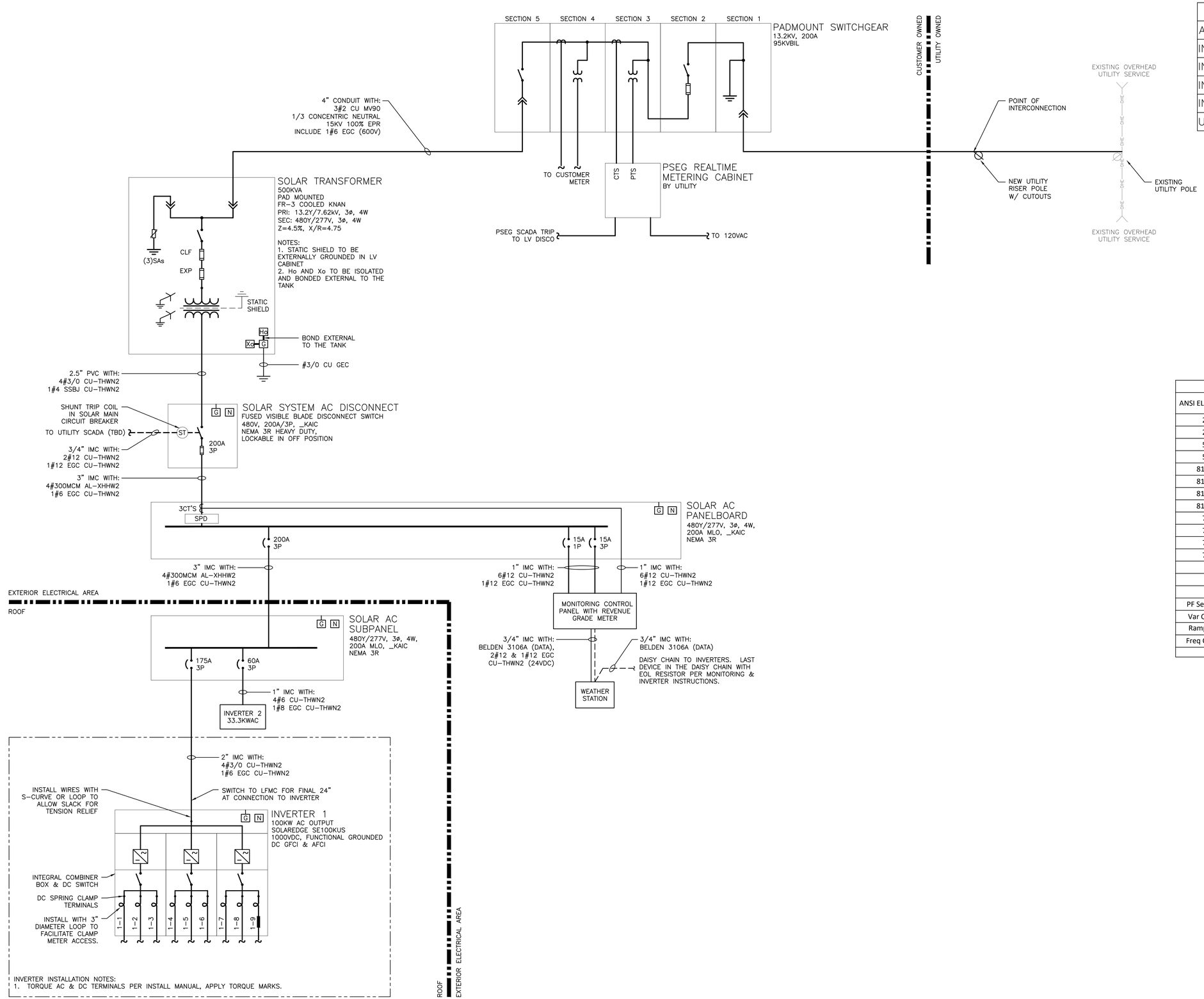


1 E300 ONE LINE DIAGRAM
SCALE: NONE

| SYSTEM SUMMARY | |
|---|---|
| AC SYSTEM SIZE | 133.30 KW |
| INVERTER | SOLAREDGE SE100KUS |
| INVERTER QTY | 1 |
| INVERTER | SOLAREDGE SE33.3KUS |
| INVERTER QTY | 1 |
| UTILITY | PSEG |

| INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT | | | | | |
|---|---|---|---|---|---|
| ANSI ELEMENT # | Pickup | Units* | Level | Total Clear Time (sec) | Description |
| 27 | 243.9 | V | 88% | 2.00 | Slow UV |
| 27 | 138.6 | V | 50% | 1.10 | Fast UV |
| 59 | 304.8 | V | 110% | 2.00 | Slow OV |
| 59 | 332.6 | V | 120% | 0.16 | Fast OV |
| 81U-1 | 56.50 | Hz | 94% | 0.16 | Fast UF |
| 81U-2 | 58.50 | Hz | 98% | 300.00 | Slow UF |
| 81O-1 | 62.00 | Hz | 103% | 0.16 | Fast OF |
| 81O-2 | 61.20 | Hz | 102% | 300.00 | Slow OF |
| 79 | 263.3 | V | 95% | 300.00 | Min Reclosing Voltage Value |
| 79 | 291.0 | V | 105% | 300.00 | Max Reclosing Voltage Value |
| 79 | 59.5 | Hz | 99% | 300.00 | Min Reclosing Frequency Value |
| 79 | 60.5 | Hz | 101% | 300.00 | Max Reclosing Frequency Value |
| INVERTER INTERNAL OPERATION SETTINGS | | | | | |
| | | | | | |
| | | | | | |
| PF Set Point | 1.00 | | | | Power Factor Control |
| Var Control | OFF | | | | Reactive Power Control |
| Ramp Rate | 10%/1 sec | | | | dkw / dt |
| Freq Control | OFF | | | | Speed Control |
| * voltages based off 277.1V Line to Neutral | | | | | |

TRANSFORMER NOTES:
1. TRANSFORMER SHALL BE THREE PHASE, SELF COOLED, AND DESIGNED FOR STEP-UP OPERATION. TRANSFORMER SHALL BE UL LISTED. PAD MOUNT, DISTRIBUTION TYPE TRANSFORMERS SHALL COMPLY WITH THE LATEST ISSUE OF IEEE/ANSI C57.12.34.
2. TRANSFORMER SHALL OPERATE AT 60HZ NOMINAL AND SHALL BE TOLERANT OF CONTINUOUS FREQUENCIES BETWEEN 56.5 HZ AND 62.0 HZ.
3. TRANSFORMER SHALL BE CAPABLE OF OPERATING AT 1.1PU VOLTAGE AT FULL LOAD FOR PERIODS OF TIME TYPICAL OF THE EXPECTED GENERATION PROFILE.
4. LOW VOLTAGE WINDING CONFIGURATION IS REQUIRED TO BE 480V Yg WITH A FULLY INSULATED NEUTRAL.
5. TRANSFORMER SHALL BE FURNISHED WITH HIGH VOLTAGE TAPS WITH A MINIMUM OF 2 1/2% TAPS ABOVE AND BELOW NAMEPLATE RATING.

GROUNDING NOTES:
1. PV INVERTER GEC TO BE SIZED PER NEC 250.166. COPPER GROUNDING ELECTRODE ROD 3/4" X 10' MIN TO BE USED.
2. TRANSFORMER GEC TO BE SIZED PER NEC 250.66. COPPER GROUNDING ELECTRODE ROD 3/4" X 10'MIN TO BE USED. FROM TRANSFORMER EARTH GROUND TO COPPER GEC, GROUND SYSTEM RESISTANCE SHALL BE 25 OHMS OR LESS.

SHEET NOTES:
1. CONTRACTOR SHALL FIELD-VERIFY INTERCONNECTION MEANS/METHODS PRIOR TO INSTALLATION. COORDINATED SHUTDOWN MAY BE REQUIRED.
2. PROVIDE TORQUE MARKS INSIDE INVERTERS.
3. SET ELECTRONIC-TRIP BREAKERS TO THE SETTINGS BELOW, UNLESS OTHERWISE NOTED IN POWER STUDY. "NOMINAL TRIP" REFERS TO BREAKER TRIP RATING INDICATED ON ONELINE.
   - L = 100% OF NOMINAL TRIP (EXACT) MINIMUM TIME DELAY
   - S = 125% OF NOMINAL TRIP (OR NEXT HIGHER) MINIMUM TIME DELAY
   - I = 150% OF NOMINAL TRIP (OR NEXT HIGHER)
   - G = 20% OF NOMINAL TRIP (OR NEXT HIGHER) 0.5 SEC TIME DELAY

DRAWING TITLE: ONE LINE DIAGRAM

DRAWING #: E300

| DATE | REVISION DESCRIPTION | PM | ENG | CHK |
|---|---|---|---|---|
| 01/18/2021 | INTERCONNECTION DOCUMENTS | RK | GP | RI |


PUREPOWER ENGINEERING
111 WOOD SQUARE, LEBANON, NJ
WWW.PUREPOWER.COM
RICHARD A. WINS
NJ LICENSE No. 47878


ENGINEER OF RECORD


SUMMIT RIDGE ENERGY
1515 WILSON BLVD
SUITE 700
ARLINGTON, VA 22209
WWW.SRENERGY.COM


DEVELOPER

PAGE SIZE: 36" x 24"

PROJECT #: 01488.16

PROJECT: SOLAR ROOFTOP SYSTEM AT 299 FAIRFIELD AVENUE
299 FAIRFIELD AVENUE
FAIRFIELD, NEW JERSEY 07004

PLOT DATE: 1/18/2021 4:50 PM

RULER IN INCHES: