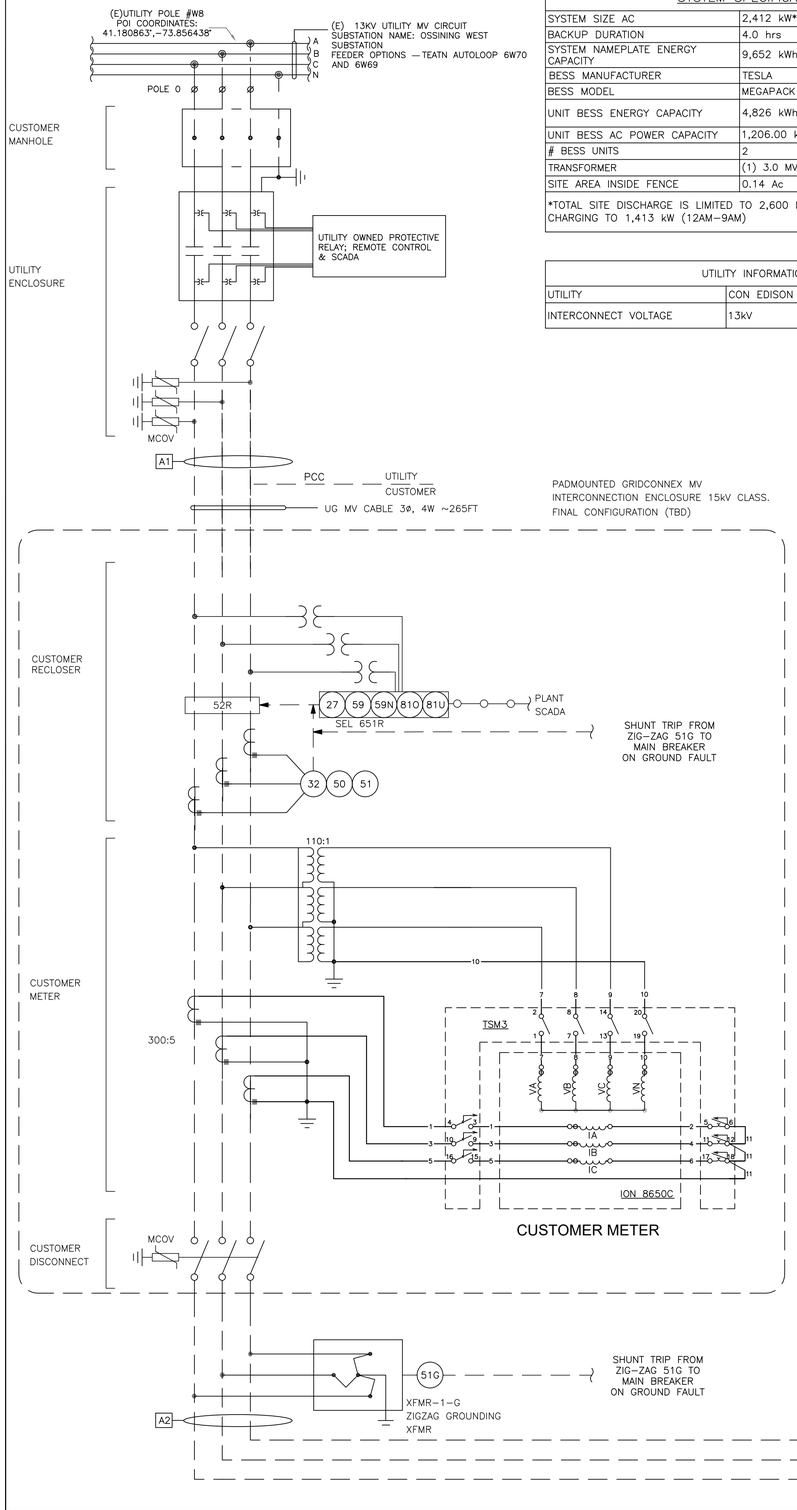

SYSTEM SPECIFICATIONS	
SYSTEM SIZE AC	2,412 kW*
BACKUP DURATION	4.0 hrs
SYSTEM NAMEPLATE ENERGY CAPACITY	9,652 kWh
BESS MANUFACTURER	TESLA
BESS MODEL	MEGAPACK 3
UNIT BESS ENERGY CAPACITY	4,826 kWh
UNIT BESS AC POWER CAPACITY	1,206.00 kW*
# BESS UNITS	2
TRANSFORMER	(1) 3.0 MVA, 13 KV GRD-Y/ 480V GRD-Y
SITE AREA INSIDE FENCE	0.14 Ac

*TOTAL SITE DISCHARGE IS LIMITED TO 2,600 kW (12PM-11PM) AND CHARGING TO 1,413 kW (12AM-9AM)

UTILITY INFORMATION	
UTILITY	CON EDISON
INTERCONNECT VOLTAGE	13kV

PROPOSED 651R RELAY SETTINGS

DEVICE	PICKUP	DELAY SETTINGS	TIME DELAY
27-2	50% (60.0V)	63 CYC	66 CYC (1.1 SEC)
27-1	88% (105.6V)	177 CYC	180 CYC (3.0 SEC)
59-1	110% (132.0V)	117 CYC	120 CYC (2.0 SEC)
59-2	120% (144.0V)	6.5 CYC	9.5 CYC (0.16 SEC)
81U-2	56.5 HZ	6.5 CYC	9.5 CYC (0.16 SEC)
81U-1	58.5 HZ	17997 CYC	18,000 CYC (300 SEC)
81O-1	61.2 HZ	17997 CYC	18,000 CYC (300 SEC)
81O-2	62.0 HZ	6.5 CYC	9.5 CYC (0.16 SEC)
59N	100V	80.0 CYC	83 CYC
51	295A	2.0T D U5	
51G	40A	3.0T D U4	
32	4800kW (EXPORT)	60 CYC	60 CYC(1 SEC)

SETTINGS INCLUDED 3 CYCLE ESTIMATE CONTACTOR OPENING TIME. VOLTAGE SETTINGS ARE BASED ON A 120V SECONDARY PT BASE.

PROPOSED IEEE 1547-2022 INVERTER INTERNAL CONTROL SETTINGS: (480V NOMINAL - 277V BASE)

DEVICE	PICKUP	TIME DELAY
27-2	50% (139V)	66 CYC (1.1 SEC)
27-1	80% (222V)	180 CYC (3.0 SEC)
59-1	110% (305V)	120 CYC (2.0 SEC)
59-2	120% (333V)	10 CYC (0.16 SEC)
81U-2	56.5 HZ	10 CYC (0.16 SEC)
81U-1	58.5 HZ	18,000 CYC (300 SEC)
81O-1	61.2 HZ	18,000 CYC (300 SEC)
81O-2	62.0 HZ	10 CYC (0.16 SEC)

SETTINGS ARE BASED ON IEEE1547-2022, AND UTILITY RIDE-THROUGH REQUIREMENTS.
INVERTER VAR CONTROL (VOLT-VAR) SHALL BE ACTIVE.

A1 — CABLE SIZE ACSR #4/0 PENGUIN (TBD)
LENGTH ~65FT
Rpos (100 MVA Base) = 0.00312 pu
Xpos (100 MVA Base) = 0.00621 pu
Rzero (100 MVA Base) = 0.00517 pu
Xzero (100 MVA Base) = 0.02052 pu
Bpos (100 MVA Base) = 1.28461 pu

A2 — CABLE SIZE 350MCM
LENGTH ~200FT
Rpos (100 MVA Base) = 0.00473 pu
Xpos (100 MVA Base) = 0.00533 pu
Rzero (100 MVA Base) = 0.04544 pu
Xzero (100 MVA Base) = 0.04059 pu
Bpos (100 MVA Base) = 1.04897 pu

UTILITY NOTE

1. FEEDER AND POI SELECTION TO BE DETERMINED BY CON EDISON BASED ON INTERCONNECTION STUDY RESULTS. PROJECT IS FULLY FLEXIBLE ON THE PREFERRED FEEDER, INCLUDING TEATN_6W70, KITCHAWAN 6W66, OR ANY VIABLE ALTERNATIVE DESIGNATED BY CON EDISON (E.G., POTENTIAL EXTENSION FROM MILLWOOD WEST), SUBJECT TO SYSTEM CAPACITY AND INTERCONNECTION REQUIREMENTS.
2. NO PHOTOVOLTAIC GENERATION INCLUDED IN THIS PROJECT. BESS ONLY FACILITY.
3. INVERTER SETTINGS COMPLIANT WITH CON EDISON GUIDE FOR PRIVATE GENERATION

NOTES:

1. AC MV CIRCUITS SHALL BE INSTALLED AND INTERCONNECTED WITH UTILITY, PER UTILITY SPECIFICATIONS.
2. ALL ELECTRICAL WORK AND WIRE SIZING SHALL BE IN ACCORDANCE WITH THE 2023 EDITION OF NATIONAL ELECTRIC CODE.
3. ALL DC AND AC EQUIPMENT, WHERE APPLICABLE, SHALL BE LISTED AND LABELLED PER RECOGNIZED ELECTRICALTESTING LABORATORY AND INSTALLED PER THE LISTING REQUIREMENTS, THE MANUFACTURERS INSTRUCTIONS AND IN ACCORDANCE WITH NEC.
4. RECLOSER CONTROL SETTINGS TO BE COORDINATED WITH UTILITY AND CONTRACTOR AND ENGINEER OF RECORD PRIOR TO ENERGIZATION.
5. THE SHEET MUST BE PART OF A FULL DRAWING PACKAGE BY THE ENGINEER OF RECORD. THIS SHEET CANNOT BE INCORPORATED AS PART OF WORK BY OTHERS.
6. THIS DRAWING REPRESENTS A CONCEPTUAL INTERCONNECTION SCHEME. THE INTENT IS TO COMMUNICATE PROJECT SPECIFIC EQUIPMENT, SIZE AND NEGOTIATE THE INTERCONNECTION DETAILS WITH THE UTILITY. THIS DRAWING HAS NOT BEEN ISSUED FOR CONSTRUCTION PURPOSES. THE DEVELOPER OR CONTRACTOR IS RESPONSIBLE FOR ENSURING A SYSTEM DESIGN IS COMPLETE AND APPROVED BY AN APPROPRIATELY LICENSED ENGINEER PRIOR TO PROCUREMENT AND CONSTRUCTION.

TX-1 (N) ENVIROTRAN SOLAR TRANSFORMER COOPER CA202003EN, ANSI C57, 3MVA, 5.75% IMPEDANCE, X/R=10 kV CLASS, 65°C TEMPERATIRE RISE, 13kV GROUNDED-WYE (UTILITY SIDE)/0.48 kV GROUNDED-WYE (CUSTOMER SIDE), IN-OUT 600A BUSHINGS, 200A EXPULSION FUSE IN SERIES WITH A PARTIAL RANGE UNDER-OIL ELSP CURRENT LIMITING FUSE, ELBOW ARRESTERS, AND TWO 2-1/2% TAPS ABOVE AND BELOW RATED VOLTAGE (SPLIT TAPS).

TX-1.G (N) GROUNDING TRANSFORMER, MGM TRANSFORMER CO, 450 KVA, 13KV, ZIG-ZAG CONFIGURATION, Z=5%, X/R=4, BIL = 110 KV

MCOV 15kV/12.7kV RATED SURGE ARRESTOR

S SWITCH: 600A, 15kV, LOCABLE, 3P GANG-OPERATED, EATON M-FORCE

R NOVA RECLOSER AND CONTROL: 15.5kV, 630A, 12.5kA, INTERNAL VOLTAGE SENSORS,

CONTROL:SEL 651R:50 INSTANANEOUS OVERCURRENT, 51 AC TIME OVERCURRENT, 51G GROUND TIME OVERCURRENT

LEGEND:

- TRANSFORMER
- POTENTIAL TRANSFORMER (PT)
- CURRENT TRANSFORMER (CT)
- GROUND, GND
- SURGE ARRESTOR
- METER (M)
- POLE FOR OVERHEAD LINE
- 52 — MV BREAKER / R - RECLOSER
- FUSE
- FUSED DISCONNECT SWITCH (LV)
- AF / AT — LV BREAKER
- CONTACTOR
- INVERTER
- DISCONNECTING SWITCH (MV)
- OVERHEAD LINE
- UNDERGROUND LINE
- COMMUNICATION LINE
- 50 — INSTANTAEOUS PHASE; 50N: INSTANTANEOUS GROUND
- 51 — OVER CURRENT PHASE; 51N: OVER-CURRENT GROUND

NOT FOR CONSTRUCTION, FOR IA DISCUSSION ONLY.

REVISIONS

5	ISSUED FOR IA	09/25/26

Luminace
By Brookfield Renewable
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BALTIMORE, MD 21202

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WALNUT CREEK, CA 94598
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www.sequoia-engineering.com

PROJECT

STORMYTOWN ROAD
25 STORMYTOWN ROAD,
OSSINING,
NY 10562
LAT: 41.180305°
LON: -73.856823°

SHEET TITLE

THREE LINE DIAGRAM

SCALE: AS SHOWN
DRAWN:SY
DATE: 04/16/26

E-200

SHEET 2 OF 2