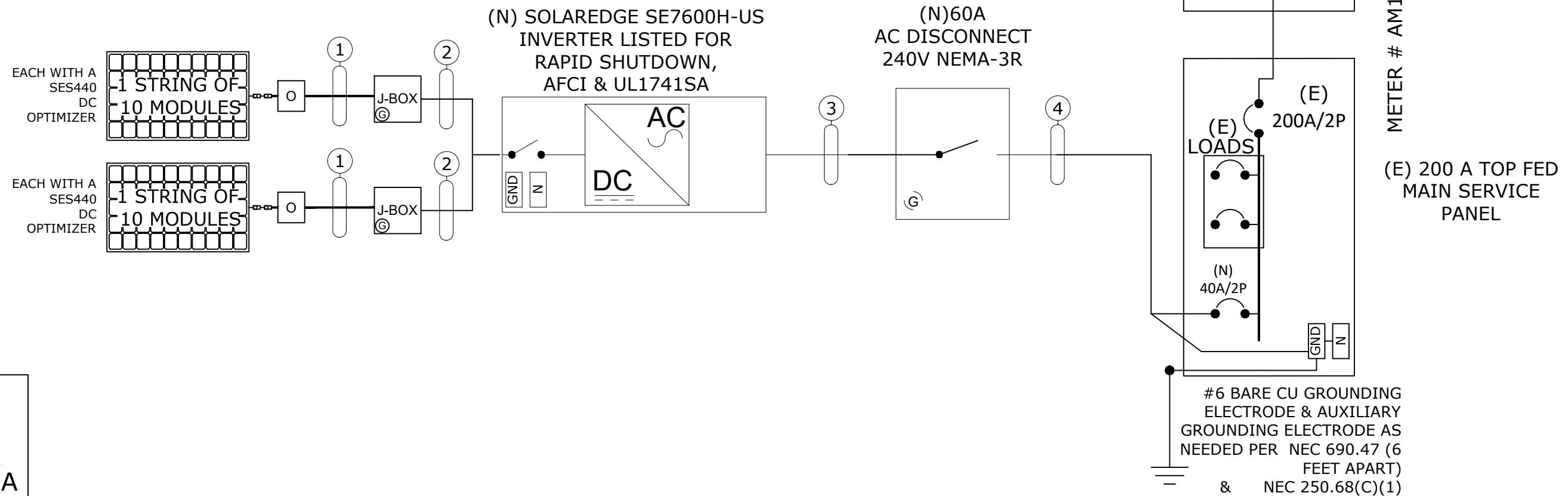


WIRE TAG #	CONDUIT	WIRE QTY	WIRE GAUGE	WIRE TYPE	TEMP RATING	WIRE AMP	TEMP DE-RATE	CONDUIT FILL	WIRE OCP	TERMINAL 75°C RATING	STRING WATTAGE	OPERATING VOLTAGE	STRING AMPS	NEC = MAX AMPS	MAX. SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE
1	Open Air	2	#10	PV WIRE	90°	40	x 0.96	x 1	= 38.40A	35 A	4150	/ 400	= 10.38	x 1.25 = 12.97A	480	#6	SBC
2	3/4" EMT	2	#10	THWN-2	90°	40	x 0.96	x 1	= 38.40A	35 A	4150	/ 400	= 10.38	x 1.25 = 12.97A	480	#10	THWN-2
3	3/4" EMT	3	#8	THWN-2	90°	55	x 0.96	x 1	= 52.80A	50 A	/		= 32	x 1.25 = 40.00A	240	#10	THWN-2
4	3/4" EMT	3	#8	THWN-2	90°	55	x 0.96	x 1	= 52.80A	50 A	/		= 32	x 1.25 = 40.00A	240	#10	THWN-2

INVERTER SPECS	OPTIMIZER SPECS	DISCONNECTS	MODULE SPECS	ASHRAE AMBIENT TEMPERATURE SPECS		
INVERTER:SE7600H-US QTY:1	OPTIMIZER:S440 QTY:20 MAX STRING WATTAGE: 5700	MAKE:EATON DG222URB QTY:1 RATED CURRENT: 60A MAX RATED VOLTAGE: 240V	MODULE TYPE: QTY: WATTAGE: FRAME COLOR: CS3N-415MS 20 415 BLACK Voc: 45.1V Isc: 11.68A Imp: 10.98A Vpmax: 37.8V	High Temp	DISTANCE ABOVE ROOF	EXTREME
VOLTAGE: 240 WATTAGE: 7600 NEC EFF: 99%	CELL: 60 ISC: 14.5			2% Avg.	1"	MIN
				34.2° C	NO TEMP ADDER PER 310.15(B)(3)(C)	-1.4° C

UTILITY HAS 24-HR UNRESTRICTED ACCESS TO ALL PHOTOVOLTAIC SYSTEM COMPONENTS LOCATED AT THE SERVICE ENTRANCE. CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT PER NEC ARTICLE 300.6 (C) (1) AND ARTICLE 310.10 (D). CONDUCTORS EXPOSED TO WET LOCATIONS SHALL BE SUITABLE FOR USE IN WET LOCATIONS PER NEC ARTICLE 310.10 (C). ALL BOS COMPONENTS SHALL BE INSTALLED WITHIN 10 FT OF ADJACENT COMPONENTS



METER # AM12251819

(E) 200 A TOP FED MAIN SERVICE PANEL

FOR MSP

120 % RULE

$$\frac{\text{BUS BAR}}{200A \times 1.2} - 200A = 40A$$



JOB NUMBER: P-003939

UTILITY: ENERGY

RACKING: K2 CROSSRAIL SYSTEM

MODULES: (20)CANADIAN SOLAR CS3N-415MS

OPTIMIZER: (20) SOLAREEDGE S440 OPTIMIZER

INVERTER: (1)SOLAREEDGE SE7600H-US

OWNER:

NICHELLE JONES,
6332 PEOPLES AVE,
NEW ORLEANS, LA 70122

DESCRIPTION:

NICHELLE JONES,
RESIDENCE
8.30 kWDC ROOF SOLAR SYSTEM
PRODUCTION: 9,921kWH

STAMP:

PV-5

PAGE NAME:
SINGLE-LINE DIAGRAM

SCALE:
NTS

DATE:
10/3/2022

POSIGEN DEVELOPER, LLC
819 CENTRAL AVE STE 210
JEFFERSON, LA 70121
LA ELECTRICAL LICENSE :74446

ACCOUNT NO. : 180971129



DESIGNED BY:
ENERQUAL
TECHNOLOGY PVT. LTD.



REV:

GROUNDING NOTES	
1	ALL EQUIPMENT SHALL BE PROPERLY GROUNDED PER THE REQUIREMENTS OF NEC ARTICLES 250 & 690
2	INSTALLER SHALL CONFIRM THAT MOUNTING SYSTEM HAS BEEN EVALUATED FOR COMPLIANCE WITH UL 2703 "GROUNDING AND BONDING" WHEN USED WITH PROPOSED PV MODULE.
3	PV MODULES SHALL BE GROUNDED TO MOUNTING RAILS USING MODULE LUGS OR RACKING INTEGRATED GROUNDING CLAMPS AS ALLOWED BY LOCAL JURISDICTION. ALL OTHER EXPOSED METAL PARTS SHALL BE GROUNDED USING UL-LISTED LAY-IN LUGS.
4	GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLOR CODED GREEN, OR MARKED GREEN IF #4AWG OR LARGER
5	AC SYSTEM GROUNDING ELECTRODE CONDUCTOR (GEC) SHALL BE A MINIMUM SIZE #8AWG WHEN INSULATED, #6AWG IF BARE WIRE.
6	IF THE EXISTING MAIN SERVICE PANEL DOES NOT HAVE A VERIFIABLE GROUNDING ELECTRODE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE.

7	EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC ARTICLE 690.45, AND BE A MINIMUM OF #10AWG WHEN NOT EXPOSED TO DAMAGE, AND #6AWG SHALL BE USED WHEN EXPOSED TO DAMAGE
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NOTES :

- MATING CONNECTORS SHALL COMPLY WITH NEC 690.33.
- SOLAR EDGE SYSTEM MEETS REQUIREMENTS FOR PHOTOVOLTAIC RAPID SHUTDOWN SYSTEM (PVRSS), AS PER NEC 690.12(B).
- THE SPECIFIED OPTIMIZER CAN BE SUBSTITUTED WITH A P400, P405, P505, P401, OR P485. THESE OPTIMIZERS HAVE AN INPUT VOLTAGE WINDOW WIDE ENOUGH TO ACCOMMODATE THE OUTPUT VOLTAGE RANGE OF THE MODULE AT THE DESIGN TEMPERATURES, HAVE A MAX INPUT CURRENT RATING THAT IS ABOVE THE MAX OUTPUT CURRENT OF THE MODULE, AND A MAX POWER INPUT THAT IS ABOVE THE RATED POWER OUTPUT OF THE MODULE.
- DC PV CONDUCTORS ARE NOT SOLIDLY-GROUNDED. NO DC PV CONDUCTOR SHALL BE WHITE- OR GRAY-COLORED
- ALL METAL ENCLOSURES, RACEWAYS, CABLES AND EXPOSED NONCURRENT-CARRYING METAL PARTS OF EQUIPMENT SHALL BE GROUNDED TO EARTH AS REQUIRED BY NEC 250.4(A) AND PART III OF ARTICLE 250 AND EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45. THE GROUNDING ELECTRODE SYSTEM SHALL ADHERE TO NEC 690.47(A) AND NEC 250.169. THE DC GROUNDING ELECTRODE SHALL BE SIZED ACCORDING TO NEC 250.166 AND INSTALLED IN COMPLIANCE WITH NEC 250.64.
- MAX DC VOLTAGE OF ARRAY FIXED BY THE INVERTER AT 380V REGARDLESS OF TEMPERATURE. THE MAX DC VOLTAGE OF THE MODULE AT -15°C IS 53.2V (-15°C - 25°C) X -0.138V/C + 47.7V = 53.2V).
- POINT-OF-CONNECTION IS ON THE SUPPLY SIDE OF SERVICE DISCONNECT, INSIDE PANELBOARD ENCLOSURE USING UNUSED TERMINALS, TERMINALS THAT ARE SUITABLE FOR DOUBLE LUGGING, OR USING OTHER LOCALLY-APPROVED METHODS AND HARDWARE, IN COMPLIANCE WITH NEC 705.12(A). THE PANELBOARD SHALL HAVE SUFFICIENT SPACE TO ALLOW FOR ANY TAP HARDWARE AS REQUIRED BY NEC 110.3 AND NEC 312.8(A)
- PV SYSTEM DISCONNECT SHALL BE A VISIBLE KNIFE-BLADE TYPE DISCONNECT THAT IS ACCESSIBLE AND LOCKABLE BY THE UTILITY. THE DISCONNECT SHALL BE LOCATED WITHIN 10 FT OF UTILITY METER. DISCONNECT SHALL BE GROUPED IN ACCORDANCE WITH NEC 230.72.

 <p>PosiGen Solar Energy and Energy Efficiency</p>	JOB NUMBER: P-003939	OWNER:	DESCRIPTION:	STAMP:	<p>PV-5.1</p> <p>PAGE NAME: ELECTRICAL NOTES</p> <p>SCALE: NTS</p> <p>DATE: 10/3/2022</p>
	UTILITY: ENERGY	NICHELLE JONES, 6332 PEOPLES AVE, NEW ORLEANS, LA 70122	NICHELLE JONES, RESIDENCE	<p>8.30 kWDC ROOF SOLAR SYSTEM PRODUCTION: 9,921kWH</p>	
	RACKING: K2 CROSSRAIL SYSTEM	ACCOUNT NO. : 180971129	DESIGNED BY:		
<p>POSIGEN DEVELOPER, LLC 819 CENTRAL AVE STE 210 JEFFERSON, LA 70121 LA ELECTRICAL LICENSE :74446</p>	MODULES: (20)CANADIAN SOLAR CS3N-415MS	 <p>ENERQUAL TECHNOLOGY PVT. LTD.</p>		REV:	
	OPTIMIZER: (20) SOLAREEDGE S440 OPTIMIZER				
	INVERTER: (1)SOLAREEDGE SE7600H-US				