE A REDUCTION IN THE ENERGY CREDIT RATE, THE ADDITION OF A DEMAND CHARGE, AN INCREASED SERVICE CHARGE, A MODIFICATION TO THE COMPENSATION PAID FOR ANNUAL EXCESS GENERATION, OR OTHER CHANGES THAT WOULD ALLOW CORE TO RECOVER COSTS OF PROVIDING SERVICE TO NET METERING AND OTHER CUSTOMERS.**

**I UNDERSTAND THAT SUCH REVISIONS, IF ADOPTED, MAY AFFECT THE RELATIVE COSTS AND ECONOMIC BENEFITS OF MY GENERATION EQUIPMENT AND I ACKNOWLEDGE THAT IN AGREEING TO INTERCONNECT MY GENERATION EQUIPMENT, CORE RESERVES ITS RIGHT TO ESTABLISH RATES DESIGNED TO FULLY RECOVER ITS COSTS AND MAKES NO COMMITMENT TO ME THAT IT WILL CONTINUE ITS CURRENT RATES OR RATE STRUCTURE FOR ANY PERIOD OF TIME.**

Signed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Contingent Approval

(For CORE use only)

Interconnection of the Small Generating Facility and/or Inverter-Based Energy Storage Device is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than twenty-five (25) kW for residential or twenty-five (25) kW for commercial and return of the Certificate of Completion.

Intermountain Rural Electric Association d/b/a CORE Electric Cooperative  
Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

SITE PLAN - SCALE = 1/16" = 1'-0"



	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	19°	127°	118°	271.6



NOTES:  
NO GATES OR FENCES PRESENT

CUSTOMER RESIDENCE:  
GEORGE WASHINGTON  
1600 PENNSYLVANIA AVE,  
WASHINGTON, D.C., 20500

TEL. (202) 456-1414  
APN/TMK #: APN: R0494648

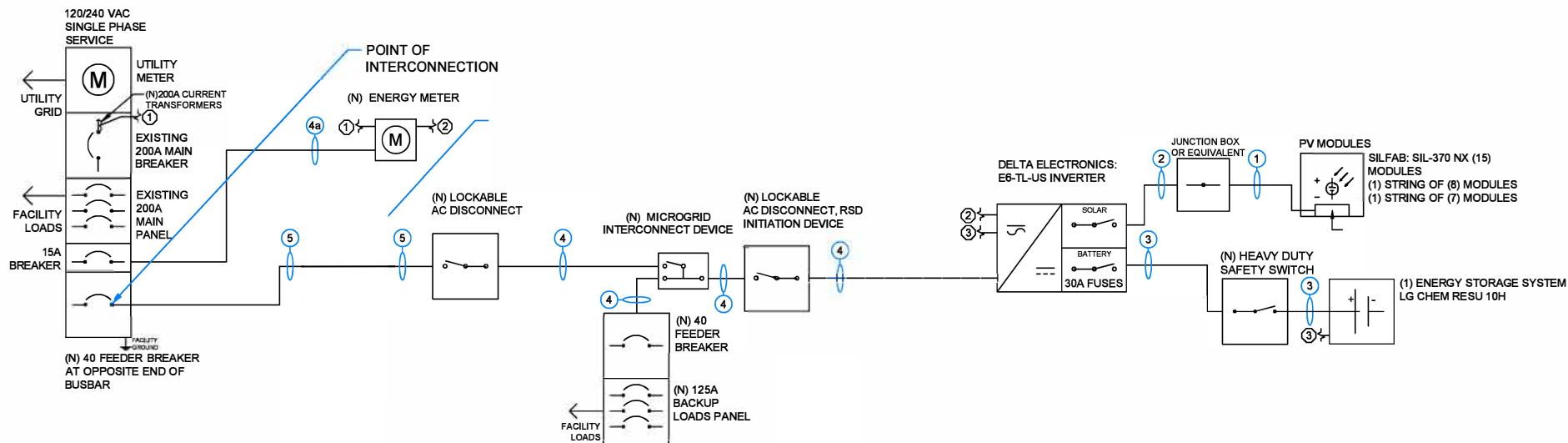
PROJECT NUMBER:  
1776-870DUE

DESIGNER:  
BENEDICT ARNOLD

SHEET  
SITE PLAN

REV: A

PAGE  
PV-2.0



#### CONDUIT SCHEDULE

#	CONDUIT	CONDUCTOR	NEUTRAL	GROUND
1	NONE	(4) 10 AWG PV WIRE	NONE	(1) 10 AWG BARE COPPER
2	3/4" EMT OR EQUIV.	(4) 10 AWG THHN/THWN-2	NONE	(1) 10 AWG THHN/THWN-2
3	3/4" EMT OR EQUIV.	(2) 10 AWG THHN/THWN-2	NONE	(1) 10 AWG THHN/THWN-2
4	3/4" EMT OR EQUIV.	(2) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2 EGC/GEC
4a	3/4" EMT OR EQUIV.	(2) 14 AWG THHN/THWN-2	(1) 14 AWG THHN/THWN-2	(1) 14 AWG THHN/THWN-2 EGC/GEC
5	3/4" EMT OR EQUIV.	(2) 6 AWG THHN/THWN-2	(1) 6 AWG THHN/THWN-2	(1) 6 AWG THHN/THWN-2 EGC/GEC

#### MODULE CHARACTERISTICS

JA SOLAR: JAM60S10-340/MR: 340 W  
 OPEN CIRCUIT VOLTAGE: 41.55 V  
 MAX POWER VOLTAGE: 34.73 V  
 SHORT CIRCUIT CURRENT: 10.46 A

#### SYSTEM CHARACTERISTICS - INVERTER 1

SYSTEM SIZE: 5100 W  
 SYSTEM OPEN CIRCUIT VOLTAGE: 378 V  
 SYSTEM OPERATING VOLTAGE: 278 V  
 MAX ALLOWABLE DC VOLTAGE: 480 V  
 SYSTEM OPERATING CURRENT: 19.58 A  
 SYSTEM SHORT CIRCUIT CURRENT: 26.15 A

CUSTOMER RESIDENCE:  
 GEORGE WASHINGTON  
 1600 PENNSYLVANIA AVE,  
 WASHINGTON, D.C., 20500

TEL. (202) 456-1414  
 APN/TMK #: APN: R0494648

PROJECT NUMBER:  
 1776-870DUE

DESIGNER:  
 BENEDICT ARNOLD

SHEET  
 ELECTRICAL

REV: A1 14-07-2021

PAGE ONE-LINE

Electrical Specifications		SIL-370 NX mono PERC	
Test Conditions		STC	NOCT
Module Power (Pmax)	Wp	370	266
Maximum power voltage (Vpmax)	V	37.2	33.7
Maximum power current (Ipmax)	A	10.0	7.9
Open circuit voltage (Voc)	V	44.8	40.7
Short circuit current (Isc)	A	10.6	8.3
Module efficiency	%	20.2	18.2
Maximum system voltage (VDC)	V	1000	
Series fuse rating	A	20	
Power Tolerance	Wp	±3%	

Measurement conditions: STC 1000 W/m<sup>2</sup> • AM 1.5 • Temperature 25 °C • NOCT 800 W/m<sup>2</sup> • AM 1.5 • Measurement uncertainty ≤ 3%  
• Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by ±5% and power by ±3%.

Temperature Ratings		SIL-370 NX mono PERC	
Temperature Coefficient Isc		+0.064 %/°C	
Temperature Coefficient Voc		-0.28 %/°C	
Temperature Coefficient Pmax		-0.36 %/°C	
NOCT (± 2 °C)		46 °C	
Operating temperature		-40/+85 °C	

Mechanical Properties and Components		SIL-370 NX mono PERC	
	Metric	Imperial	
Module weight	20±0.2 kg	44±0.4 lbs	
Dimensions (H x L x D)	1832 mm x 1000 mm x 38 mm	72.13 in x 39.4 in x 1.5 in	
Maximum surface load (wind/snow)*	4000 Pa rear load / 5400 Pa front load	83.5/112.8 lb/ft <sup>2</sup>	
Hail impact resistance	Ø 25 mm at 83 km/h	Ø 1 in at 51.6 mph	
Cells	66 - Si mono-PERC - 5 busbar 158.75 x 158.75 mm	66 - Si mono-PERC - 5 busbar 62.25 x 62.25 in	
Glass	3.2 mm high transmittance, tempered, DSM anti-reflective coating	0.126 in high transmittance, tempered, DSM anti-reflective coating	
Cables and connectors (refer to installation manual)	1200 mm Ø 5.7 mm, MC4 from Staubli	47.2 in, Ø 0.22 (12AWG), MC4 from Staubli	

Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film, fluorine-free PV backsheet		
Frame	Anodized Aluminum (Black)		
Bypass diodes	3 diodes-30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)		
Junction Box	UL 3730 Certified, IEC 62790 Certified, IP67 rated		

Warranties		SIL-370 NX mono PERC	
Module product workmanship warranty		25 years**	
Linear power performance guarantee		30 years	
		≥ 97.1% end 1 <sup>st</sup> year ≥ 91.6% end 12 <sup>th</sup> year ≥ 85.1% end 25 <sup>th</sup> year ≥ 82.6% end 30 <sup>th</sup> year	

Certifications		SIL-370 NX mono PERC	
Product		ULC ORD C1703, UL1703, CEC listed***, UL 61215-1/-1-1/-2, UL 61730-1/-2, IEC 61215-1/-1-1/-2***, IEC 61730-1/-2***, CSA C22.2#61730-1/-2, IEC 62716	
Factory		Ammonia Corrosion; IEC61701:2011 Salt Mist Corrosion Certified, UL Fire Rating: Type 2 ISO9001:2015	

All states except California California  
■ Modules Per Pallet: 26 ■ Modules Per Pallet: 26  
■ Pallets Per Truck: 34 ■ Pallets Per Truck: 32  
■ Modules Per Truck: 884 ■ Modules Per Truck: 832

\*⚠ Warning. Read the Safety and Installation Manual for mounting specifications and before handling, installing and operating modules.

\*\*12 year extendable to 25 years subject to registration and conditions outlined under "Warranty" at [www.silfabsolar.com](http://www.silfabsolar.com).

\*\*\*Certification and CEC listing in progress.

PAN files generated from 3rd party performance data are available for download at: [www.silfabsolar.com/downloads](http://www.silfabsolar.com/downloads).



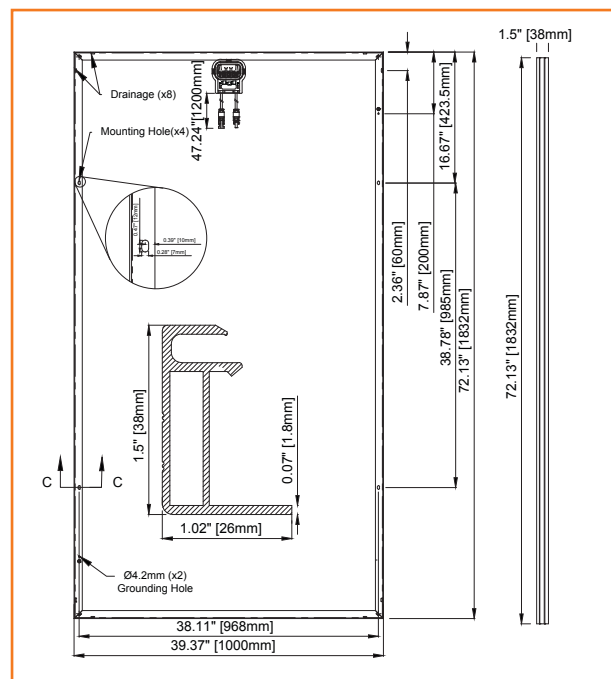
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## SPECIFICATIONS

Model	M4-TL-US	M5-TL-US	M6-TL-US	M8-TL-US	M10-TL-US
INPUT (DC)					
Maximum system voltage	600 V				
Nominal voltage	380 V				
Maximum operating voltage Voc	540 V				
Operating MPPT range	50 V to 480 V				
Maximum input current (per MPPT)	12 A	12 A	12 A	12 A	20 A
Maximum short circuit current @ STC	15 A / 15 A	15 A / 15 A	15 A / 15 A / 15 A	15 A / 15 A / 15 A	25 A / 25 A
Maximum DC/AC ratio	1.3				
DC disconnect	Integrated				
MPP tracker	2	2	3	3	2
Input strings available	2 - 2	2 - 2	2 - 2 - 2	2 - 2 - 2	2 - 2
OUTPUT (AC)					
Nominal power @ 240V	3840 W	4800 W	5760 W	7680 W	9600 W
Maximum output power	4000 W	5000 W	6000 W	8000 W	10000 W
Voltage range	183 Vac to 228 Vac @ 208 Vac 211 Vac to 264 Vac @ 240 Vac				
Maximum continuous current	16 A	20 A	24 A	32 A	40 A
Nominal frequency	60 Hz				
Frequency range	59.3 Hz to 60.5 Hz				
Adjustable frequency range	50 Hz to 66 Hz				
Night consumption	< 1.5 W *				
THD @ nominal power	< 3 %				
Power factor @ nominal power	> 0.99				
Adjustable power factor range	0.85i to 0.85c				
GENERAL SPECIFICATION					
Maximum efficiency	98%				
CEC efficiency	97.0 % @ 208 V 97.5 % @ 240 V	97.5 % @ 208 V 97.5 % @ 240 V	97.0 % @ 208 V 97.5 % @ 240 V	97.5 % @ 208 V 97.5 % @ 240 V	97.5 % @ 208 V 97.5 % @ 240 V
Operating temperature range	-22 °F to 149 °F (-30 °C to 65 °C) de-rating above 113 °F (45 °C )				
Storage temperature range	-40 °F to 185 °F (-40 °C to 85 °C)				
Humidity	0% to 95%				
Maximum operating altitude	9,843 ft (3,000 m)				
Acoustic noise	< 45 dB(A) @ 3 ft (1m)				

## SPECIFICATIONS

Model	M4-TL-US	M5-TL-US	M6-TL-US	M8-TL-US	M10-TL-US
MECHANICAL DESIGN					
Dimensions (W x H x D)	16.7 x 23.2 x 5.9 in (425 x 590 x 150 mm)				
Weight <sup>1)</sup>	41.9 lbs (19.0 kg)	41.9 lbs (19.0 kg)	44.3 lbs (20.1 kg)	45.2 lbs (20.5 kg)	47.6 lbs (21.6 kg)
Cooling	Natural convection			Natural convection with internal fan	
DC connection	Spring contact type				
Admissible conductor size DC	AWG 12 to AWG 8			AWG 10 to AWG 8	
AC connection	Spring contact type				
Admissible conductor size AC	AWG 10 to AWG 6			AWG 8 to AWG 6	
Communication interface	BLE, optional WiFi, Ethernet, 3G / 4G cellular communication				
Enclosure material	Die-casting aluminum				
STANDARDS / DIRECTIVES					
Enclosure protection rating	Type 4				
Safety	UL 1741, CSA-C22.2 No. 107.1-01				
Software approval	UL 1998				
Ground fault protection	UL 1741 CRD				
Anti-islanding protection	IEEE 1547, IEEE 1547.1				
EMC	FCC part 15 Class B				
AFCI	UL 1699B (Type 1), NEC 2017 Article 690.11				
Integrated meter	ANSI C12.20 (meets 0.5% accuracy)				
Grid support regulation	UL 1741 SA, California Rule 21 phase 1, 2 (pending), HECO Compliant				
WARRANTY					
Standard warranty	10 years				



1) Without communication meter

### Delta Electronics (Americas), Ltd.

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 Support Email: [Inverter.Support@deltaww.com](mailto:Inverter.Support@deltaww.com)  
 Sales Hotline: +1-877-440-5851 or +1-626-369-8021  
 Support Hotline: +1-877-442-4832  
 Support (Intl.): +1-626-369-8019  
 Monday to Friday from 6am to 6pm PST (apart from Holidays)  
[www.Delta-Americas.com](http://www.Delta-Americas.com)



## RESU10H

Solaredge compatible

Electrical Characteristics		
Total Energy		9.8 kWh @25°C (77°F)
Usable Energy <sup>1)</sup>		9.3 kWh @25°C (77°F)
Voltage Range	Charge	400 ~ 450 VDC
	Discharge	350 ~ 430 VDC
Absolute Max. Voltage		520VDC
Max. Charge/Discharge Current		11.9A@420V / 14.3A@350V
Max. Charge/Discharge Power <sup>2)</sup>		5kW
Peak Power (only discharging) <sup>3)</sup>		7kW for 10 sec.
Peak Current (only discharging)		18.9A@370V for 10 sec.
Communication Interface		RS485
DC Disconnect		Circuit Breaker, 25A, 600V rating
Connection Method		Spring Type Connector
User interface		LEDs for Normal and Fault operation
Protection Features		Over Voltage / Over Current / short circuit / Reverse Polarity
Scalability (Total Energy, Max. Charge/Discharge Power, Peak Power (only discharging))		Max. 2 in parallel (19.6 kWh @25°C (77°F), 6.6KW, 7kW for 10 sec.)

Operating Conditions	
Installation Location	Indoor(Wall-Mounted) / Outdoor
Operating Temperature	14 ~ 113°F (-10 ~ 45°C)
Operating Temperature (Recommended)	59 ~ 86°F (15 ~ 30°C)
Storage Temperature	-22 ~ 131°F (-30 ~ 55°C)
Humidity	5%~95%
Altitude	Max. 6,562ft (2,000m)
Cooling Strategy	Natural Convection

Certification		
Safety	Cell	UL1642
	Battery Pack	UL1973 / CE / RCM / TUV (IEC 62619)
Emissions		FCC
Hazardous Materials Classification		Class 9
Transportation		UN38.3 (UNDOT)
Ingress Rating		IP55

※ Test Conditions - Temperature 25°C, at the beginning of life

※ Total Energy is measured under specific condition from LGC(0.3CCCV/0.3CC)

※ DC/DC Discharge Efficiency 94.5%

1) Value for Battery Cell Only (Depth of Discharge 95%), 2kW charge/discharge power.

2) LG Chem recommends 3.3kW for maximum battery lifetime

3) Peak Current excludes repeated short duration (less than 10 sec. of current pattern).



### RESU10H

Solaredge compatible

Mechanical Characteristics		
Dimensions	Width	744 mm (29.3")
	Height	907 mm (35.7")
	Depth	206 mm ( 8.1")
Weight		97 kg (214lbs)

