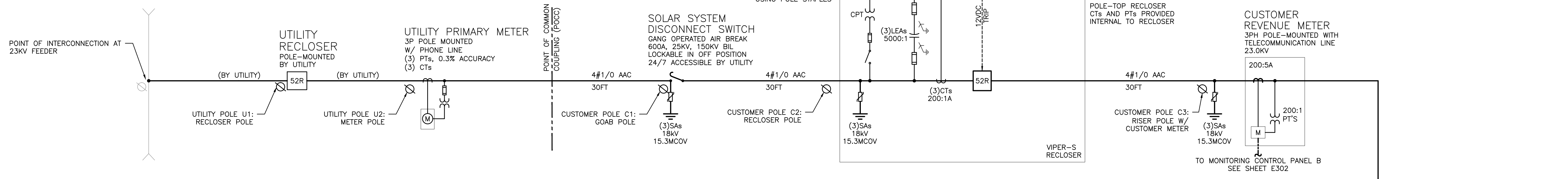
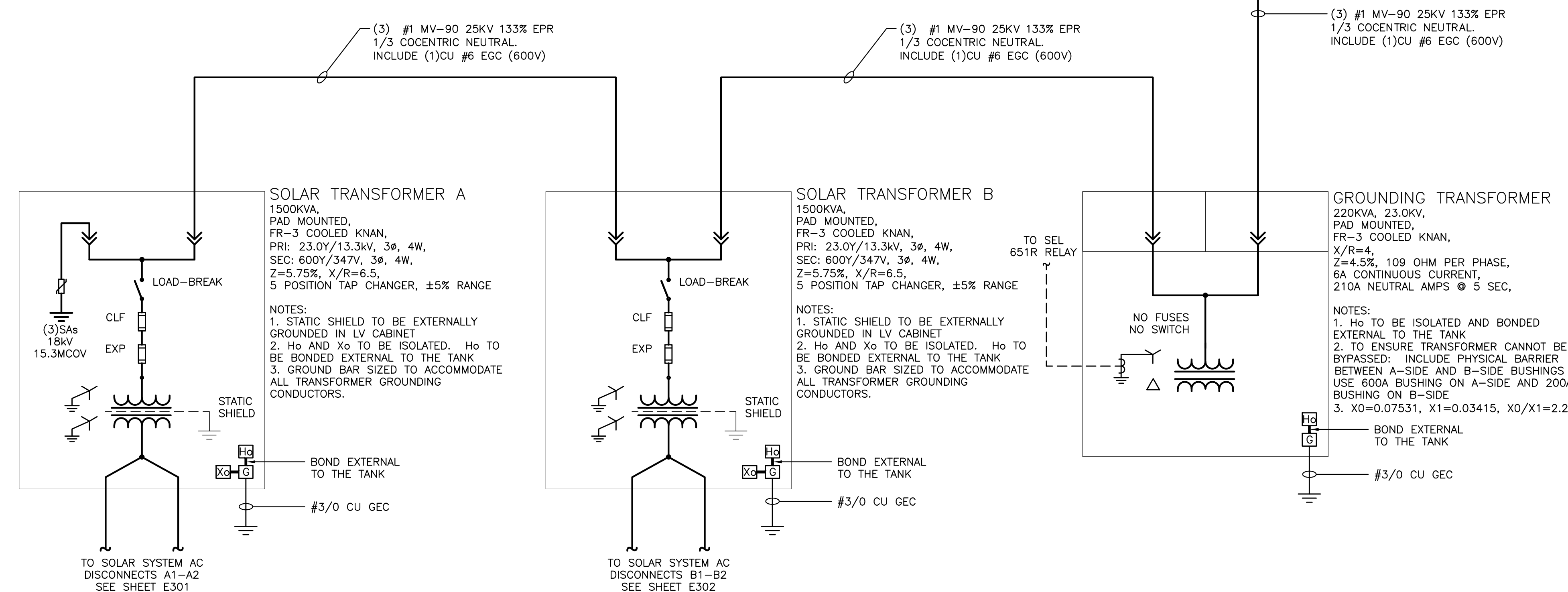


RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SYSTEM SUMMARY	
DC SYSTEM SIZE	3,901.35 KW
AC SYSTEM SIZE	3,000.00 KW
MODULE 1	SERIES 6 BIFACIAL (FS-6465A-P-B)
MODULE 2	SERIES 6 PLUS SL (FS-6465A-P)
MODULE QTY	8,390
(QTY) INVERTER	(24) CPS SCH125KTL-DO/US-600
AZIMUTH / TILT	180° / ±55°
UTILITY	EVERSOURCE



INVERTER UL1741-SA Compliant						
ANSI ELEMENT #	Pickup	Real	Level	Delay (sec)	Curve	Description
27	304.84	528V	88.0%	2.00		Slow UV
27	173.21	300V	50.0%	1.10		Fast UV
59	381.05	660V	110.0%	2.00		Slow OV
59	415.69	720V	120.0%	0.16		Fast OV
81U-1	56.50	56.5Hz	94.2%	0.16		Fast UF
81U-2	58.50	58.5Hz	97.5%	300.00		Slow UF
81O-1	62.00	62Hz	103.3%	0.16		Fast OF
81O-2	61.20	61.2Hz	102.0%	300.00		Slow OF
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



SEL 651R RELAY										
ANSI ELEMENT #	Unit	Pickup (Secondary)	Real (Primary)	Level	Def. Time Delay (s)	Time Dial	Total Clear Time (s)*	Total Clear Time (cyc)*	Curve	Description
27-1	L-N Volt	2.34	11685.57	88.0%	1.95	-	2.00	120.00	-	Slow UV
27-2	L-N Volt	1.33	6639.53	50.0%	1.05	-	1.10	66.00	-	Fast UV
59-1	L-N Volt	2.92	14606.96	110.0%	1.95	-	2.00	120.00	-	Slow OV
59-2	L-N Volt	3.19	15934.87	120.0%	0.11	-	0.16	9.60	-	Fast OV
79-UV	L-N Volt	2.52	12615.10	95.0%	299.95	-	300.00	18000.00	-	Min Permissive Close Voltage
79-OV	L-N Volt	2.79	13943.01	105.0%	299.95	-	300.00	18000.00	-	Max Permissive Close Voltage
59N	3VO L-N Volt	0.45	2257.44	17.0%	1.95	-	2.00	120.00	-	Zero Sequence Overvolt
81U-1	Hz	58.50	58.50	97.5%	299.95	-	300.00	18000.00	-	Slow UF
81U-2	Hz	56.50	56.50	94.2%	0.11	-	0.16	9.60	-	Fast UF
81O-1	Hz	61.20	61.20	102.0%	299.95	-	300.00	18000.00	-	Slow OF
81O-2	Hz	62.00	62.00	103.3%	0.11	-	0.16	9.60	-	Fast OF
79-UF	Hz	59.50	59.50	99.2%	299.95	-	300.00	18000.00	-	Min Permissive Close Frequency
79-OF	Hz	60.50	60.50	100.8%	299.95	-	300.00	18000.00	-	Max Permissive Close Frequency
51P	A	0.47	94.13	125.0%	-	2.0	3.9 @2X	234.02 @2X	U4	Time Phase OC
50P	A	4.52	903.68	1200.0%	0.00	-	0.05	3.00	-	Instantaneous P OC
51G	A	0.08	15.06	20.0%	-	2.0	3.9 @2X	234.02 @2X	U4	Timed Ground OC
50G	A	0.38	75.31	100.0%	0.00	-	0.05	3.00	-	Instantaneous G OC
74	-	-	-	-	0.00	-	0.05	3.00	-	Relay Alarm
Solar System Base AC Size = 3000KVA			75.31A BASE PRIMARY USED FOR 50/51 ELEMENTS			*Total Clear Time = 3 Cycle Breaker Plus Delay (Time Dial or DEF Time)				
0.38A BASE SECONDARY 50/51P,G						13279.06V BASE PRIMARY USED FOR 27/59 ELEMENTS				
P,G CT RATIO FACTOR = 200						2.66V BASE SECONDARY USED FOR 27/59 ELEMENTS				
P CT = 200:1 180.5 C50 RF = 1 @ 30C						LEA RATIO FACTOR = 5000				

SETTINGS ARE PRELIMINARY PENDING UTILITY APPROVAL AND NOT INTENDED FOR CONSTRUCTION

1 ONE LINE DIAGRAM
SCALE: NONE

- SHEET NOTES:**
- CONTRACTOR SHALL FIELD-VERIFY INTERCONNECTION MEANS/METHODS PRIOR TO INSTALLATION. COORDINATED SHUTDOWN MAY BE REQUIRED.
 - ALL GROUND BARS AND LUGS SHALL BE DUAL RATED AL/CU.
 - UNLESS OTHERWISE NOTED EQUIPMENT IS PERMITTED TO BE 80% OR 100% RATED.
 - PVC SCH80 REQUIRED WHERE PVC IS SPECIFIED. PVC SCH40 IS PERMITTED FOR UNDERGROUND STRAIGHT RUNS ONLY.
 - SET NEW ELECTRONIC-TRIP BREAKERS TO THE SETTINGS BELOW, UNLESS OTHERWISE NOTED IN POWER STUDY. "NOMINAL TRIP" REFERS TO BREAKER TRIP RATING INDICATED ON ONLINE. SETTINGS BELOW ARE NOT FOR COORDINATION PURPOSES.
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

DATE: 05/13/2024
REVISION DESCRIPTION: CONCEPTUAL DESIGN
ENGINEER: VEROGY
DEVELOPER: VEROGY
PROJECT #: 09905.05
PAGE SIZE: 36" x 24"
DC SYSTEM SIZE: 3,901.35 kW
AC SYSTEM SIZE: 3,000.00 kW
MODULE TYPE 1: FS-6465A-P-B
MODULE TYPE 2: FS-6465A-P
MODULE QUANTITY: 8,390
ORIENTATION: 25° TILT, 180° AZIMUTH
PROJECT: 3,901.35 KW SOLAR GM SYSTEM AT WOODSTOCK SOLAR CASTLE ROCK ROAD WOODSTOCK, CT 06281