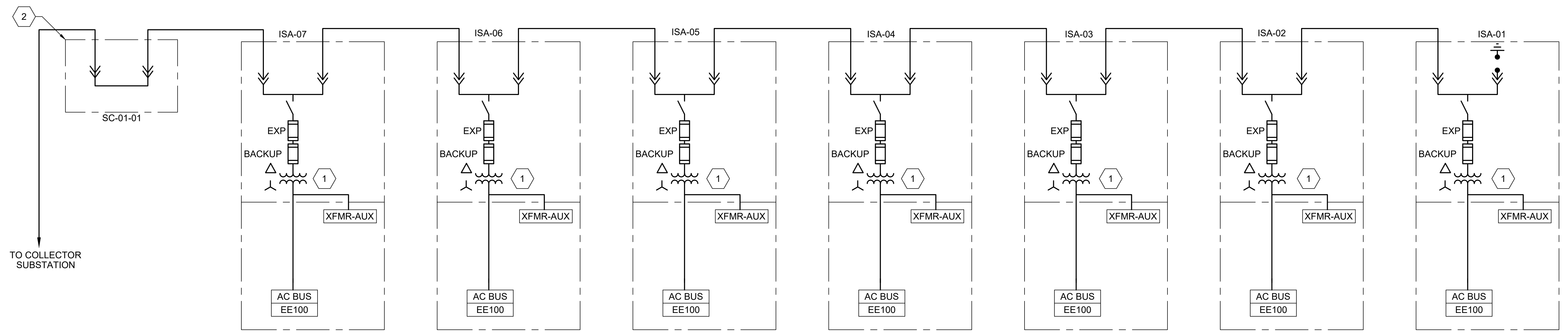


Case No. 2023-00361
 Attachment 2 to Response to PSC-2 Question No. 30
 Page 1 of 5
 Tummonds

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 - SURGE ARRESTOR RATING TO BE DETERMINED DURING DETAILED DESIGN.

EQUIPMENT LIST		
NO.	QUANTITY	DESCRIPTION
1	7	4,400 kVA, 34.5 kV:0.645 kV MV TRANSFORMER, Z = 8% (±10%), SUNGROW INVERTER SKID ASSEMBLY
2	1	SECTIONALIZING CABINET, 35 kV, 600 A, 2-WAY

SYSTEM DESCRIPTION	
TOTAL CAPACITY @ POI (AC)	120.00 MW
SOLAR NAMEPLATE CAPACITY (AC)	127.60 MVA
SOLAR CAPACITY (DC)	151.33 MW
DC:AC RATIO @ POI	1.26
AC COLLECTION SYSTEM VOLTAGE	34,500 kV
DC SYSTEM VOLTAGE	1,500 V
TOTAL MODULES	238,322
MODULES PER STRING	29
AVERAGE STRINGS PER INVERTER	283
TOTAL INVERTERS	29



PRELIMINARY - NOT FOR CONSTRUCTION

LEGEND

	POWER TRANSFORMER
	SURGE ARRESTOR
	FUSE
	DISCONNECT SWITCH
	600 A ELBOW CONNECTOR
	SOLAR PHOTOVOLTAIC INVERTER

Scale for Microfilming
 Millimeters
 Inches

no.	date	by	ckd	description
A	04/05/24	PSD	SH	ISSUED FOR REVIEW

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

designed: S. HIBBARD
 detailed: P. DURKEE

LGE KU

MERCER COUNTY, KY

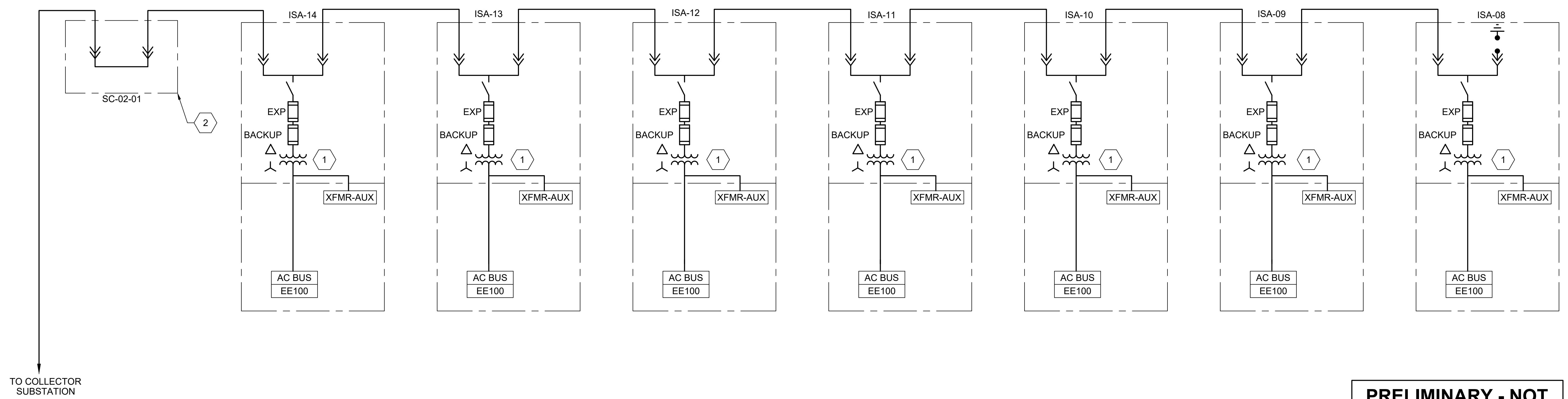
MERCER COUNTY SOLAR FACILITY AC ONE LINE DIAGRAM HIGHER GCR - CIRCUIT 1	
project 157644	contract -
drawing	rev. EE001 - A
sheet -	of - sheets
file 157644EE001-HGCR.dwg	

Case No. 2023-00361
 Attachment 2 to Response to PSC-2 Question No. 30
 Page 2 of 5
 Tummonds

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PRELIMINARY - NOT FOR CONSTRUCTION

LEGEND

	POWER TRANSFORMER
	SURGE ARRESTOR
	FUSE
	DISCONNECT SWITCH
	600 A ELBOW CONNECTOR
	SOLAR PHOTOVOLTAIC INVERTER

Scale For Microfilming
 Millimeters
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no.	date	by	ckd	description
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 KANSAS CITY, MO 64114
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 Burns & McDonnell Engineering Co., Inc.
 Firm Reg. No. 43

designed: S. HIBBARD
 detailed: P. DURKEE

LGE KU

MERCER COUNTY, KY

MERCER COUNTY SOLAR FACILITY AC ONE LINE DIAGRAM HIGHER GCR - CIRCUIT 2	
project 157644	contract -
drawing EE002	rev. A
sheet -	of - sheets
file 157644EE002-HGCR.dwg	

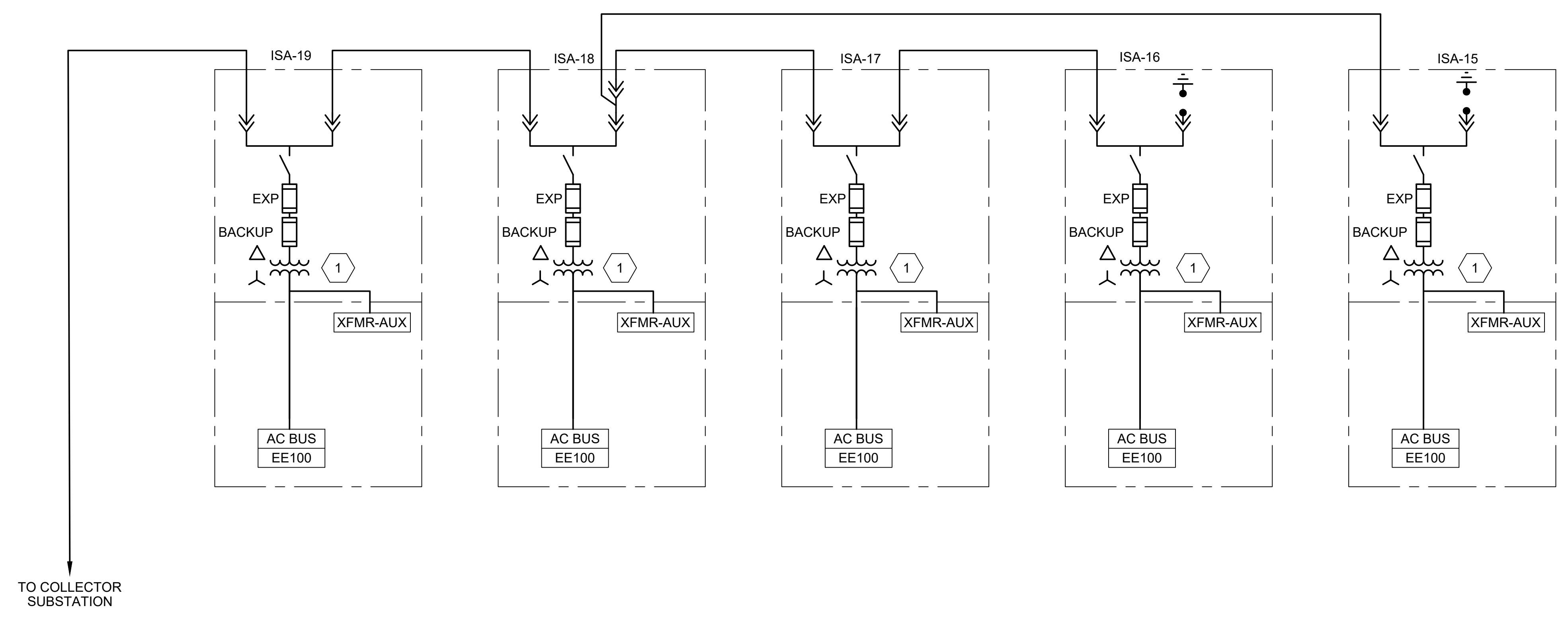
EQUIPMENT LIST		
NO.	QUANTITY	DESCRIPTION
1	5	4,400 kVA, 34.5 kV:0.645 kV MV TRANSFORMER, Z = 8% (±10%), SUNGROW INVERTER SKID ASSEMBLY

SYSTEM DESCRIPTION	
TOTAL CAPACITY @ POI (AC)	120.00 MW
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MODULES PER STRING	29
AVERAGE STRINGS PER INVERTER	283
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LEGEND

- POWER TRANSFORMER
- SURGE ARRESTOR
- FUSE
- DISCONNECT SWITCH
- 600 A ELBOW CONNECTOR
- SOLAR PHOTOVOLTAIC INVERTER

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Scale For Microfilming
 Millimeters
 Inches

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 KANSAS CITY, MO 64114
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 Burns & McDonnell Engineering Co., Inc.
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designed: S. HIBBARD
 detailed: P. DURKEE

LGE KU

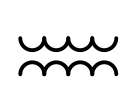
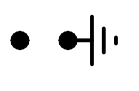
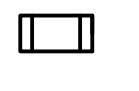
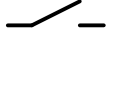

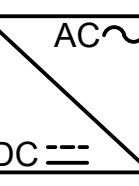
MERCER COUNTY, KY

MERCER COUNTY SOLAR FACILITY AC ONE LINE DIAGRAM HIGHER GCR - CIRCUIT 3	
project	contract
157644	-
drawing	rev.
EE003	- A
sheet	of sheets
-	-
file 157644EE003-HGCR.dwg	

EQUIPMENT LIST		
NO.	QUANTITY	DESCRIPTION
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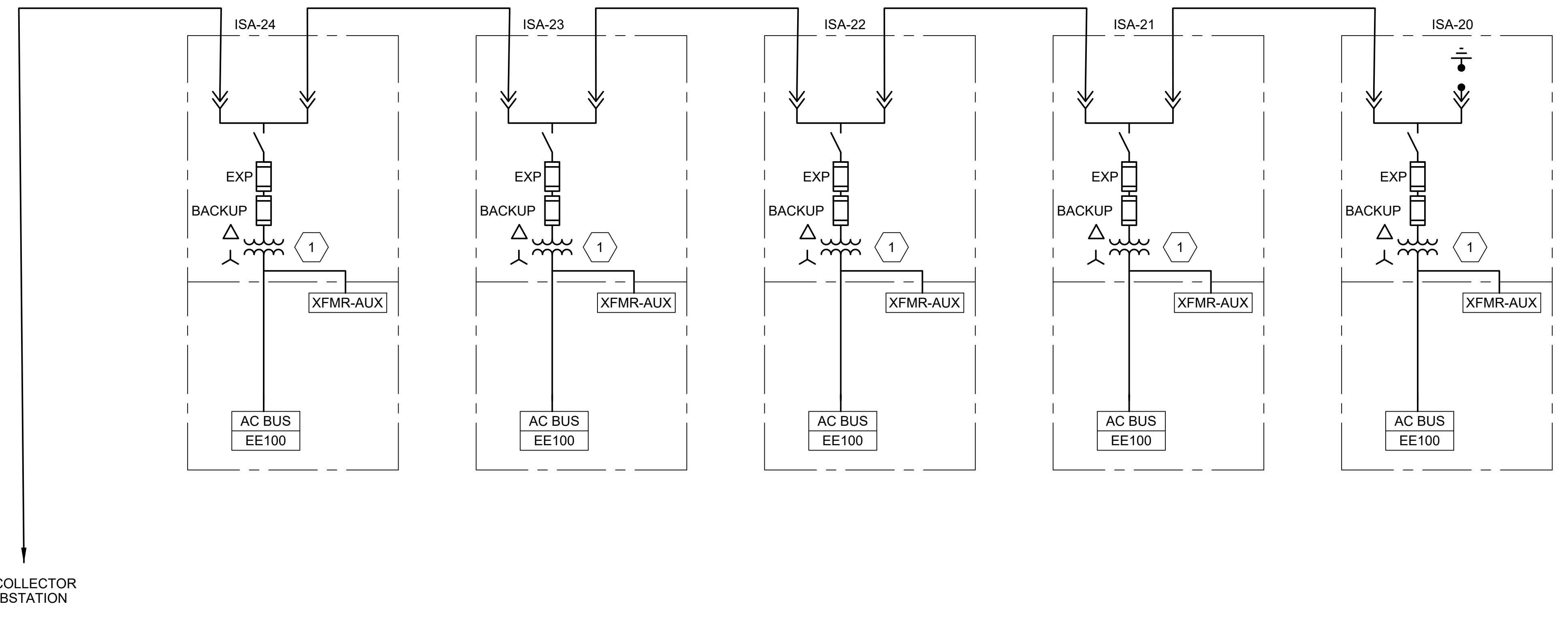
SYSTEM DESCRIPTION	
TOTAL CAPACITY @ POI (AC)	120.00 MW
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SOLAR CAPACITY (DC)	151.33 MW
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MODULES PER STRING	29
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LEGEND

-  POWER TRANSFORMER
-  SURGE ARRESTOR
-  FUSE
-  DISCONNECT SWITCH
-  600 A ELBOW CONNECTOR
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BURNS MCDONNELL
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 KANSAS CITY, MO 64114
 816-333-9400
 Burns & McDonnell Engineering Co, Inc.
 Firm Reg. No. 43

designed: S. HIBBARD
 detailed: P. DURKEE

LGE KU

MERCER COUNTY, KY

MERCER COUNTY SOLAR FACILITY AC ONE LINE DIAGRAM HIGHER GCR - CIRCUIT 4	
project: 157644	contract: -
drawing: EE004	rev. A
sheet: -	of: - sheets
file: 157644EE004-HGCR.dwg	

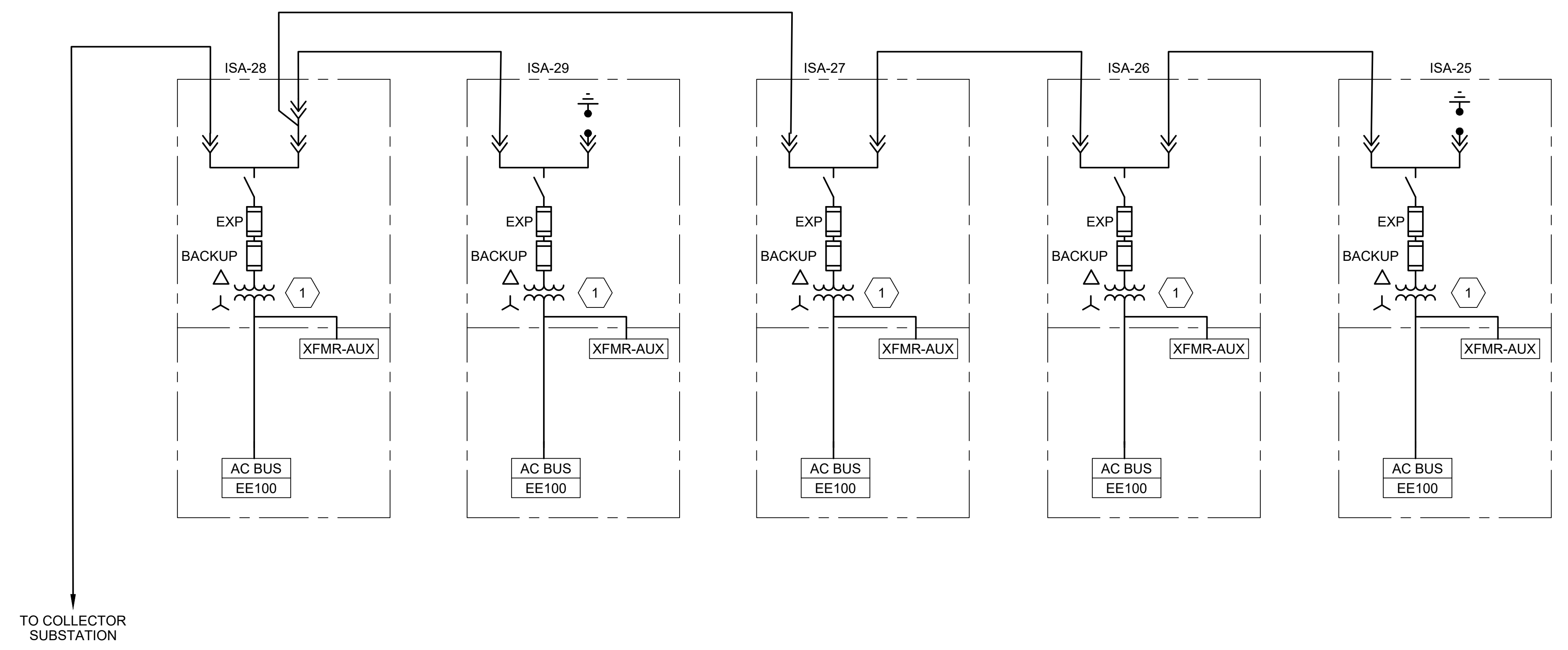
EQUIPMENT LIST		
NO.	QUANTITY	DESCRIPTION
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LGE KU

MERCER COUNTY, KY

MERCER COUNTY SOLAR FACILITY AC ONE LINE DIAGRAM HIGHER GCR - CIRCUIT 5	
project 157644	contract -
drawing EE005 - rev. A	
sheet -	of - sheets
file 157644EE005-HGCR.dwg	