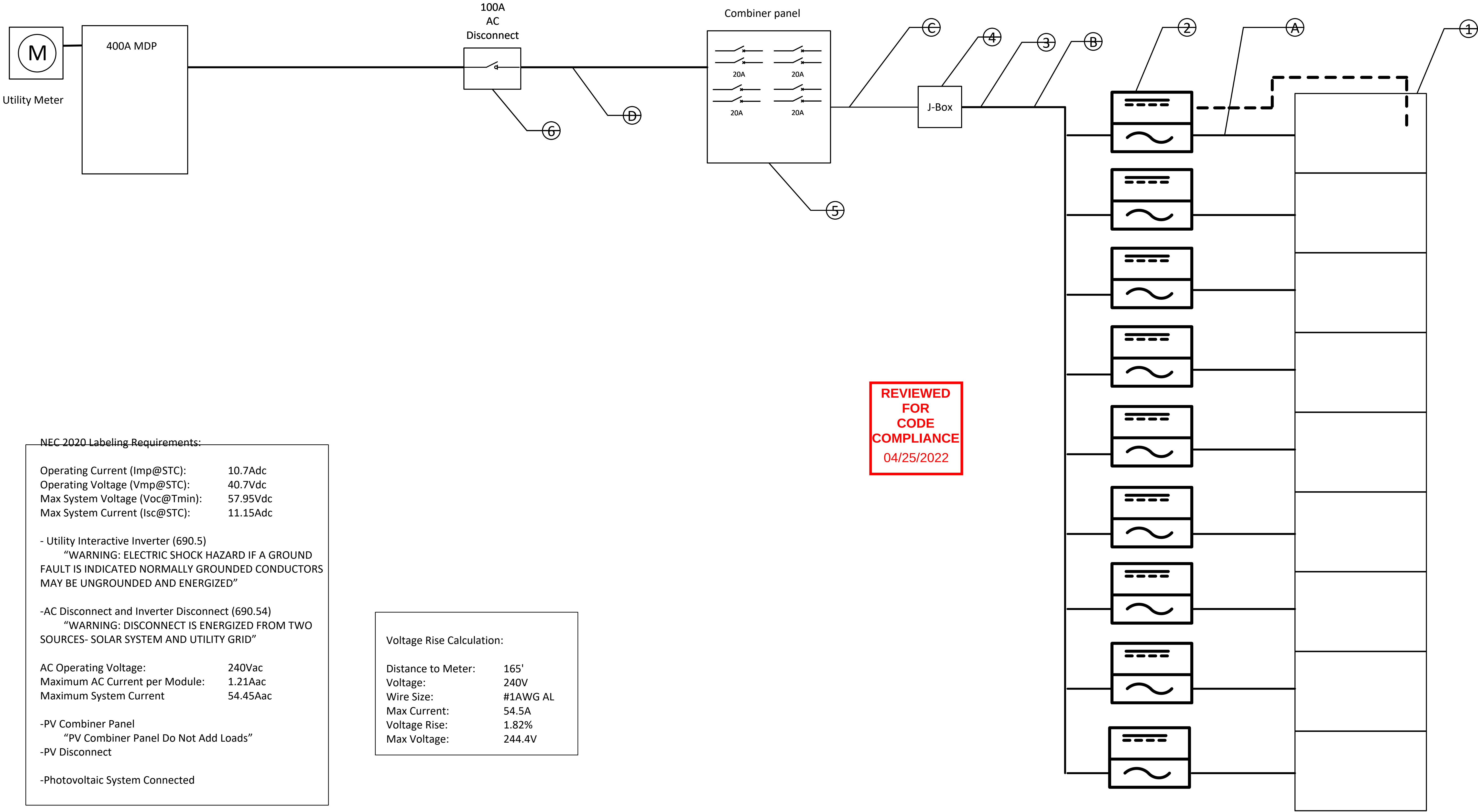




NEC 2020 Labeling Requirements:

Operating Current (Imp@STC): 10.7Adc
Operating Voltage (Vmp@STC): 40.7Vdc
Max System Voltage (Voc@Tmin): 57.95Vdc
Max System Current (Isc@STC): 11.15Adc

- Utility Interactive Inverter (690.5)
“WARNING: ELECTRIC SHOCK HAZARD IF A GROUND FAULT IS INDICATED NORMALLY GROUNDED CONDUCTORS MAY BE UNGROUNDED AND ENERGIZED”

-AC Disconnect and Inverter Disconnect (690.54)
“WARNING: DISCONNECT IS ENERGIZED FROM TWO SOURCES- SOLAR SYSTEM AND UTILITY GRID”

AC Operating Voltage: 240Vac
Maximum AC Current per Module: 1.21Aac
Maximum System Current 54.45Aac

-PV Combiner Panel
“PV Combiner Panel Do Not Add Loads”

-PV Disconnect

-Photovoltaic System Connected

Voltage Rise Calculation:

Distance to Meter: 165'
Voltage: 240V
Wire Size: #1AWG AL
Max Current: 54.5A
Voltage Rise: 1.82%
Max Voltage: 244.4V

Module:

LG NeON h LG465N2T-E6
Power @ STC: 435W
Voc: 48.7Vdc
Vmpp: 40.7Vdc
Isc: 11.15A
Impp: 10.7A

UL: 1703

Inverter:

Enphase IQ7+
Max Power: 250W
AC Voltage: 240VAC
AC Current: 1.21A

Max DC Voltage: 60V
Max DC Current: 15A (Isc)

UL: 1741

Wire Schedule:

A. PV Source Circuit- Module Integrated- less than 60" from inverter (in accordance with 2017 NEC 690.12(1))
B. Inverter Output Circuit- Enphase Trunk Cable 12/3
C. Inverter Output Circuit- 10/3
D. Combiner Output Circuit- #1 XHHW

Equipment Schedule:

1. Solar Array - (45) LG435N2T-E6
2. Enphase IQ7 Micro Inverter IQ7+-72-2-US (45)
3. Enphase Trunk Cable (4)
4. J box from Enphase Trunk Cable to 10/3 (4)
5. 200A Combiner Panel w/ (4) 20A Breakers, (Labeled per NEC) “PV Combiner Panel Do Not Add Loads”
6. 240V, 100A AC Fused Blade Style Disconnect w/ 80A Fuses

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