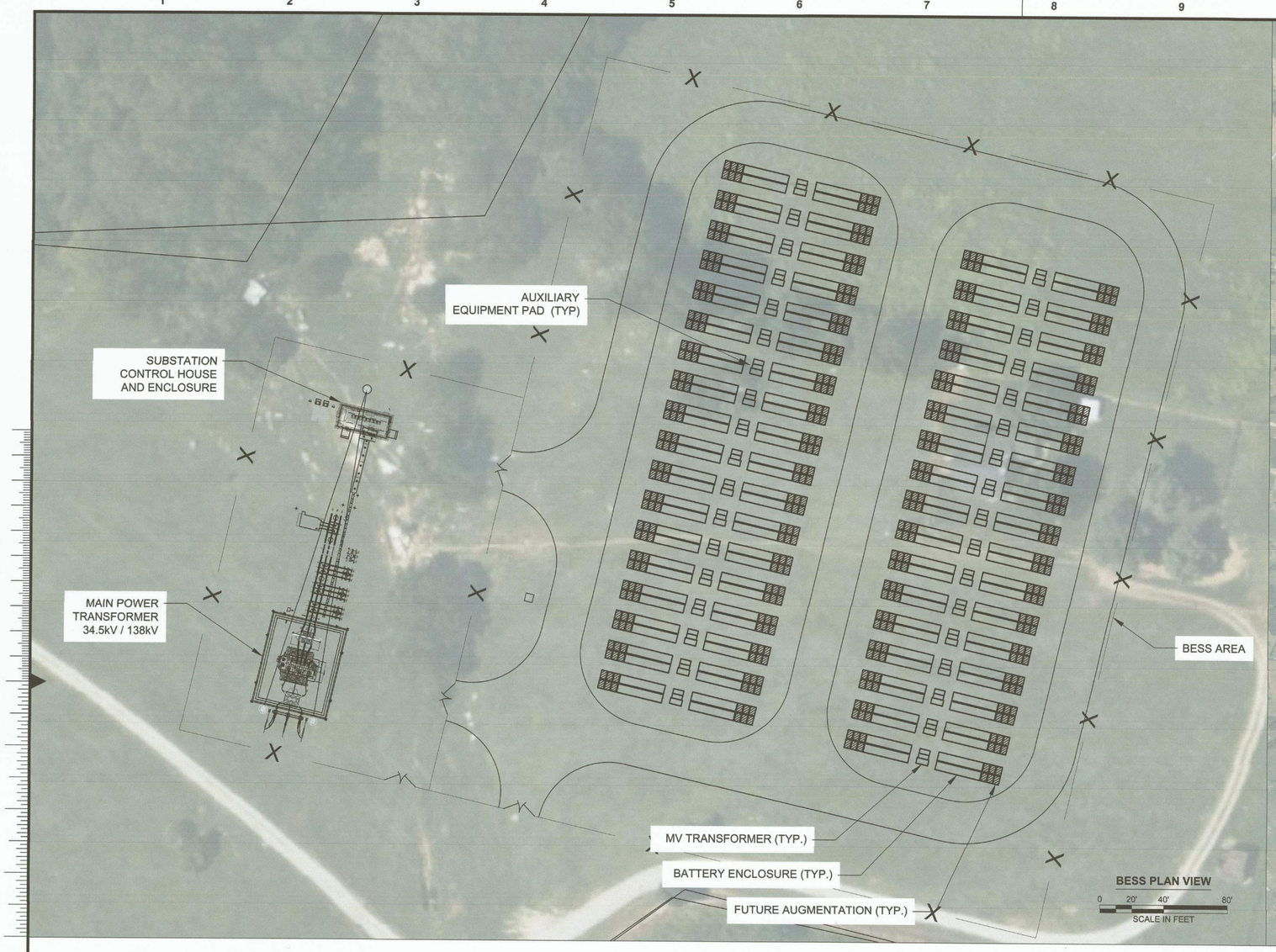
Joint Application Exhibit 4

Brown BESS Facility

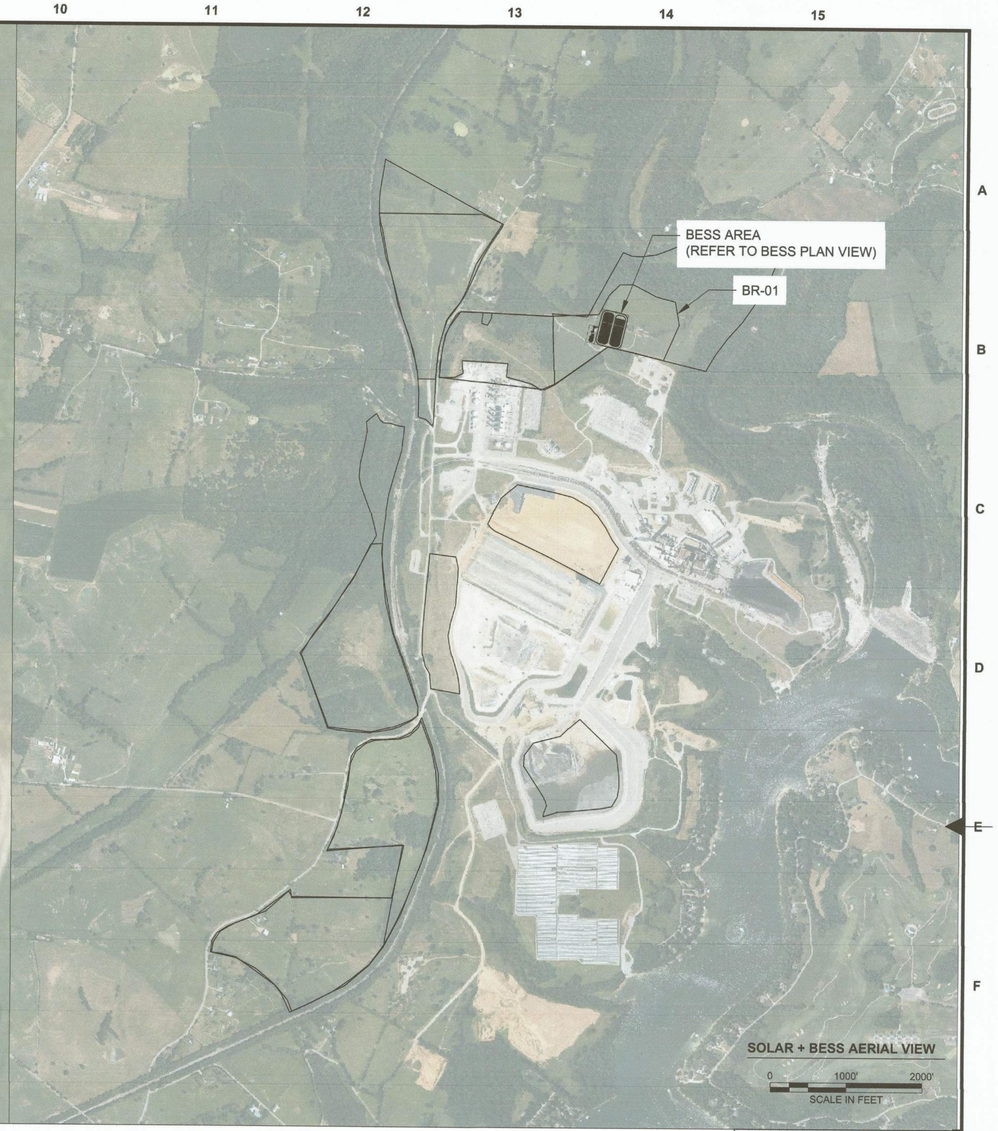
Maps, Conceptual Plans, Specifications, and Drawings



BESS PLAN VIEW

0 20' 40' 80'

SCALE IN FEET



SOLAR + BESS AERIAL VIEW

0 1000' 2000'

SCALE IN FEET

ENERGY STORAGE SYSTEM DESCRIPTION	
NAMEPLATE	125 MW / 500 MWh

BESS MATERIAL LIST	
NUMBER OF BATTERY ENCLOSURES	~140
NUMBER OF MV TRANSFORMERS	~35
NUMBER OF FUTURE AUGMENTATION UNITS	~420

LEGEND:

FENCE

GATE

ABBREVIATION LIST:

BESS - BATTERY ENERGY STORAGE SYSTEM
MV - MEDIUM VOLTAGE
TYP - TYPICAL

NOTES:

1. FINAL LAYOUT SUBJECT TO CHANGE BASED ON FINAL ENVIRONMENTAL AND CIVIL SETBACK DISTANCES.
2. EQUIPMENT QUANTITIES, CONFIGURATION, AND FOOTPRINT SUBJECT TO CHANGE BASED ON FINAL BESS TECHNOLOGY SELECTION AND ADDITIONAL PROJECT DUE DILIGENCE.
3. LAYOUTS ARE PRELIMINARY IN NATURE AND ARE NOT INDICATIVE OF POTENTIAL ADDITIONAL EQUIPMENT REQUIRED TO MEET COMPLIANCE WITH LOCAL AUTHORITIES HAVING JURISDICTION.

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

STATE OF KENTUCKY
JEFFREY B. HEUN
24528
LICENSED PROFESSIONAL ENGINEER
12/09/22

no.	date	by	ckd	description
C	12/6/22	SVL	IMB	ISSUED FOR REVIEW
B	12/1/22	SVL	IMB	ISSUED FOR REVIEW
A	7/12/22	SVL	-	ISSUED FOR REVIEW

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.
License No. 43

designed S. LE | detailed S. LE

LG&E KU PPL companies

MERCER COUNTY, KENTUCKY

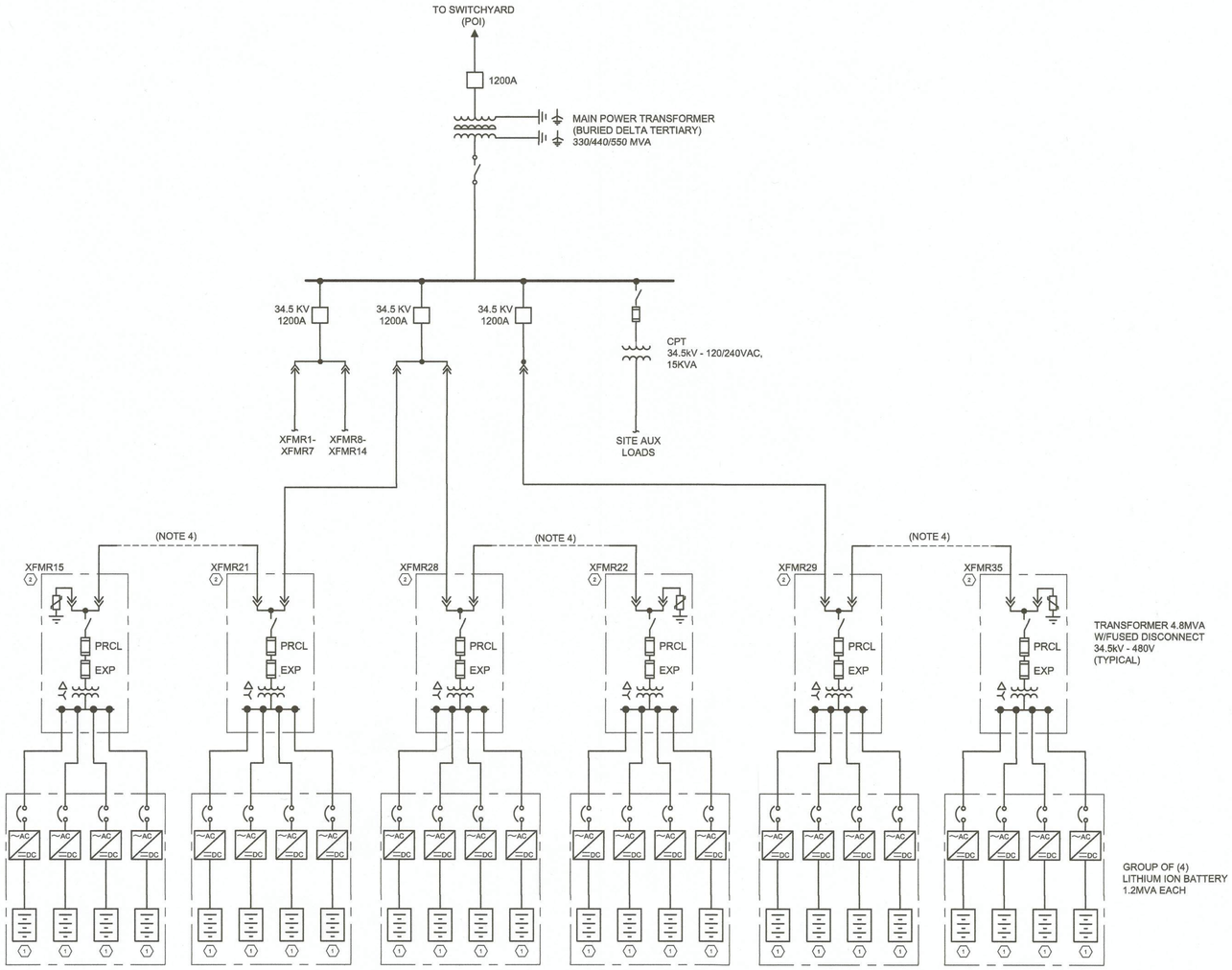
E.W. BROWN 125MW/500MWh BATTERY ENERGY STORAGE SYSTEM SITE PLAN

project | contract

drawing LAYOUT – rev. C

sheet 1 of 1 sheets

file LGE&KU_EWBrown_Layout.dwg



SYSTEM DESCRIPTION	
STORAGE NAMEPLATE AT POI (0.95 PF)	125 MW / 500 MWh

MATERIAL LIST		QTY.
1	3916.8kWH, 1.2MVA LITHIUM ION BATTERY WITH INTERNAL INVERTER	TBD
2	4.8MVA, 34.5kV - 480V MEDIUM VOLTAGE TRANSFORMER	TBD

NOTES:

1. THIS DRAWING REPRESENTS ONE PROPOSED ARRANGEMENT AND IS SUBJECT TO CHANGE BASED ON DETAILED DESIGN.
2. THIS DRAWING IS CONCEPTUAL IN NATURE AND IS FOR PLANNING PURPOSES ONLY.
3. POWER EXPORT AT INVERTERS WILL BE CONTROLLED BY ENERGY MANAGEMENT SYSTEM TO MEET REAL AND REACTIVE POWER REQUIREMENTS AT POI.
4. UNIT CONTAINS (5) STRINGS OF (7) MV TRANSFORMERS.

LEGEND:

- POWER TRANSFORMER
- SURGE ARRESTOR
- FUSE
- CIRCUIT BREAKER
- DISCONNECT SWITCH
- INVERTER
- POWER CABLE

ABBREVIATIONS:

BESS - BATTERY ENERGY STORAGE SYSTEM
POI - POINT OF INTERCONNECTION
CPT - CONTROL POWER TRANSFORMER
EXP - EXPULSION (FUSE)
PRCL - PARTIAL RANGE CURRENT-LIMITING (FUSE)
AUX - AUXILIARY

STATE OF KENTUCKY
JEFFREY B HEUN
24528
LICENSED PROFESSIONAL ENGINEER
12/09/22

PRELIMINARY - NOT FOR CONSTRUCTION

no.	date	by	ckd	description
C	12/6/22	RC	JLT	ISSUED FOR REVIEW
B	12/5/22	RC	JLT	ISSUED FOR REVIEW
A	5/13/22	BSG	JAG	ISSUED FOR REVIEW

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed B. GANTNER | detailed B. GANTNER

LG&E KU PPL companies

MERCER COUNTY, KENTUCKY

E.W. BROWN 125MW/500MWh
BATTERY ENERGY STORAGE SYSTEM
ONE - LINE DIAGRAM

project 145989 | contract -

drawing ONELINE | rev. B

sheet 1 of 1 sheets

file LGE & KU BESS ONELINE

MEGAPACK 2 XL DATASHEET

Specifications are preliminary and subject to change.

Grid transformation for the world's largest energy projects
- Best-in-class energy density and round-trip efficiency
- Industry-leading power electronics and thermal system performance
- Rapid and cost-effective deployment with factory-assembled and pre-tested solution

Scaled and rigorously tested product safety and reliability
- Comprehensive in-house reliability testing by the leading experts in the industry
- Engineered for safety and performance at every level
- Continuous improvement based on large-scale operational experience

Designed with flexibility and configurability in mind
- Modular architecture that allows for a range of configurations across multiple applications
- Industry experts available to identify site-specific needs
- Integrated solution that allows for battery augmentation over time

POWER AND ENERGY

Megapack duration is configurable. Standard configurations are 2-hour and 4-hour durations. Nominal energy is specified at 25°C (77°F).

	AC Power per Megapack	Energy per Megapack
2-Hour	1927 kW	3854 kWh
4-Hour	979 kW	3916 kWh

ELECTRICAL

Nominal AC Voltage	480 V AC 3-phase	
Nominal Frequency	50 or 60 Hz	
Inverter Power per Megapack[1]	2-Hour Max: 4-Hour Max:	2400 kVA 1632 kVA
Round-Trip System Efficiency[2]	2-Hour: 4-Hour:	92.0% 93.5%

[1] Scalable from 400 kVA minimum in increments of 50 kVA
[2] Full-depth cycle including all power conversion and thermal system losses, at 25°C (77°F)

WARRANTY

Coverage	All-inclusive, equipment and energy retention
Term	15 years standard, extendable to 20 years

PART NUMBER

1848844-XX-Y Where X is a number between 0-9 and Y is a letter

MECHANICAL AND MOUNTING

Ingress Ratings	IP66/NEMA 3R (Main Enclosure) IP20 (Thermal System)	
Enclosure Dimensions +/- 13 mm (½ in)	Width: Depth: Height:	8800 mm (346 ½ in) 1650 mm (65 in) 2785 mm (110 in)
Maximum Weight	38,100 kg (84,000 lb)	
Operating Ambient Temperature	-30°C to 50°C (-22°F to 122°F)	

REGULATORY (EXPECTED LISTINGS)

System is compliant to grid codes and safety standards of all major markets.

System	NRTL listed to UL 1973, UL 9540, UL 9540A, UL 1741 SA, IEC 62619, IEEE 1547
Cells	NRTL listed to UL 1642

CONTROLS AND COMMUNICATIONS

Protocols	Modbus TCP / DNP3 / REST API	
Core Control Modes	Direct Real Power Direct Reactive Power Frequency Support Virtual Inertia	Ramp Rate Control Site Control Power Factor Control Voltage Control

MONITORING

Powerhub	Free-to-use cloud monitoring portal
Powerhub API	REST API providing event-based controls and site level monitoring