



# Power Delivery Solutions for . . .

**Utility**

**Oil & Gas**

**Industrial**

**Transit**



## Tyeen Lake 15 kV Switchgear

08.16.2023

**Prepared For:**

**Electric Power Systems**

### The Myers Power Products Family of Companies



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## Detail Bill of Material

<b>Project Name:</b>	SEAPA Tyee Station Service Switchgear_AXG10425X3K1	<b>Negotiation No:</b>	AXG10425X3K1
<b>General Order No:</b>		<b>Alternate No:</b>	0000

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Power Transformers	Power Transformer, 1, 72221 - ABB VPI or VPE Dry Substation, 500 KVA, Air Terminal Chamber, Magnum Switchgear, Right		\$116,305.04	\$116,305.04

Catalog No CN\_72221\_500

<b>Catalog No</b>	<b>Qty</b>	<b>List of Materials</b>
CN_72221_500	1	Secondary Substation, Ventilated VPI Polyester 500KVA

**Notes**

Quote dated: 1/22/2024      Quote Number: QT-23-00912399

From:

Hitachi Energy USA Inc.  
Tyler White  
171 Industry Drive  
Bland, VA 24315

CHAMPS QUOTATION – NCC 1/22/2024  
Quote Number: QT-23-00912399  
Project: SEAPA - Tyee Service Switchgear

Item	Alt	Qty	Description	Unit Net Price(USD)
2		1	500 KVA VPI Secondary Unit Substation	

(Activity Location: 9AAE328373, PDC: 9AAF401369, DTXX-DXW209)  
Lead Times  
Drawing Submittal : 2-3 Weeks after receipt of order.  
Approval Order (Shipment) : 56-58 Weeks after return of approved drawings.  
Firm Order (Shipment) : 56-58 Weeks after receipt of order.

Transformers are designed, built and tested to ANSI/IEEE C57 Transformer Standards. No other Codes/Standards apply (NEC, NESC, etc.) unless noted on quote.

General Comments and Exceptions

- SECTION 26 12 16 DRY-TYPE TRANSFORMERS
- 1.1: Quotation is based on transformers previously quoted to SEAPA - SITKA SWAN LAKE.
- 1.3: Manufacturer's standard drawings and documentation will be provided.
- 2.1: Transformers will be provided with a 95kV HV BIL and 30kV LV BIL.
- 2.4.5.1: Manufacturer's standard NEMA 1 Indoor Ventilation enclosure will be provided. Exception is taken to dead front.
- 2.4.5.3: Seismic Clarification: The unit is being quoted with a seismic rating of 1.85SDS per International Building Code. The seismic rating (design) for the above listed units will be prepared by using design data processed from previously tested units only. The new design will be prepared from calculations only. No seismic testing will be performed on this unit. All site studies, pad construction, installation and mounting hardware are by others.
- 3.3.3 - 3.3.6: All site and field work is the responsibility of others.

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<b>General Order No:</b>		<b>Alternate No:</b>	0000

- 1. The attached proposal is for the design, manufacture and shipment of the above detailed equipment. Offloading and all site work; including installation, training and field testing shall be the responsibility of others.
- 2. Hitachi Energy USA Inc. standard drawing, instruction manual, test, and quality documentation to be provided only. All information shall be provided electronically only. Customer must advise at the time of order if drawings are preferred as .pdf or Autocad, otherwise, electronic Autocad drawings will be submitted by Hitachi Energy USA Inc.
- 3. NOTE: If the quoted transformer will be feed by a vacuum breaker, the manufacturer strongly recommends that the customer considers adding protection to each transformer to mitigate both transient over-voltage and voltage amplification due to resonance caused by the vacuum or SF6 insulated circuit breakers. The manufacturer can offer the traditional R/C Snubber Circuit option that can be supplied on all transformer types (VPI, VPE, RESIBLOC and Cast Coil).  
The customer should have a system study completed to confirm the ratings needed for the R/C Snubber Circuit to properly protect the transformer. The transformer manufacturer assumes no responsibility for sizing the snubber circuit or damages resulting from improper coordination between the transformer and the vacuum circuit breaker. Please contact the manufacturer if you have any questions or concerns.
- 4. Transformers are not designed for any overloads, over/under voltages or harmonics, as nothing was specified (other than specifically stated with this proposal or ANSI/IEEE/NEMA standards).
- 5. The transformer manufacturer is certified to ISO 9001:2008 for design and manufacture of Power, Distribution and Specialty Dry Type Transformers.
- 6. The transformers are designed, manufactured and tested in accordance with applicable ANSI, IEEE and NEMA standards.
- 7. The above listed weight and dimensions are approximate.
- 8. Quotation is based on the above Bill of Material only.
- 9. Pricing does not include taxes.

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Catalog No CN\_72221\_500

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<b>General Order No:</b>		<b>Alternate No:</b>	0000

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6. The transformers are designed, manufactured and tested in accordance with applicable ANSI, IEEE and NEMA standards.
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	1	Low Voltage Assemblies	Magnum Low Voltage Assemblies, NEMA1 Indoor, 480 delta, 65 kAIC, 3 Wires, 60 Hertz, 1600 Amps Main Bus		\$1,140,240.36	\$1,140,240.36
		Designation	480V SWGR			
Structure	1	<b>22in Structure 1600 Amps</b>	NEMA1 Indoor Enclosure			
	A	<b>Main Metering - 1/4 High Main Metering Compartment</b>	Current Transformer Ratio 1200:5 Power Xpert Gateway 900 RJ45 to RJ45 Bulkhead Pass-through Receptacle Special Metering w/ CTs and PTs SEL-751 Feeder Protection Relay			
	B	<b>Breaker - MDS-612 Main, [Drawout/O-E/O], 1200A Magnum DS Breaker, Digitrip 1150, LSI</b>	Sensor + Plug (Rated Current In) 1200 Digitrip RMS 1150 LSI Trip Unit Cell Switch 8-Form C contacts Brk control Sw: Standard E34 switch with open & closed LEDs Auxiliary Switch 6a/b Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts Metering Class, Compartment CT, 1200:5 Relaying Class, Delta (3-Wire), VTs (Voltage Transformer(s)) Local ARMS Switch w/ Locking Cover & Light Zone Interlock S & G			
	C	<b>CHRG - 1/2 High CHRG Compartment</b>	CHRG - Resistor Type 5 Amp Tap CHRG - Pulsing Delta Current Sensing with Ground Detection Lights CHRG - Ground Detection Lights - Resistor type with Test Button (Std)			

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<b>General Order No:</b>		<b>Alternate No:</b>	0000

- Structure 2 22in Structure 1600 Amps  
NEMA1 Indoor Enclosure
- A Instruments - 1/4 High Metering Compartment  
Door with Cutouts  
Door Cutout (Per Cutout)
- B Breaker - MDS-608 Main, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (1)-500/Ph, #4G  
Sensor + Plug (Rated Current In)  
300  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 6a/b  
Cell Switch 8-Form C contacts  
Local ARMS Switch w/ Locking Cover & Light  
Metering Class, Compartment CT, 2000:5  
Relaying Class, Delta (3-Wire), VTs (Voltage Transformer(s))  
Zone Interlock S & G
- C Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (2)-500/Ph, #3G  
Sensor + Plug (Rated Current In)  
400  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 4a/b  
Cell Switch 4-Form C contacts  
Local ARMS Switch w/ Locking Cover & Light  
Zone Interlock S & G
- D Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (3)-500/Ph, 1/0G  
Sensor + Plug (Rated Current In)  
800  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 4a/b  
Cell Switch 4-Form C contacts  
Local ARMS Switch w/ Locking Cover & Light  
Zone Interlock S & G

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**Project Name:** SEAPA Tyee Station Service  
Switchgear\_AXG10425X3K1

**Negotiation No:** AXG10425X3K1

**General Order No:**

**Alternate No:** 0000

- Structure
- 3 22in Structure 1600 Amps  
NEMA1 Indoor Enclosure
  - A TransferScheme - 1/4 High Transfer Scheme Operator Interface
  - B Breaker - MDS-612 Tie, [Drawout/O-E/O], 1200A Magnum DS Breaker,  
Digitrip 1150, LSI  
Sensor + Plug (Rated Current In)  
1200  
Digitrip RMS 1150 LSI Trip Unit  
Tie Breaker with Panel-Mounted Controlled Auto-Transfer  
Cell Switch 8-Form C contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 6a/b  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Local ARMS Switch w/ Locking Cover & Light
  - C Breaker - MDS-612 Tie, [Drawout/O-E/O], 1200A Magnum DS Breaker,  
Digitrip 1150, LSI  
Sensor + Plug (Rated Current In)  
1200  
Digitrip RMS 1150 LSI Trip Unit  
Tie Breaker with Panel-Mounted Controlled Auto-Transfer  
Cell Switch 8-Form C contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 6a/b  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Local ARMS Switch w/ Locking Cover & Light
  - D Blank Compartment

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<b>General Order No:</b>		<b>Alternate No:</b>	0000

- Structure 4 22in Structure 1600 Amps  
NEMA1 Indoor Enclosure
- A Instruments - 1/4 High Metering Compartment  
Door with Cutouts  
Door Cutout (Per Cutout)
- B Breaker - MDS-608 Main, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (1)-500/Ph, #4G  
Sensor + Plug (Rated Current In)  
300  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 6a/b  
Cell Switch 8-Form C contacts  
Local ARMS Switch w/ Locking Cover & Light  
Metering Class, Compartment CT, 2000:5  
Relaying Class, Delta (3-Wire), VTs (Voltage Transformer(s))  
Zone Interlock S & G
- C Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (2)-500/Ph, #3G  
Sensor + Plug (Rated Current In)  
400  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 4a/b  
Local ARMS Switch w/ Locking Cover & Light  
Zone Interlock S & G
- D Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI  
Typical Qty/Cable size per Ph(N) & G: (3)-500/Ph, 1/0G  
Sensor + Plug (Rated Current In)  
800  
Digitrip RMS 1150 LSI Trip Unit  
Standard Mechanical Lugs  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 4a/b  
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Local ARMS Switch w/ Locking Cover & Light  
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**Project Name:** SEAPA Tyee Station Service  
Switchgear\_AXG10425X3K1

**General Order No:**

**Negotiation No:** AXG10425X3K1

**Alternate No:** 0000

- Structure
- 5 22in Structure 1600 Amps  
NEMA1 Indoor Enclosure
  - A Main Metering - 1/4 High Main Metering Compartment  
Power Xpert Gateway 900  
RJ45 to RJ45 Bulkhead Pass-through Receptacle  
Current Transformer Ratio 2000:5  
Special Metering w/ CTs and PTs  
SEL-751 Feeder Protection Relay
  - B Breaker - MDS-612 Main, [Drawout/O-E/O], 1200A Magnum DS  
Breaker, Digitrip 1150, LSI  
Sensor + Plug (Rated Current In)  
1200  
Digitrip RMS 1150 LSI Trip Unit  
Cell Switch 8-Form C contacts  
Brk control Sw: Standard E34 switch with open & closed LEDs  
Auxiliary Switch 6a/b  
Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts  
Local ARMS Switch w/ Locking Cover & Light  
Metering Class, Compartment CT, 1200:5  
Relaying Class, Delta (3-Wire), VTs (Voltage Transformer(s))  
Zone Interlock S & G
  - C CHRG - 1/2 High CHRG Compartment  
CHRG - Resistor Type 5 Amp Tap  
CHRG - Pulsing Delta Current Sensing with Ground Detection Lights  
CHRG - Ground Detection Lights - Resistor type with Test Button (Std)

- Qty List of Materials
- 1 Standard Voltage Selection (Included)
  - 1 Standard Frequency Selection (Included)
  - 1 1600 amps (Standard - Included)
  - 4 Customer Supplied CPT - - Not Supplied by Plant
  - 1 125VDC ATR Control Voltage - Customer Supplied
  - 1 125VDC Motor Control Voltage - Customer Supplied
  - 1 125VDC Close Control Voltage - Customer Supplied
  - 1 125VDC Trip Control Voltage - Customer Supplied
  - 1 125VDC Lights Control Voltage - Customer Supplied
  - 1 Overhead Breaker Lifting Device
  - 1 Ratchet & Extension
  - 1 Breaker Lifting Transport Truck
  - 1 Trip Unit Test Kit:MTK2000 Test Kit
  - 1 Sets of Spare Fuses
  - 1 Sets of Spare Indicating Lights
  - 4 Main Breakers with Panel-Mounted Controlled Auto-Transfer
  - 1 4 Source Control Power Transfer (120 VAC Req'd)
  - 4 Service Entr.Label w/Barriers
  - 1 IBC/CBC Seismic Qualified
  - 5 22in Structure 1600 Amps
  - 5 NEMA1 Indoor Enclosure
  - 2 1/4 High Main Metering Compartment
  - 1 Current Transformer Ratio 1200:5
  - 2 Power Xpert Gateway 900
  - 2 RJ45 to RJ45 Bulkhead Pass-through Receptacle

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**General Order No:**

**Negotiation No:** AXG10425X3K1

**Alternate No:** 0000

Qty	List of Materials
2	Special Metering w/ CTs and PTs
2	SEL-751 Feeder Protection Relay
2	MDS-612 Main, [Drawout/O-E/O], 1200A Magnum DS Breaker
10	Digitrip RMS 1150 LSI Trip Unit
6	Cell Switch 8-Form C contacts
10	Brk control Sw: Standard E34 switch with open & closed LEDs
6	Auxiliary Switch 6a/b
10	Bell alarm (OTS) Switch - Indicator with 2-Form C Contacts
6	Metering Class, Compartment CT, 1200:5
4	Relaying Class, Delta (3-Wire), VTs (Voltage Transformer(s))
10	Local ARMS Switch w/ Locking Cover & Light
8	Zone Interlock S & G
2	1/2 High CHRГ Compartment
2	CHRГ - Resistor Type 5 Amp Tap
2	CHRГ - Pulsing Delta Current Sensing with Ground Detection Lights
2	CHRГ - Ground Detection Lights - Resistor type with Test Button (Std)
4	MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker
6	Standard Mechanical Lugs
4	Auxiliary Switch 4a/b
3	Cell Switch 4-Form C contacts
2	MDS-608 Main, [Drawout/O-E/O], 800A Magnum DS Breaker
6	Metering Class, Compartment CT, 2000:5
2	1/4 High Metering Compartment
2	Door with Cutouts
10	Door Cutout (Per Cutout)
1	Current Transformer Ratio 2000:5
2	1600A EATON Xfmr. Xsition 3W
10	IR Window, Hawk/Fluke (4") - Crystal
1	Magnum Remote Racking Device (MRR1000 w/ US Power Cord & Storage Case w/ 25 FT Cable)
1	Arc-Flash Detection Sensors/Fiber Loop NOT INCLUDED. Must be provided and installed by contractor in the field
5	#14 AWG Control Wire
5	Gray Control Wire Color
7	Control Wire Mkrs(Machine Printed on Wire (Std))
7	(Origin/Wire Name/Destination) Control Wire Labeling
7	Ring Tongue Wire Terminals
5	Green Ground Wire Color
5	#10 AWG CT Wire
5	Gray CT Wire Color
5	Ring Tongue CT Wire Terminals
1	Duplicate of 480V Swgr on GO #MAN0010301
2	Additional Remote Racking Devices (Accessories Spec)
2	MDS-612 Tie, [Drawout/O-E/O], 1200A Magnum DS Breaker
2	Tie Breaker with Panel-Mounted Controlled Auto-Transfer
1	Blank Compartment
1	1/4 High Transfer Scheme Operator Interface
2	SEL Cat # 751001ACA0X70851D00 - Relay type 751 (price in meter comp)
2	SEL Cat #0735BX00544EXXXXXX16101XX - Watthour Meter
2	SEL Cat # 0700G01ACA0X74850300 - Relay type 700G
1	GE/IC695CHS007
5	Spare Contacts on Relays and Breakers

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- Qty List of Materials
- 5 10% Spare Terminal Blocks
- 5 Shorting Block Covers with Marking Strips
- 5 Terminal Blocks Strip Labels
- 7 Screw-Type Staggered Terminal Blocks
- 5 Cable Supports - Insulated
- 5 Seg Barriers Cable/Bus
- 5 Vent Screens
- 1 Open Transition for Automatic Transfer (Standard)
- 1 Eaton LVA integration & installation of PSC Transfer system - PLC & Touchscreen provided by Eaton PSC
- 1 Additional Shipping Splits
- 1 GE/IC695PSD140
- 1 GE/IC695CPE305
- 1 GE/IC695PNC001
- 3 GE/IC695CMM004
- 3 GE/EXPNS001
- 9 GE/EP-1218
- 6 GE/EP-2714
- 8 WEIDMULLER/8611320000
- 10 Mimic Bus Plastic (Adhesive) - Red 3/8" wide
- 1 UL/Warning Label Language:English Only
- 1 Certified Test Report (Std Test)
- 6 Test Switches
- 2 500VA CPT for Transformer Fans
- 3 Relay Class Bus CT
- 2 Relay Class Generator Main CTs
- 2 PTs w/Fusing and Disconnects

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Automatic Transfer Switches	Quote Date: 6/23/2023		\$35,752.60	\$35,752.60
			Product Family: Floor Standing Contactor Switch Type: Automatic Contactor 800A thru 1600A 480/277v, 60hz, 3 Phase, 4 Wire, 3 poles Transition Mode: Closed Controller Type: ATC-900 Continuous Current: 800 Amps Withstand: 100kA spc bkr/100kA (0.05 sec) Normal Source Terminals: (8) 1/0-750 CU/AL Emergency Source Terminals: (8) 1/0-750 CU/AL Load Side Terminals: (8) 1/0-750 CU/AL Neutral Terminals: (24) 1/0-750 CU/AL			
			Standard Features: 1b, 1c, 1d, 2a, 3b, 3c, 3d, 4b, 5h, 5j, 5k, 5l, 5m, 6b, 7a, 8e, 10b, 10d, 12c, 12d, 12g, 12h, 14e, 14f, 15v, 15w, 23m, 26h, 26j, 26k, 26l, 26m, 42, 47h, 48f, 48u, 49c, 59a, 80b, Optional Features: 47e,			
			<b>Catalog No</b> CTC9F5X30800XSU			

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Switchgear\_AXG10425X3K1

**Negotiation No:** AXG10425X3K1

**General Order No:**

**Alternate No:** 0000

Qty	List of Materials
1	Overall enclosure height to be 88 inches
1	CTC9F5 3 Poles 800 Amps
1	Enclosure - Type-1
1	1b. Time Delay Normal to Emergency Adj. 0-9999 sec
1	1c. Time Delay Normal Disconnect Adjustable 0-10 Sec
1	1d. Time Delay Normal Reconnect Adjustable 0-60 Sec
1	2a. Time Delay Engine Start Adj. 0-120 sec
1	3b. Time Delay Emergency to Normal Adj. 0-9999 sec
1	3c. Time Delay Emergency Disconnect Adjustable 0-10 Sec
1	3d. Time Delay Emergency Reconnect Adjustable 0-10 Sec
1	4b. Time Delay Engine Cool-off Adj. 0-9999 sec
1	5h. Emergency (S2) Sensing Phase Reversal
1	5j. Emergency (S2) Sensing Under Voltage/Under Freq
1	5k. Emergency (S2) Sensing Over Voltage/Over Freq
1	5l. Emergency (S2) Sensing Voltage Unbalance
1	5m. Emergency (S2) Sensing Phase Loss
1	6b. Test Pushbutton
1	7a. Time Delay Engine Fail Adj. 0-6 sec
1	8e. Bypass All Timers
1	10b. Source Selector - Utility to Utility or Utility to Gen
1	10d. Source Selector - Generator to Generator
1	12c. LED Indicator Normal Position
1	12d. LED Indicator Emergency Position
1	12g. LED Indicator Normal Source Available
1	12h. LED Indicator Emergency Source Available
1	14e. Normal (S1) Source Available (1 Form C)
1	14f. Emergency (S2) Source Available (1 Form C)
1	15v. Normal (S1) Position Indication 6NO 6NC
1	15w. Emergency (S2) Position Indication 6NO 6NC
1	22. Ground Bar
1	23m. Auto Plant Exerciser Selectable-Disabled/Daily/Calendar Dates, 0-600 min, Load/No Load w/Fail Safe
1	26h. Normal (S1) Sensing Phase Reversal
1	26j. Normal (S1) Sensing Under-voltage/Under-frequency
1	26k. Normal (S1) Sensing Over-voltage/Over-frequency
1	26l. Normal (S1) Sensing Voltage Unbalance
1	26m. Normal (S1) Sensing Phase Loss
1	42. IBC/CBC Seismic Qualified
1	47e. Closed / Inphase Open Transition Time Delay Neutral
1	47h. Parallel Limit Timer w/Terminal Block
1	48f. MODBUS Communication
1	48u. USB Port for Memory Stick
1	49c. Multi-Tap Transformer
1	59a. Silver Plated Bus
1	80b. Input Terminal Blocks

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## Detail Bill of Material

**Project Name:** SEAPA Tyee Station Service  
Switchgear\_AXG10425X3K1

**Negotiation No:** AXG10425X3K1

**General Order No:**

**Alternate No:** 0000

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Panelboards	PRL4X, 39 Circuits, 800A, Fully Rated, 480V 3Ph 3W, Copper Bus, 65kAIC, 800A, 3P PDG43M0800 Main Breaker[Top Fed], Surface Mounted		\$17,278.66	\$17,278.66

**Catalog No** PBSFNHBTB48A  
**Designation** PPCL R1

- Qty List of Materials**
- 1 800A, 3P PDG43M0800 Main Breaker
  - 1 400A, 3P PDG33M0400 Branch Breaker
  - 1 400A, 3P PDG33MH400 Branch Breaker
  - 1 600A, 3P PDG33M0600 Branch Breaker
  - 2 25A, 3P PDG23M0025 Branch Breaker
  - 2 20A, 3P PDG23M0020 Branch Breaker
  - 1 100A, 3P PDG23M0100 Branch Breaker
  - 3 70A, 3P PDG23M0070 Branch Breaker
  - 1 30A, 3P PDG23M0030 Branch Breaker
  - 1 3P Frame 2 Branch Provision Only
  - 1 Copper Main Bus, 800 Amps
  - 1 Std. Bolted Al Ground Bar (Al/Cu Cable)
  - 1 Painted Box - ANSI 61
  - 1 Panel Nameplate - White with Black Letters
  - 1 Type 1 Enclosure: BX3673P
  - 1 Standard Covers: Standard Covers

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Panelboards	PRL4X, 9 Circuits, 800A, Fully Rated, 480V 3Ph 3W, Copper Bus, 65kAIC, 800A, Main Lugs Only[Top Fed], Surface Mounted		\$9,846.30	\$9,846.30

**Catalog No** PBSFNHLTB18A  
**Designation** TEMP POWER

- Qty List of Materials**
- 1 800A, Main Lugs Only
  - 1 800A, 3P PDG43M0800 Branch Breaker
  - 2 400A, 3P PDG33MH400 Branch Breaker
  - 1 Copper Main Bus, 800 Amps
  - 1 Std. Bolted Al Ground Bar (Al/Cu Cable)
  - 1 Painted Box - ANSI 61
  - 1 Panel Nameplate - White with Black Letters
  - 1 Type 1 Enclosure: BX4473P
  - 1 Standard Covers: Standard Covers

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Panelboards	PRL3X, 51 Circuits, 400A, Fully Rated, 480V 3Ph 3W, Copper Bus, 65kAIC, 400A, Main Lugs Only[Bottom Fed], Surface Mounted		\$10,824.73	\$10,824.73

**Catalog No** PBSCNFLBB54A  
**Designation** PDP-A R1

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## Detail Bill of Material

**Project Name:** SEAPA Tye Station Service  
Switchgear\_AXG10425X3K1

**General Order No:**

**Negotiation No:** AXG10425X3K1

**Alternate No:** 0000

- Qty List of Materials
- 1 400A, Main Lugs Only
- 7 20A, 3P PDG23M0020 Branch Breaker
- 1 3P Frame 2 Branch Provision Only
- 1 175A, 3P PDG23M0175 Branch Breaker
- 1 100A, 3P PDG23M0100 Branch Breaker
- 1 70A, 3P PDG23M0070 Branch Breaker
- 2 40A, 3P PDG23M0040 Branch Breaker
- 1 25A, 3P PDG23M0025 Branch Breaker
- 3 80A, 3P PDG23M0080 Branch Breaker
- 1 Copper Main Bus, 400 Amps
- 1 Std. Bolted Al Ground Bar (Al/Cu Cable)
- 1 Panel Nameplate - White with Black Letters
- 1 Type 1 Enclosure: EZB2072R
- 1 EZ Trim, Door in Door, Concealed Hardware: EZT2072S

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Panelboards	PRL3X, 30 Circuits, 400A, Fully Rated, 480V 3Ph 3W, Copper Bus, 65kAIC, 225A, 3P PDG33M0225 Main Breaker[Top Fed], Surface Mounted		\$7,971.49	\$7,971.49
		<b>Catalog No</b>	PBSCNFBTB30A			
		<b>Designation</b>	PDP-A1			

- Qty List of Materials
- 1 225A, 3P PDG33M0225 Main Breaker
- 1 400A, Through-Feed Lugs
- 10 20A, 3P PDG23M0020 Branch Breaker
- 1 Copper Main Bus, 400 Amps
- 1 Std. Bolted Al Ground Bar (Al/Cu Cable)
- 1 Panel Nameplate - White with Black Letters
- 1 Type 1 Enclosure: EZB2072R
- 1 EZ Trim, Door in Door, Concealed Hardware: EZT2072S

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	3	Panelboards	PRL3X, 42 Circuits, 400A, Fully Rated, 480V 3Ph 3W, Copper Bus, 65kAIC, 400A, 3P PDG33M0400 Main Breaker[Top Fed], Surface Mounted		\$7,980.98	\$23,942.94
		<b>Catalog No</b>	PBSCNFBTB42A			
		<b>Designation</b>	PPU1,PPU2,PPU3			

- Qty List of Materials
- 1 400A, 3P PDG33M0400 Main Breaker
- 4 3P Frame 2 Branch Provision Only
- 1 35A, 3P PDG23M0035 Branch Breaker
- 1 30A, 3P PDG23M0030 Branch Breaker
- 7 20A, 3P PDG23M0020 Branch Breaker

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## Detail Bill of Material

<b>Project Name:</b>	SEAPA Tyee Station Service Switchgear_AXG10425X3K1	<b>Negotiation No:</b>	AXG10425X3K1
<b>General Order No:</b>		<b>Alternate No:</b>	0000

Qty	List of Materials
1	25A, 3P PDG23M0025 Branch Breaker
1	Copper Main Bus, 400 Amps
1	Std. Bolted Al Ground Bar (Al/Cu Cable)
1	Panel Nameplate - White with Black Letters
1	Type 1 Enclosure: EZB2072R
1	EZ Trim, Door in Door, Concealed Hardware: EZT2072S

Total Quote Price

\$1,478,467.16

Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.

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## Detail Bill of Material

<b>Project Name:</b>	SEAPA Tyee Station Service	<b>Negotiation No:</b>	AXG10425X3K1
	Switchgear		
<b>General Order No:</b>		<b>Alternate No:</b>	0001

Item No.	Qty	Product	Description	Unit	Quote Price	Extended Quote
	1	Automatic Transfer Switches	Quote Date: 6/23/2023		\$35,752.60	\$35,752.60
			Product Family: Floor Standing Contactor Switch Type: Automatic Contactor 800A thru 1600A 480/277v, 60hz, 3 Phase, 4 Wire, 3 poles Transition Mode: Closed Controller Type: ATC-900 Continuous Current: 800 Amps Withstand: 100kA spc bkr/100kA (0.05 sec) Normal Source Terminals: (8) 1/0-750 CU/AL Emergency Source Terminals: (8) 1/0-750 CU/AL Load Side Terminals: (8) 1/0-750 CU/AL Neutral Terminals: (24) 1/0-750 CU/AL  Standard Features: 1b, 1c, 1d, 2a, 3b, 3c, 3d, 4b, 5h, 5j, 5k, 5l, 5m, 6b, 7a, 8e, 10b, 10d, 12c, 12d, 12g, 12h, 14e, 14f, 15v, 15w, 23m, 26h, 26j, 26k, 26l, 26m, 42, 47h, 48f, 48u, 49c, 59a, 80b, Optional Features: 47e,			

**Catalog No** CTC9F5X30800XSU

**Qty List of Materials**

- 1 Overall enclosure height to be 88 inches
- 1 CTC9F5 3 Poles 800 Amps
- 1 Enclosure - Type-1
- 1 1b. Time Delay Normal to Emergency Adj. 0-9999 sec
- 1 1c. Time Delay Normal Disconnect Adjustable 0-10 Sec
- 1 1d. Time Delay Normal Reconnect Adjustable 0-60 Sec
- 1 2a. Time Delay Engine Start Adj. 0-120 sec
- 1 3b. Time Delay Emergency to Normal Adj. 0-9999 sec
- 1 3c. Time Delay Emergency Disconnect Adjustable 0-10 Sec
- 1 3d. Time Delay Emergency Reconnect Adjustable 0-10 Sec
- 1 4b. Time Delay Engine Cool-off Adj. 0-9999 sec
- 1 5h. Emergency (S2) Sensing Phase Reversal
- 1 5j. Emergency (S2) Sensing Under Voltage/Under Freq
- 1 5k. Emergency (S2) Sensing Over Voltage/Over Freq
- 1 5l. Emergency (S2) Sensing Voltage Unbalance
- 1 5m. Emergency (S2) Sensing Phase Loss
- 1 6b. Test Pushbutton
- 1 7a. Time Delay Engine Fail Adj. 0-6 sec
- 1 8e. Bypass All Timers
- 1 10b. Source Selector - Utility to Utility or Utility to Gen
- 1 10d. Source Selector - Generator to Generator
- 1 12c. LED Indicator Normal Position
- 1 12d. LED Indicator Emergency Position
- 1 12g. LED Indicator Normal Source Available
- 1 12h. LED Indicator Emergency Source Available
- 1 14e. Normal (S1) Source Available (1 Form C)
- 1 14f. Emergency (S2) Source Available (1 Form C)
- 1 15v. Normal (S1) Position Indication 6NO 6NC
- 1 15w. Emergency (S2) Position Indication 6NO 6NC
- 1 22. Ground Bar

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## Detail Bill of Material

<b>Project Name:</b>	SEAPA Tyee Station Service Switchgear	<b>Negotiation No:</b>	AXG10425X3K1
<b>General Order No:</b>		<b>Alternate No:</b>	0001

Qty	List of Materials
1	23m. Auto Plant Exerciser Selectable-Disabled/Daily/Calendar Dates, 0-600 min, Load/No Load w/Fail Safe
1	26h. Normal (S1) Sensing Phase Reversal
1	26j. Normal (S1) Sensing Under-voltage/Under-frequency
1	26k. Normal (S1) Sensing Over-voltage/Over-frequency
1	26l. Normal (S1) Sensing Voltage Unbalance
1	26m. Normal (S1) Sensing Phase Loss
1	42. IBC/CBC Seismic Qualified
1	47e. Closed / Inphase Open Transition Time Delay Neutral
1	47h. Parallel Limit Timer w/Terminal Block
1	48f. MODBUS Communication
1	48u. USB Port for Memory Stick
1	49c. Multi-Tap Transformer
1	59a. Silver Plated Bus
1	80b. Input Terminal Blocks

Total Quote Price	\$35,752.60
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Eaton Selling Policy 25-000 applies.

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## Low Voltage Assemblies General Information

### Magnum Specifications

Service Voltage: 480 delta, 3 Wires, 60 Hertz,  
Neutral None

Short Circuit Rating:: 65

Certification: UL1558

### Bus Specifications

Amps::	1600	Bus Rating:	100 kA
Insulation::	None	Bus Plating::	Silver
Density::	Standard		
Temperature Rise::	65 Degree C Rise over 40 Degrees		
High Altitude Derating::	None		
Ground Bus::	0.25x2" (Std)		
Ground Bus Lugs (1 each end)::	Std Gnd Lug (Mechanical Locking)		

### Incoming Information

Left Substation:	Transformer Sourcing Group Substation Transformer
Right Substation:	Transformer Sourcing Group Substation Transformer
Incoming Cables in Structure(s)::	None
Incoming Busway in Structure(s)::	None

### Structure Specifications

Enclosure Type::	NEMA1 Indoor
Cable Compartment Closure:	Covers, Captive Screws
Conduit Entry::	Bottom Entry

### Special Mods

Qty	Description
1	Arc-Flash Detection Sensors/Fiber Loop NOT INCLUDED. Must be provided and installed by contractor in the field
3	Relay Class Bus CT
2	500VA CPT for Transformer Fans
6	Test Switches
8	WEIDMULLER/8611320000
6	GE/EP-2714
9	GE/EP-1218
3	GE/EXPNS001
3	GE/IC695CMM004
1	GE/IC695PNC001
1	GE/IC695CPE305
1	GE/IC695PSD140
1	GE/IC695CHS007
2	SEL Cat # 0700G01ACA0X74850300 - Relay type 700G
2	SEL Cat #0735BX00544EXXXXXX16101XX - Watthour Meter
2	SEL Cat # 751001ACA0X70851D00 - Relay type 751 (price in meter comp)
2	Additional Remote Racking Devices (Accessories Spec)
1	Duplicate of 480V Swgr on GO #MAN0010301
2	Relay Class Generator Main CTs
2	PTs w/Fusing and Disconnects

### Enclosure Properties

Struct #	Width	Depth	Description/Modifications	Max 4 in. Conduits Top or Bottom *
1	22	72	Breakers - 22in Structure, 1600 Amps	6

The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.

PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>		Asheville, NC	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION 480V SWGR		
VERSION 11.25.26.0		TYPE Low Voltage Assemblies		DRAWING TYPE Customer Appr.	
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 1 of 7

2	22	72	Breakers - 22in Structure, 1600 Amps	12
3	22	72	Breakers - 22in Structure, 1600 Amps	12
4	22	72	Breakers - 22in Structure, 1600 Amps	12
5	22	72	Breakers - 22in Structure, 1600 Amps	6

Total of 5 Structures, Total Width of 110 in [2794 mm]

Overall Depth 72, Overall Weight 8050 lbs [3651 kg]

**\* Recommended number of 4 inch power conduits available in this structure (top or bottom entry).**

**\*\* Please contact the factory for recommended number of 4 inch power conduits available in this structure.**

**Items in this structure's Bill of Material would not allow an automated calculation.**

**\*\*\* Transfer Control Requirements: "PLC & Touchscreen provided by Eaton PSC" selected on Automatic Transfer Tab in Bidman Takeoff**

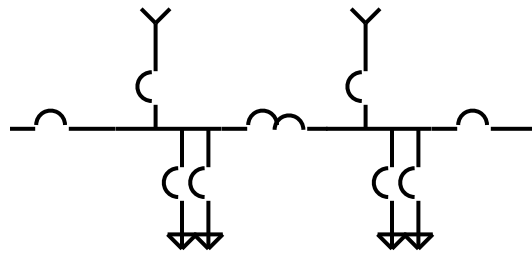
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**DIMENSIONS ARE NOT FOR CONSTRUCTION.**

<b>The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.</b>	PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>			Asheville, NC		
	APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION 480V SWGR				
	VERSION 11.25.26.0	TYPE Low Voltage Assemblies	DRAWING TYPE Customer Appr.					
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 2 of 7			

<b>A</b>	Main Metering SEL-751	Instrument	Transfer Scheme PSC	Instrument	Main Metering SEL-751
<b>B</b>	Main MDS-612 1200A-DE 1150LSI	Generator MDS-608 800A-DE 1150LSI	Tie MDS-612 1200A-DE 1150LSI	Generator MDS-608 800A-DE 1150LSI	Main MDS-612 1200A-DE 1150LSI
<b>C</b>	CHRG	Feeder MDS-608 800A-DE 1150LSI	Tie MDS-612 1200A-DE 1150LSI	Feeder MDS-608 800A-DE 1150LSI	CHRG
<b>D</b>		Feeder MDS-608 800A-DE 1150LSI	Blank	Feeder MDS-608 800A-DE 1150LSI	
	1	2	3	* 4	5

Front View

Power Flow

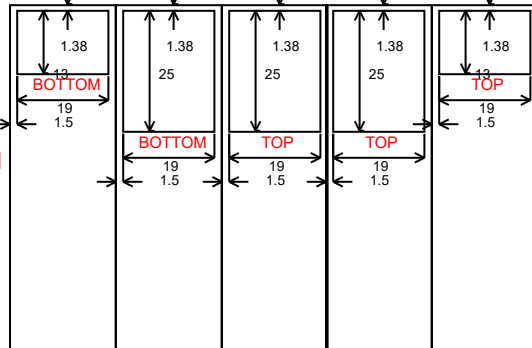


Rear

Floor Plan

Close Coupled

Close Coupled



\* Shipping Split

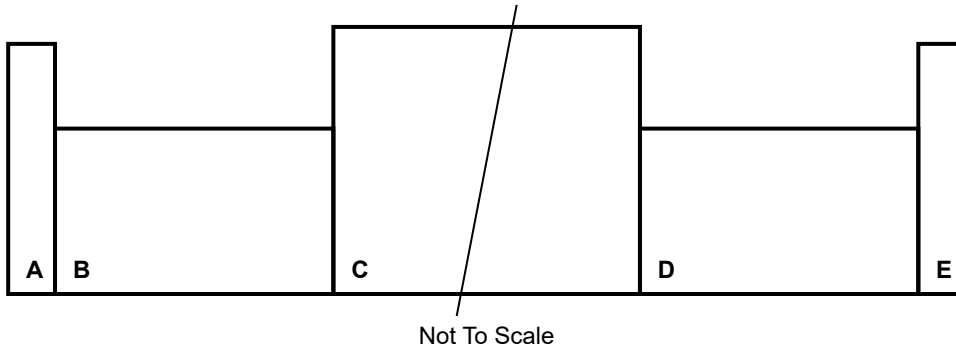
Structure	1	2	3	4	5				
Ship-Inches	0	0	66	0	44				
Ship-MM	0	0	1676	0	1117				
Width-Inches	22	22	22	22	22				
Width-MM	558	558	558	558	558				
Depth-Inches	72	72	72	72	72				
Depth-MM	1828	1828	1828	1828	1828				
Height-Inches	96	96	96	96	96				
Height-MM	2438	2438	2438	2438	2438				
Weight-Lbs	1480	1740	1610	1740	1480				
Weight-Kg	671	789	730	789	671				

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>		Asheville, NC	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION 480V SWGR		
VERSION 11.25.26.0		TYPE Low Voltage Assemblies	DRAWING TYPE Customer Appr.		
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 3 of 7

**SUBSTATION - FLOOR PLAN**

- Unit A: HV Power (from): Air Terminal Chamber > Ref Number:  
Lightning Arrester: Station Class > Heater Power: No > Outdoor: No
- Unit B: Type Transformer: Ventilated VPI Polyester > Ref Number:  
500 KVA > 5.75 Impedance > 80 deg C Rise Temp Rise  
Prim V: Delta/13800 > Sec V: Wye/480 delta > Lightning Arrester: -  
Fan Power: :No > Heater Power: No > Outdoor: No
- Unit C: Low Voltage Assembly (See previous pages)
- Unit D: Type Transformer: Ventilated VPI Polyester > Ref Number:  
500 KVA > 5.75 Impedance > 80 deg C Rise Temp Rise  
Prim V: Delta/13800 > Sec V: Wye/480 delta > Lightning Arrester: -  
Fan Power: :No > Heater Power: No > Outdoor: No
- Unit E: HV Power (from): Air Terminal Chamber > Ref Number:  
Lightning Arrester: Station Class > Heater Power: No > Outdoor: No



Unit	A	B	C	D	E			
Width-In	18.00	84.00	110.00	84.00	18.00			
Width-MM	457	2133	2794	2133	457			
Depth-In	60.00	60.00	72.00	60.00	60.00			
Depth-MM	1524	1524	1828	1524	1524			
Height-In	90.00	90.00	96.00	90.00	90.00			
Height-MM	2286	2286	2438	2286	2286			
Weight-Lbs	300.00	6328.00	8050.00	6328.00	300.00			
Weight-Kg	136	2870	3651	2870	136			

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	APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION 480V SWGR	
	VERSION 11.25.26.0	TYPE Low Voltage Assemblies	DRAWING TYPE Customer Appr.		
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 4 of 7

### Low Voltage Assemblies Units Information

Str#	Unit	Description/Modifications
1	A	MainMetering - 1/4 High Main Metering Compartment Main Metering: : Special Metering w/ CTs and PTs Schweitzer Engineering Laboratories: : SEL-751 Feeder Protection Relay Association to Main: : 1B Special Metering: : Special Metering w/ CTs and PTs Meter Control Power: : Display Type: :
1	B	Breaker - MDS-612 Main, [Drawout/O-E/O], 1200A Magnum DS Breaker, Digitrip 1150, LSI Sensor + Plug (Rated Current In) 1200 Nameplate 1 Line 1: 52-N1 Nameplate 1 Line 2: MAIN Continuous Current: : 1200 Auxiliary Switch: : 6A-6B CT Ratio: : 1200:5 Wires: : 3 Cell Mounted CTs: : Metering VTs: : Relaying
1	C	CHRG - 1/2 High CHRG Compartment CHRG Pulsing Ground Type: : Pulsing Current Sensing with Ground Detection Lights
<hr/>		
2	A	Instruments - 1/4 High Metering Compartment Compartment Height: : 1/4 Quantity of Cutouts: : 5
2	B	Breaker - MDS-608 Main, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI Typical Qty/Cable size per Ph(N) & G: (1)-500/Ph, #4G Sensor + Plug (Rated Current In) 300 Nameplate 1 Line 1: 52-E1 Nameplate 1 Line 2: GEN DE200 GEC Auxiliary Switch: : 6A-6B Cell Switch: : 8-Form C contacts Breaker Control Switch: : Standard with open & closed LED status light plate Special Breaker Type: : Generator Main Cell Mounted CTs: : Metering VTs: : Relaying
2	C	Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI Typical Qty/Cable size per Ph(N) & G: (2)-500/Ph, #3G Sensor + Plug (Rated Current In) 400 Nameplate 1 Line 1: 52-U1 Nameplate 1 Line 2: PPU1 Cell Switch: : 4-Form C contacts Breaker Control Switch: : Standard with open & closed LED status light plate
2	D	Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI Typical Qty/Cable size per Ph(N) & G: (3)-500/Ph, 1/0G Sensor + Plug (Rated Current In) 800 Nameplate 1 Line 1: 52-CL Nameplate 1 Line 2: ATS-A Cell Switch: : 4-Form C contacts

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	DAVE DICKASON	1/23/2024			
	APPROVED BY	DATE	JOB NAME	SEAPA Tye Station Service Switchgear_AXG10425X3K1	
		DESIGNATION	480V SWGR		
	VERSION	TYPE	DRAWING TYPE		
	11.25.26.0	Low Voltage Assemblies	Customer Appr.		
NEG-ALT Number	REVISION	DWG SIZE	G.O.	ITEM	SHEET
AXG10425X3K1-0000	0	A			5 of 7

Breaker Control Switch: : Standard with open & closed LED status light plate

- |   |   |  |
|---|---|--|
| 3 | A | TransferScheme - 1/4 High Transfer Scheme Operator Interface<br>Compartment Height: : 1/4  |
| 3 | B | Breaker - MDS-612 Tie, [Drawout/O-E/O], 1200A Magnum DS Breaker, Digitrip 1150, LSI<br>Sensor + Plug (Rated Current In)<br>1200<br>Nameplate 1 Line 1: 52-T1<br>Nameplate 1 Line 2: TIE<br>Continuous Current: : 1200<br>Auxiliary Switch: : 6A-6B   |
| 3 | C | Breaker - MDS-612 Tie, [Drawout/O-E/O], 1200A Magnum DS Breaker, Digitrip 1150, LSI<br>Sensor + Plug (Rated Current In)<br>1200<br>Nameplate 1 Line 1: 52-T2<br>Nameplate 1 Line 2: TIE<br>Continuous Current: : 1200<br>Auxiliary Switch: : 6A-6B   |
| 3 | D | Blank Compartment  |
|   |   |  |
| 4 | A | Instruments - 1/4 High Metering Compartment<br>Compartment Height: : 1/4<br>Quantity of Cutouts: : 5   |
| 4 | B | Breaker - MDS-608 Main, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI<br>Typical Qty/Cable size per Ph(N) & G: (1)-500/Ph, #4G<br>Sensor + Plug (Rated Current In)<br>300<br>Nameplate 1 Line 1: 52-E2<br>Nameplate 1 Line 2: GEN DE200 GC<br>Auxiliary Switch: : 6A-6B<br>Cell Switch: : 8-Form C contacts<br>Breaker Control Switch: : Standard with open & closed LED status light plate<br>Special Breaker Type: : Generator Main<br>Cell Mounted CTs: : Metering<br>VTs: : Relaying |
| 4 | C | Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI<br>Typical Qty/Cable size per Ph(N) & G: (2)-500/Ph, #3G<br>Sensor + Plug (Rated Current In)<br>400<br>Nameplate 1 Line 1: 52-U2<br>Nameplate 1 Line 2: PPU2<br>Breaker Control Switch: : Standard with open & closed LED status light plate   |
| 4 | D | Breaker - MDS-608 Feeder, [Drawout/O-E/O], 800A Magnum DS Breaker, Digitrip 1150, LSI<br>Typical Qty/Cable size per Ph(N) & G: (3)-500/Ph, 1/0G<br>Sensor + Plug (Rated Current In)<br>800<br>Nameplate 1 Line 1: 52-U3<br>Nameplate 1 Line 2: ATS-B<br>Cell Switch: : 4-Form C contacts<br>Breaker Control Switch: : Standard with open & closed LED status light plate   |
|   |   |  |
| 5 | A | MainMetering - 1/4 High Main Metering Compartment<br>Main Metering: : Special Metering w/ CTs and PTs<br>Schweitzer Engineering Laboratories: : SEL-751 Feeder Protection Relay  |

<b>The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.</b>	PREPARED BY	DATE	<b>Eaton</b> <span style="float: right;">Asheville, NC</span>		
	DAVE DICKASON	1/23/2024			
	APPROVED BY	DATE	JOB NAME	SEAPA Tye Station Service Switchgear_AXG10425X3K1	
		DESIGNATION	480V SWGR		
	VERSION	TYPE	DRAWING TYPE		
	11.25.26.0	Low Voltage Assemblies	Customer Appr.		
NEG-ALT Number	REVISION	DWG SIZE	G.O.	ITEM	SHEET
AXG10425X3K1-0000	0	A			6 of 7

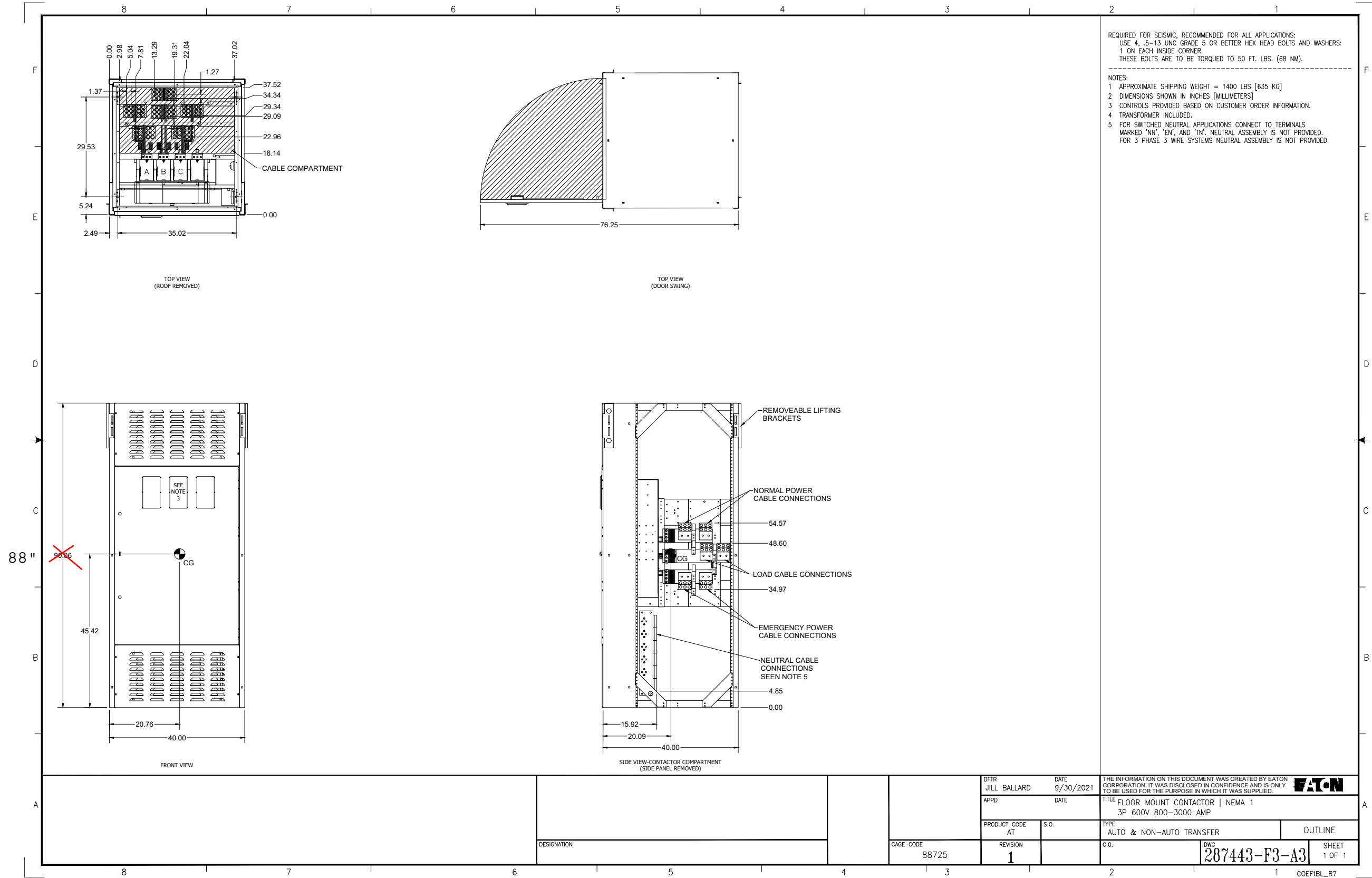
- 5
B

 Special Metering: : Special Metering w/ CTs and PTs  
 Meter Control Power: :  
 Display Type: :  
 Breaker - MDS-612 Main, [Drawout/O-E/O], 1200A Magnum DS Breaker, Digitrip 1150, LSI  
 Sensor + Plug (Rated Current In)  
 1200  
 Nameplate 1 Line 1: 52-N2  
 Nameplate 1 Line 2: MAIN  
 Continuous Current: : 1200  
 Auxiliary Switch: : 6A-6B  
 CT Ratio: : 1200:5  
 Wires: : 3  
 Cell Mounted CTs: : Metering  
 VTs: : Relaying
- 5
C

 CHRGR - 1/2 High CHRGR Compartment  
 CHRGR Pulsing Ground Type: : Pulsing Current Sensing with Ground Detection Lights

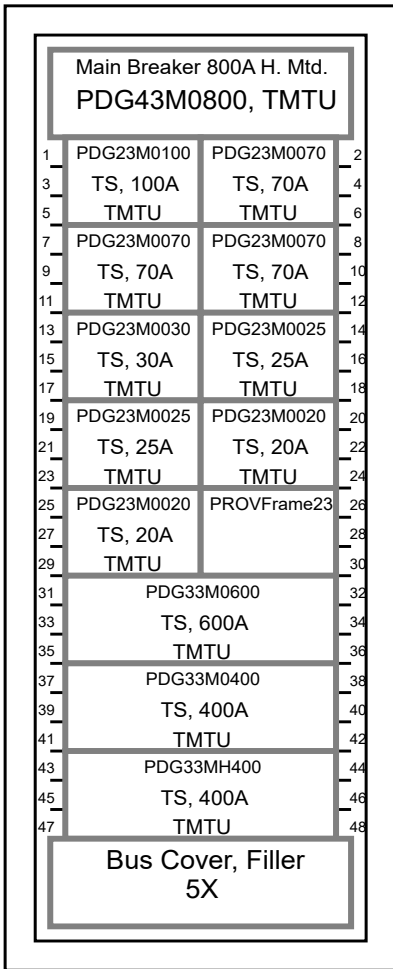
The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.	PREPARED BY	DATE	<b>Eaton</b> <span style="float: right;">Asheville, NC</span>		
	DAVE DICKASON	1/23/2024			
	APPROVED BY	DATE	JOB NAME	SEAPA Tye Station Service Switchgear_AXG10425X3K1	
			DESIGNATION	480V SWGR	
	VERSION		TYPE	DRAWING TYPE	
	11.25.26.0		Low Voltage Assemblies	Customer Appr.	
NEG-ALT Number	REVISION	DWG SIZE	G.O.	ITEM	SHEET
AXG10425X3K1-0000	0	A			7 of 7





DFTR JILL BALLARD		DATE 9/30/2021	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON CORPORATION. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.		<b>EATON</b>
APPD		DATE	TITLE FLOOR MOUNT CONTACTOR   NEMA 1 3P 600V 800-3000 AMP		
PRODUCT CODE AT	S.O.	TYPE AUTO & NON-AUTO TRANSFER		OUTLINE	
CAGE CODE 88725	REVISION 1	G.O.	DWG 287443-F3-A3	SHEET 1 OF 1	

GO/NEG-Alt-Date: AXG10425X3K1-0000-1/23/2024	Job Name: SEAPA Tye Station Service Switchgear_AXG10425X3K1
Item Number:	Catalog Number: CTC9F5X30800XSU
Designation:	



**General Information**

**(Section 1 of 1)**

**Service Voltage:** 480V 3Ph 3W  
**Bus Rating & Type:** 800A Copper  
**Ground Bar:** Std. Bolted Aluminum, Al or Cu cable  
**S.C. Rating:** 65k A.I.C. Fully Rated

**Enclosure:** Type 1  
**Neutral Rating:** None

**Main Device Type:** Main Breaker - Top Cable Entry  
**Main Terminals:** Mechanical - (2) 500-750 kcmil (Cu/Al)  
**Neutral Terminals:** None  
**Box Catalog No.:** BX3673P  
**Trim:** Standard Covers  
 Surface Mounted

**Box Dimensions:** 73.50" [1866.9mm]H x 36.00" [914.4mm]W x 10.4" [264.2mm]D  
**Min. Gutter Size:** Top = 10.625" [269.9mm] Bottom = 10.625" [269.9mm]  
 Left = 6" [152.4mm] Right = 8" [203.2mm]

**Panel ID Nameplate:** (1) PPCL R1  
**Type:** Plastic, adhesive-backed (2) 480V 3Ph 3W  
**Color:** White with Black Letters (3)

**UL**

Circuit Directory: Plastic Sleeve with Card  
 Painted Box: ANSI 61  
 Material may ship short or be substituted based on availability at the time of manufacturing.  
 Main Circuit Breaker Trip Type: Thermal-Magnetic.  
 Seismic Label (IBC/CBC Seismic Qualified).  
 Heat Loss - Watts (Est.) = 352  
 Wire shall be based on the ampacity of 75°C rated conductors unless otherwise indicated.

**Device Modifications:**

**Ref # Description**

**Branch Devices**

Qty	Poles	Trip	Frame	Amps	kAIC
3	3	70	Frame 2	100	65
1	3	100	Frame 2	100	65
2	3	20	Frame 2	100	65
2	3	25	Frame 2	100	65
1	3	30	Frame 2	100	65
1	3	400	Frame 3	600	65
1	3	400	Frame 3	400	65
1	3	600	Frame 3	600	65
1	3		PROVFrame23		

**Main Devices**

Qty	Poles	Trip	Frame	Amps	kAIC
1	3	800	Frame 4	800	65

**Notes:**

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION PPCL R1
VERSION 1.0.0.66	TYPE PRL4X	DRAWING TYPE Customer Approval	
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O. ITEM SHEET 1 of 3

### Pow-R-Line4X Device Specifications

Ckt #s	Nameplate	Device	Trip	Terminal	Modifications
Main		PDG43M0800	800	(2) 500-750 kcmil (Cu/Al)	
1,3,5		PDG23M0100	100	(1) #14-1/0 (Cu/Al)	
2,4,6		PDG23M0070	70	(1) #14-1/0 (Cu/Al)	
7,9,11		PDG23M0070	70	(1) #14-1/0 (Cu/Al)	
8,10,12		PDG23M0070	70	(1) #14-1/0 (Cu/Al)	
13,15,17		PDG23M0030	30	(1) #14-1/0 (Cu/Al)	
14,16,18		PDG23M0025	25	(1) #14-1/0 (Cu/Al)	
19,21,23		PDG23M0025	25	(1) #14-1/0 (Cu/Al)	
20,22,24		PDG23M0020	20	(1) #14-1/0 (Cu/Al)	
25,27,29		PDG23M0020	20	(1) #14-1/0 (Cu/Al)	
26,28,30		PROVFrame23	100	None Available	
31,32,33 34,35,36		PDG33M0600	600	(2) #2-500 kcmil (Cu/Al)	
37,38,39 40,41,42		PDG33M0400	400	(1) 2/0-500 kcmil (Cu/Al)	

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION PPCL R1
VERSION 1.0.0.66	TYPE PRL4X	DRAWING TYPE Customer Approval	
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O. ITEM SHEET 2 of 3

Pow-R-Line4X Device Specifications

Ckt #s	Nameplate	Device	Trip	Terminal	Modifications
43,44,45 46,47,48		PDG33MH400	400	(1) 2/0-500 kcmil (Cu/Al)	

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>			
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION PPCL R1		
VERSION 1.0.0.66	TYPE PRL4X	DRAWING TYPE Customer Approval			
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 3 of 3

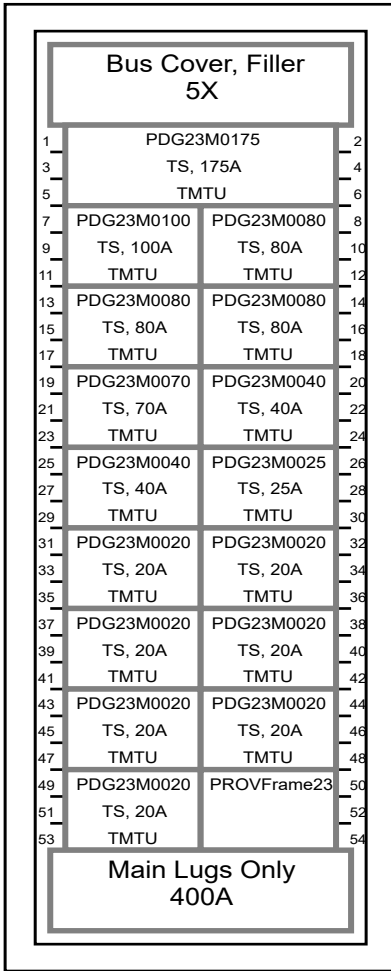


Pow-R-Line4X Device Specifications

Ckt #s	Nameplate	Device	Trip	Terminal	Modifications
Main		800A-MLO		(3) #2-500 kcmil (Cu/Al)	
1,2,3 4,5,6		PDG33MH400	400	(1) 2/0-500 kcmil (Cu/Al)	
7,8,9 10,11,12		PDG33MH400	400	(1) 2/0-500 kcmil (Cu/Al)	
13,14,15 16,17,18		PDG43M0800	800	(2) 500-750 kcmil (Cu/Al)	

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>			
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION TEMP POWER		
VERSION 1.0.0.66	TYPE PRL4X	DRAWING TYPE Customer Approval			
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O.	ITEM	SHEET 2 of 2



**General Information**

**(Section 1 of 1)**

**Service Voltage:** 480V 3Ph 3W **Enclosure:** Type 1  
**Bus Rating & Type:** 400A Copper **Neutral Rating:** None  
**Ground Bar:** Std. Bolted Aluminum, Al or Cu cable  
**S.C. Rating:** 65k A.I.C. Fully Rated

**Main Device Type:** Main Lugs Only - Bottom Cable Entry  
**Main Terminals:** Mechanical - (2) #4-500 kcmil (Cu/Al)  
**Neutral Terminals:** None  
**Box Catalog No.:** EZB2072R  
**Trim:** EZ Trim, Door in Door, Concealed Hardware (EZT2072S)

Surface Mounted

**Box Dimensions:** 72.00" [1828.8mm]H x 20.00" [508.0mm]W x 5.75" [146.1mm]D  
**Min. Gutter Size:** Top = 5.5" [139.7mm] Bottom = 5.5" [139.7mm]  
 Left = 4" [101.6mm] Right = 4" [101.6mm]

**Panel ID Nameplate:** (1) PDP-A R1  
**Type:** Plastic, adhesive-backed (2) 480V 3Ph 3W  
**Color:** White with Black Letters (3)

**UL**

Trim Lock: Standard Lock & Key (Keyed WEM2)  
 Circuit Directory: Plastic Sleeve with Card  
 Material may ship short or be substituted based on availability at the time of manufacturing.  
 Seismic Label (IBC/CBC Seismic Qualified).  
 Heat Loss - Watts (Est.) = 217  
 Wire shall be based on the ampacity of 75°C rated conductors unless otherwise indicated.

**Device Modifications:**

Ref # Description

**Branch Devices**

Qty	Poles	Trip	Frame	Amps	kAIC
1	3	25	Frame 2	100	65
2	3	40	Frame 2	100	65
1	3	70	Frame 2	100	65
3	3	80	Frame 2	100	65
1	3	100	Frame 2	100	65
1	3	175	Frame 2	225	65
1	3		PROVFrame23		
7	3	20	Frame 2	100	65

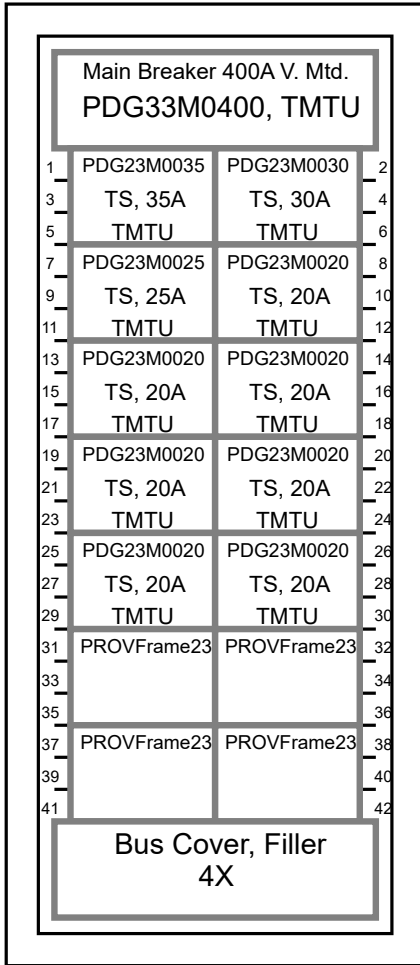
**Notes:**

The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.

PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION PDP-A R1
VERSION 1.0.0.66	TYPE PRL3X	DRAWING TYPE Customer Approval	
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O. ITEM SHEET 1 of 1







**General Information**

**(Section 1 of 1)**

**Service Voltage:** 480V 3Ph 3W  
**Bus Rating & Type:** 400A Copper  
**Ground Bar:** Std. Bolted Aluminum, Al or Cu cable  
**S.C. Rating:** 65k A.I.C. Fully Rated  
**Enclosure:** Type 1  
**Neutral Rating:** None

**Main Device Type:** Main Breaker - Top Cable Entry  
**Main Terminals:** Mechanical - (1) 2/0-500 kcmil (Cu/Al)  
**Neutral Terminals:** None  
**Box Catalog No.:** EZB2072R  
**Trim:** EZ Trim, Door in Door, Concealed Hardware (EZT2072S)  
 Surface Mounted

**Box Dimensions:** 72.00" [1828.8mm]H x 20.00" [508.0mm]W x 5.75" [146.1mm]D  
**Min. Gutter Size:** Top = 5.5" [139.7mm] Bottom = 5.5" [139.7mm]  
 Left = 4" [101.6mm] Right = 4" [101.6mm]

**Panel ID Nameplate:** (1) PPU1, PPU2, PPU3  
**Type:** Plastic, adhesive-backed (2) 480V 3Ph 3W  
**Color:** White with Black Letters (3)

**UL**

Trim Lock: Standard Lock & Key (Keyed WEM2)  
 Circuit Directory: Plastic Sleeve with Card  
 Material may ship short or be substituted based on availability at the time of manufacturing.  
 Main Circuit Breaker Trip Type: Thermal-Magnetic.  
 Seismic Label (IBC/CBC Seismic Qualified).  
 Heat Loss - Watts (Est.) = 217  
 Wire shall be based on the ampacity of 75°C rated conductors unless otherwise indicated.

**Device Modifications:**

**Ref # Description**

**Branch Devices**

Qty	Poles	Trip	Frame	Amps	kAIC
7	3	20	Frame 2	100	65
1	3	25	Frame 2	100	65
1	3	30	Frame 2	100	65
1	3	35	Frame 2	100	65
4	3		PROVFrame23		

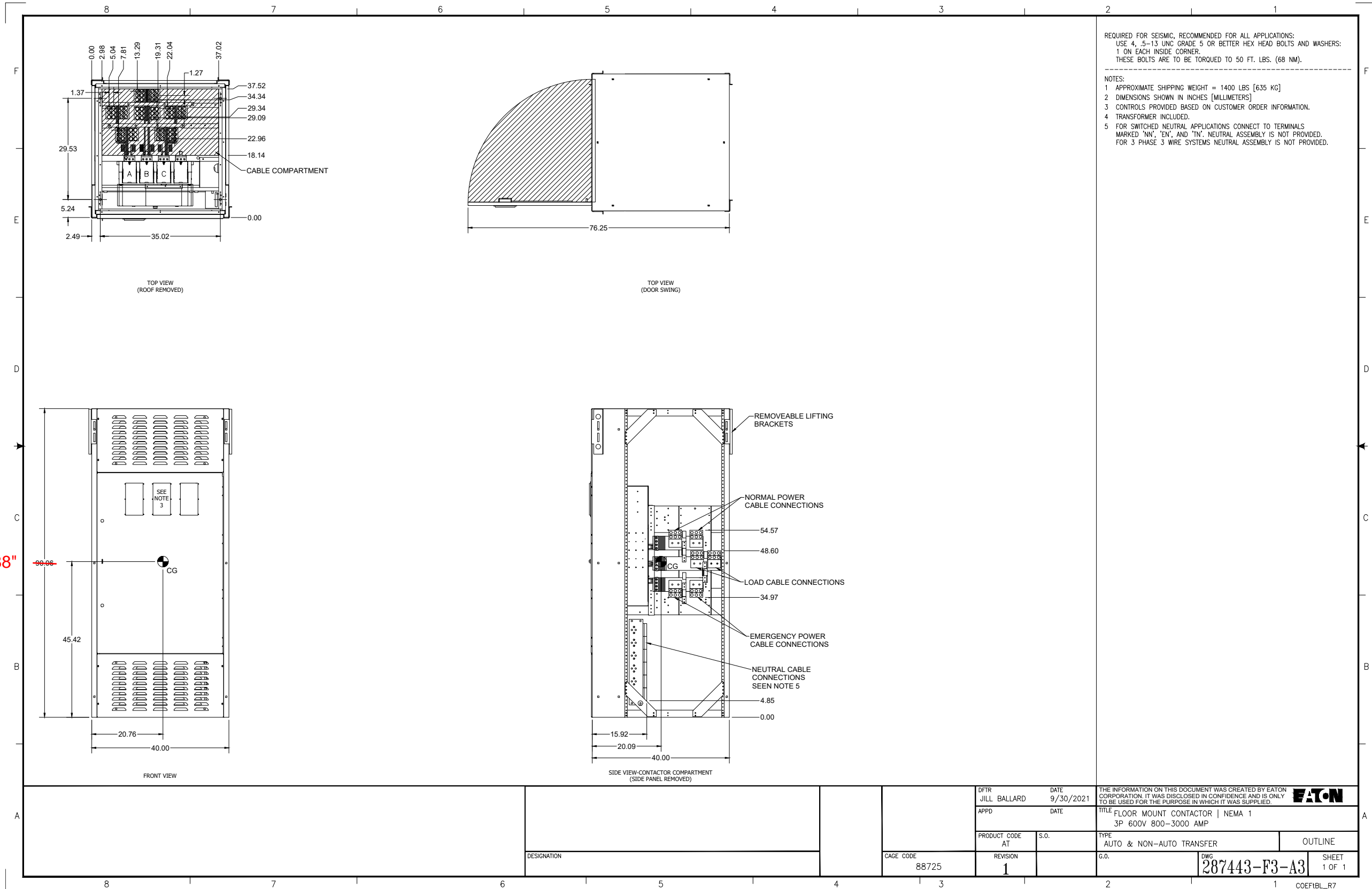
**Main Devices**

Qty	Poles	Trip	Frame	Amps	kAIC
1	3	400	Frame 3	400	65

**Notes:**

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PREPARED BY DAVE DICKASON	DATE 1/23/2024	<b>Eaton</b>	
APPROVED BY	DATE	JOB NAME SEAPA Tye Station Service Switchgear_AXG10425X3K1	DESIGNATION PPU1, PPU2, PPU3
VERSION 1.0.0.66	TYPE PRL3X	DRAWING TYPE Customer Approval	
NEG-ALT Number AXG10425X3K1-0000	REVISION 0	DWG SIZE A	G.O. ITEM SHEET 1 of 1



GO/NEG-Alt-Date: AXG10425X3K1-0001-6/26/2023		Job Name: SEAPA Tye Station Service Switchgear	
Item Number:	Catalog Number: CTC9F5X30800XSU	Designation:	

DFTR JILL BALLARD	DATE 9/30/2021	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON CORPORATION. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.		<b>EATON</b>
APPD	DATE	TITLE FLOOR MOUNT CONTACTOR   NEMA 1 3P 600V 800-3000 AMP		
PRODUCT CODE AT	S.O.	TYPE AUTO & NON-AUTO TRANSFER	OUTLINE	
CAGE CODE 88725	REVISION 1	G.O.	DWG 287443-F3-A3	SHEET 1 OF 1

COEF1BL\_R7

**Item 2**

Qty	Description
1	500 KVA VPI Secondary Unit Substation
3 Phase 60 Hertz, 80/80 Degree C Rise, AN/Future AF 30 Average / 40 Maximum Ambient 5 Percent Impedance (Minimum) Phase relation Dyn1 3300 Feet Maximum Altitude 60 dB(a) Guaranteed Sound Level (AA) Approximate Dimensions: Ht 102 in X Wd 84 in X Dp 60 in Approximate Total Weight: 4715 lbs	

**HIGH VOLTAGE 13800 Delta**

95 kV BIL  
 Taps: +2 -2 2.5% on 13800  
 Copper Conductor  
 Termination in ANSI segment 2  
 Air Terminal Chamber (Add 30" To Width) - HV  
 Electrical Snubber Circuit (Surge Capacitors, Arresters, Resistors, Fuse and Fuse Clips) - HV  
 18 kV 15.3 MCOV Station Class Polymer Surge Arresters (Set of 3) - HV

**LOW VOLTAGE 480Y/277**

30 kV BIL  
 Taps: No Taps  
 Copper Conductor  
 Termination in ANSI segment 4  
 Connection to Indoor Magnum DS - LV

**CORE/COIL**

IBC/CBC 1.85 SDS  
 Isolated Core/Single Point Gnd  
 VPI, 1 Cycle Polyester Varnish

**DOCUMENTS**

Warranty - 30 Months from Shipment  
 Customer Drawings

**ENCLOSURES**

Aluminum Screens  
 Louvered Ventilation  
 NEMA 1 (Indoor Ventilated)  
 Copper Ground Bus, .25" X 2.00"

**FINISH**

ANSI 61 Paint

**MONITORING**

3 Phase Winding Temperature Indicator (TC101)  
 Control Power by LV Gear

**NP/SIGN/TAG**

Eaton Logo

**SHIPPING**

Carriage Paid To - Origin - Freight Prepaid and Allowed

**TEST**

Sound Test (AN)  
 Power Factor Test  
 Insulation Resistance (Meggar)

The calculated efficiency @ 50% Load, PF of 1, NL @ 20 Degrees C and LL @ 75 Degree C for units offered on this quotation is in compliance with the DOE efficiency standard which became effective January 1, 2016

UL Listing

100% QC Impulse Test

Certified Test Report

**WIRING/CAB**

240 Volts

**Lead Times**

Drawing Submittal

: 2-3 Weeks after receipt of order.

Approval Order (Shipment)

: 56-58 Weeks after return of approved drawings.

Firm Order (Shipment)

: 56-58 Weeks after receipt of order.

Transformers are designed, built and tested to ANSI/IEEE C57 Transformer Standards. No other Codes/Standards apply (NEC, NESC, etc.) unless noted on quote.

**Item 3**

Qty	Description	)
1	500 KVA VPI Secondary Unit Substation	
3 Phase 60 Hertz, 80/80 Degree C Rise, AN/Future AF 30 Average / 40 Maximum Ambient 5 Percent Impedance (Minimum) Phase relation Dyn1 3300 Feet Maximum Altitude 60 dB(a) Guaranteed Sound Level (AA) Approximate Dimensions: Ht 102 in X Wd 84 in X Dp 60 in Approximate Total Weight: 4715 lbs		

**HIGH VOLTAGE 13800 Delta**

95 kV BIL  
 Taps: +2 -2 2.5% on 13800  
 Copper Conductor  
 Termination in ANSI segment 4  
 Air Terminal Chamber (Add 30" To Width) - HV  
 Electrical Snubber Circuit (Surge Capacitors, Arresters, Resistors, Fuse and Fuse Clips) - HV  
 18 kV 15.3 MCOV Station Class Polymer Surge Arresters (Set of 3) - HV

**LOW VOLTAGE 480Y/277**

30 kV BIL  
 Taps: No Taps  
 Copper Conductor  
 Termination in ANSI segment 2  
 Connection to Indoor Magnum DS - LV

**CORE/COIL**

IBC/CBC 1.85 SDS  
 Isolated Core/Single Point Gnd  
 VPI, 1 Cycle Polyester Varnish

**DOCUMENTS**

Warranty - 30 Months from Shipment  
 Customer Drawings

**ENCLOSURES**

Aluminum Screens  
 Louvered Ventilation  
 NEMA 1 (Indoor Ventilated)  
 Copper Ground Bus, .25" X 2.00"

**FINISH**

ANSI 61 Paint

**MONITORING**

3 Phase Winding Temperature Indicator (TC101)  
 Control Power by LV Gear

**NP/SIGN/TAG**

Eaton Logo

**SHIPPING**

Carriage Paid To - Origin - Freight Prepaid and Allowed

**TEST**

Sound Test (AN)  
 Power Factor Test  
 Insulation Resistance (Meggar)  
 The calculated efficiency @ 50% Load, PF of 1, NL @ 20 Degrees C and LL @ 75 Degree C for units offered on this quotation is in compliance with the DOE efficiency standard which became effective January 1, 2016

UL Listing  
100% QC Impulse Test  
Certified Test Report

**WIRING/CAB**

240 Volts

**Lead Times**

Drawing Submittal : 2-3 Weeks after receipt of order.  
Approval Order (Shipment) : 56-58 Weeks after return of approved drawings.  
Firm Order (Shipment) : 56-58 Weeks after receipt of order.

Transformers are designed, built and tested to ANSI/IEEE C57 Transformer Standards. No other Codes/Standards apply (NEC, NESC, etc.) unless noted on quote.

**General Comments and Exceptions**

- SECTION 26 12 16 DRY-TYPE TRANSFORMERS
  - 1.1: Quotation is based on transformers previously quoted to SEAPA - SITKA SWAN LAKE.
  - 1.3: Manufacturer's standard drawings and documentation will be provided.
  - 2.1: Transformers will be provided with a 95kV HV BIL and 30kV LV BIL.
  - 2.4.5.1: Manufacturer's standard NEMA 1 Indoor Ventilation enclosure will be provided. Exception is taken to dead front.
  - 2.4.5.3: Seismic Clarification: The unit is being quoted with a seismic rating of 1.85SDS per International Building Code. The seismic rating (design) for the above listed units will be prepared by using design data processed from previously tested units only. The new design will be prepared from calculations only. No seismic testing will be performed on this unit. All site studies, pad construction, installation and mounting hardware are by others.
  - 3.3.3 - 3.3.6: All site and field work is the responsibility of others.
- 1. The attached proposal is for the design, manufacture and shipment of the above detailed equipment. Offloading and all site work; including installation, training and field testing shall be the responsibility of others.
- 2. Hitachi Energy USA Inc. standard drawing, instruction manual, test, and quality documentation to be provided only. All information shall be provided electronically only. Customer must advise at the time of order if drawings are preferred as .pdf or Autocad, otherwise, electronic Autocad drawings will be submitted by Hitachi Energy USA Inc.
- 3. NOTE: If the quoted transformer will be feed by a vacuum breaker, the manufacturer strongly recommends that the customer considers adding protection to each transformer to mitigate both transient over-voltage and voltage amplification due to resonance caused by the vacuum or SF6 insulated circuit breakers. The manufacturer can offer the traditional R/C Snubber Circuit option that can be supplied on all transformer types (VPI, VPE, RESIBLOC and Cast Coil).  
The customer should have a system study completed to confirm the ratings needed for the R/C Snubber Circuit to properly protect the transformer. The transformer manufacturer assumes no responsibility for sizing the snubber circuit or damages resulting from improper coordination between the transformer and the vacuum circuit breaker. Please contact the manufacturer if you have any questions or concerns.
- 4. Transformers are not designed for any overloads, over/under voltages or harmonics, as nothing was specified (other than specifically stated with this proposal or ANSI/IEEE/NEMA standards).
- 5. The transformer manufacturer is certified to ISO 9001:2008 for design and manufacture of Power, Distribution and Specialty Dry Type Transformers.

6. The transformers are designed, manufactured and tested in accordance with applicable ANSI, IEEE and NEMA standards.
7. The above listed weight and dimensions are approximate.
8. Quotation is based on the above Bill of Material only.
9. Pricing does not include taxes.

**\*\* GENERAL TERMS AND CONDITIONS OF SALE \*\***

This quotation is effective for 60 days from 1/17/2024, unless otherwise authorized by Hitachi Energy.

Unless stated otherwise in this quotation, the following terms and conditions of sale will apply.

1. Shipment is CPT - Carriage paid.
2. Payment is due in 30 days invoice date from invoice date.
3. Terms and conditions of sale are based upon Hitachi Energy USA Inc. General Terms and Conditions of Sale.

**Price Adjustment Policy (PAC):**

**To facilitate order acceptance, please reference this quote number and acknowledge acceptance of this PAC, on the order document.**

Due to extended delivery dates, pricing is not held constant between order placement and shipment. The price shall be adjusted per the price adjustment clause described below 3 months prior to shipment.

The following index will be used for price adjustments: BLS Index -- WPU117409

The Index Baseline will be the month and year in which the proposal is issued.  
If the percentage change is less than +/- 2%, then no change will apply.

Should the specified indices be discontinued, proper indices shall be submitted by mutual agreement of both parties.

The Index Baseline will be the month and year in which the proposal is issued.

**Order cancellation policy:**

Approval Orders

- 20% after order entry
- 50% after submittal of approval drawings
- 80% after procurement of major materials
- 100% 6 weeks prior to planned start of manufacture

Firm Orders

- 50% after order entry
- 80% after procurement of major materials
- 100% 6 weeks prior to planned start of manufacture

This offer is made as a complete proposal. If this offer is not accepted in its entirety, individual item prices will be provided on an as needed basis.

We appreciate the opportunity to quote on this business. Hitachi Energy has had many years of experience building reliable, high-quality transformers and we look forward to supplying this equipment. If there are any questions regarding this quotation or any other matter relating to this job please call me at your convenience.

Quoted lead times are based on current production levels. Actual lead times are dependent on available production space at time of order entry and/or release to manufacturing.

**Transportation/Delivery:**

Purchaser has the responsibility to guarantee clear access to the delivery point. If Seller encounters obstructions preventing or hindering delivery, Purchaser shall be responsible for removal and replacement to permit Seller's clear access. Seller shall not be responsible for any added costs or delivery delays caused by such obstructions, nor any state or local regulations that impede or restrict the ability of the originally planned shipping vehicle to reach Purchaser's destination.

In the event the Purchaser does not collect and/or agree to accept shipment of the products at delivery (unless otherwise stipulated in the contract), Seller will locate local storage facilities to which the products will be delivered, at which point contractual delivery will be deemed complete. Storage at such facilities will be at the Purchaser's expense. The Purchaser shall be liable for costs arising from such delay, including the Supplier's costs relating to storage, insurance, and handling of the products.

**Force Majeure.** Hitachi Energy shall neither be liable for loss, damage, detention or delay nor be deemed to be in default for failure to perform when prevented from doing so by causes beyond its reasonable control including, but not limited to, acts of war (declared or undeclared), Acts of God, fire, strike, labor difficulties, acts or omissions of any governmental authority, compliance with government regulations, insurrection or riot, epidemic, pandemic (including coronavirus (COVID-19)), embargo, delays or shortages in transportation or inability to obtain necessary labor, materials, or manufacturing facilities from usual sources or from defects or delays in the performance of its suppliers or subcontractors due to any of the foregoing enumerated causes. In the event of delay due to any such cause, the date of delivery will be extended by period equal to the delay plus a reasonable time to resume production.

**Change in Laws.** Hitachi Energy shall comply with all federal, state and local laws, rules, regulations, ordinances, statutes, orders, codes and practices ("Applicable Laws"). If there is a change in any of the Applicable Laws after a purchase order is issued, Hitachi Energy shall notify Customer, and the parties agree to meet in good faith to discuss such change. The price and time to perform the work, shall be increased or decreased, based on the change and consistent with the time and price to perform the original scope of work.

**Russia-Ukraine Situation**

For the purpose hereof,

(i) "Russia-Ukraine Situation" means (1) the conflict between Russia and Ukraine which began on or around 24 February 2022 and/or (2) any other or further conflict which may arise out of or in connection with the same and/or (3) any economic and other sanctions imposed by, amongst others the United Nations, U.S., EU, UK, Japan Switzerland or any agency or authority against Russia, Russian entities and individuals, Russian goods, products, services, technology which may arise out of or in connection therewith, and/or (4) any economic and other sanctions imposed by, amongst others the United Nations, U.S., EU, UK, Japan Switzerland or any agency or authority thereof against any other country, entities and individuals, Russian goods, products, services, technology which may arise out of or in connection therewith;

(ii) "Electronic Component Shortage" means the continuing global shortage of microchips or apparatus or components which include microchips.

The Parties acknowledge that the Russia-Ukraine Situation and/or the Electronic Component Shortage is affecting or may have an adverse impact on [Hitachi Energy's] ability to perform the [offer] including but not limited to price increases, transportation and logistics constraints, shortages and price increases in the procurement of products and commodities (e.g. copper, aluminum, steel, oil and gas).

If the Russia-Ukraine Situation and/or the Electronic Component Shortage continue affecting, will or may have any adverse impact, whether direct or indirect, on [Hitachi Energy's] ability to perform the [offer] in accordance with its terms [and/or the [Law]], the Parties shall, if so requested in writing by [Hitachi Energy /], negotiate in good faith and agree without delay reasonable amendments to the terms and conditions of the



[offer], including, but not limited to, revisions of the [Schedule] and/or any increase in the [Contract Price].

In the absence of such agreement, [Hitachi Energy] shall, if it suffers delay and/or incurs additional [Costs] due to any direct or indirect impact of the Russia-Ukraine Situation and/or the Electronic Component Shortage, in any case be entitled to an extension of the [Time for Completion] and compensation for any additional [Costs].

50616-TX1  
EPS: Tyeen Lake 15 kV Switchgear  
Rev #0 - Budgetary  
Wrangell, Alaska

Attn: David Buss

System Proposal for:  
Medium Voltage Metal-Clad Switchgear



2950 E. Philadelphia Street  
Ontario, California 91761  
(909)923-1800  
[www.myerspowerproducts.com](http://www.myerspowerproducts.com)



219 East Maple Street, Suite 100/200E.  
North Canton, Ohio 44720  
Tel: 330-834-3200 Fax: 330-834-3201  
[www.controlledpower.com](http://www.controlledpower.com)



4775 M. L. King Pkwy  
Beaumont, TX 77705  
PH: (409) 838-0441  
Fax: (409) 838-1066  
[www.mielectric.com](http://www.mielectric.com)



**Power Products, Inc.**

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## Introduction

August 16<sup>th</sup>, 2023

David Buss  
Electric Power Systems, Inc.  
dbuss@epsinc.com

Dear Mr. Buss,

Myers Power Products is pleased to present our budgetary proposal for Tye Lake 15KV switchgear project. This proposal has been developed based upon a careful review of the solicitation documents provided by EPS and reflects the best value solution for meeting the objectives and requirements of this project. This solution, combined with the capabilities of our organization, which we describe below, offers EPS the greatest assurance of successful delivery.

We appreciate the opportunity to present our solution for this important project and look forward to serving EPS. If you have any questions or concerns regarding this proposal, please do not hesitate to contact me at any time.

Sincerely,

*Blanca Rooks*  
Application Engineer  
Mobile: 832.298.0227  
[brooks@mielectric.com](mailto:brooks@mielectric.com)

Technical Contact  
Robert McMullen  
Application Engineer  
Mobile: 409.543.4888

Sales Contact  
Don Rottert  
Director- Sales and Marketing  
Mobile: 713.304.3664



## Commercial Summary

**Base Price includes the following equipment & services** \$ 472,076 USD

- Medium Voltage Metal-Clad Switchgear (Qty. 2)
- Engineering, Design, Project Management, O&M Manuals, and Technical Literature

*Bonds of any type are not included in our proposal unless specifically noted above.*

Sales Tax is Not Included

### **Estimated Freight Pricing as follows:**

- Estimated as FOB Destination, per Domestic Terms.
- Offloading is not included in freight price.
- Fuel Prices are subject to change based on time of shipment.
- Freight pricing to customer specified jobsite is based on approximate load weights and dimensions at the time of quotation. Actual load weights and dimensions must be verified by structural calculations. If in the event the load weights and dimensions exceed the original estimate, freight overages will be applied at cost plus 10% margin above original estimate.
- **Free and clear unfettered access by common carrier and any/all necessary traffic control to be secured by customer. Freight charges in excess of this estimate below shall be borne by Buyer; surcharges and excess charges beyond the control of Supplier shall be borne by Buyer.**

**Freight to Port of Seattle, WA – dock side estimated at \$ 14,713 USD (Included in above Price)**

### **Bid Validity**

30 Days

### **Estimated Delivery**

*Standard Lead Times:*

Approval Drawings 12-16 weeks ARO

Customer Approval: 2 weeks

Approval Delivery 42-46 weeks ARAD

*Actual lead times may vary based on factory loading at time of order*

### **Freight**

FOB Destination – Port of Seattle, WA – dock side (Offloading by Others)

### **Progress Payments (payable per unit)**

- |    |     |                                    |
|----|-----|------------------------------------|
| 1) | 10% | Upon Receipt of Order              |
| 2) | 10% | Upon Submittal Submission          |
| 3) | 10% | Approval of Submittals             |
| 4) | 25% | Release for Purchasing of Material |
| 5) | 25% | Release to Production              |
| 6) | 20% | FAT or When Ready to Ship          |



**MYERS**  
**Power Products, Inc.**

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Payment due when milestone is achieved, and invoice received.

Standard Progress Payments listed above can be negotiated pending credit verification.

**Terms of Payment**

Net 30 Days - Progress Payment Terms Apply – Pending Credit Verification; No Retentions Allowed; No Cash / Early Pay Discounts



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**Purchase Order**

If awarded, please make Purchase Order out to Myers Power Products, Inc.

**Factory Location**

Myers Power Products has three (3) factory locations (Ontario, CA, Beaumont, TX, North Canton, OH) Final Factory location will be determined at time of PO which will be based on current shop loadings from each facility.

**Cancellation Policy**

An order may be canceled by the purchaser only upon written notice and upon payment to the company of reasonable and proper cancellation charges. The expenses to be covered by these charges would include an unrecoverable cost incurred by the company. In addition, a one-time charge will be made to compensate for lost profits, disruptions in schedules, planned production and other indirect costs. It is recognized that it is impossible to determine exactly these indirect costs. As such, it is agreed that the one-time charge is acceptable and proper. Total cancellation charges will be calculated as follows:

*Order Entry:*

After receipt of an order at the factory and order processing, but prior to the start of engineering, there will be a one-time 5 percent charge, with a minimum of \$1,000.00 for any one order.

*Release for Engineering:*

After an order has been released for engineering, there will be a one-time 10 percent charge for cancellation plus any actual costs incurred including vendor cancellation charges, engineering labor expended plus costs associated with engineering overhead, selling, general and administrative expenses.

*Release for Manufacture:*

After an order has been released for manufacture and scheduled for production, there will be a one-time 10 percent charge for cancellation plus any actual costs incurred including, but not limited to, vendor cancellation charges, all materials received or expended, shop and engineering labor plus costs associated with manufacturing and engineering overhead, selling, general and administrative expenses.

*Cancellation within 61-90 days of scheduled completion:*

Cancellation charge will be a minimum of 50 percent of the contract value.

*Cancellation within 31-60 days of scheduled completion:*

Cancellation charge will be a minimum of 75 percent of the contract value.

*Cancellation within 30 days of scheduled completion:*

Cancellation charge will be 100 percent of the contract value.

In addition to the above charges, a reasonable profit of 10 percent will be allowed and payable against all identified costs incurred at the time of cancellation. Cancellation costs will be due and payable within 30 days of submittal of a proper invoice for such costs. Any amount not paid within 30 days will be subject to late charges of 1 ½ percent per month for each fraction of a month that payment is received late at Myers Power Products, Inc.

**Service Offering**



As an integrated products and services company, we would also like to provide you with installation, commissioning and startup services. Our testing services can confirm the equipment was not compromised during shipment or installation, meets factory specifications, ensures a reliable start-up, and establishes a base line for future reference. In addition, we have maintenance and electrical equipment testing services available for your new and existing equipment. These services include:

- Repair and upgrade services for transformers, breakers, and switchgear and motor controls
- Electrical maintenance programs
- Drive, automation and control system services
- E&I construction services including switchgear installation, new project and plant upgrades

### **On Site Services**

#### **Domestic service**

- Start-up services can be provided at \$2,000 per person, per day based on 8 hours per day. Additional hours will be billed at 1.5 above rate.  
Travel and living expenses will be invoiced at cost plus 25 percent

### **Customer Inspection and Factory Acceptance Testing**

- Customer inspection of equipment at Myers Power Products, Inc. is included in the quoted base price.
- Customer witnessing of factory accepting testing will be charged \$2,500 per day. This is not included in our base price.

### **Escalation - Material, Delay & Storage**

**Escalation:** For shipments requested beyond standard delivery times, price escalation may apply as determined at time of order.

**Customer Delay:** Should customer place a subsequent purchase order on hold, or delay any critical path item (e.g. drawing approval, owner furnished equipment arrival, acceptance testing delay, shipment, etc.), price escalation may apply, as determined by the company at the time of delay and/or release from hold.

**Storage:** Unless included in the above quoted scope of work, storage costs (e.g. insurance, power requirements, administrative costs, etc.) will be based on cost plus 20% margin. The full purchase order value must be invoiced and paid in full for projects that are complete.

Pricing and delivery detailed in this proposal is based on current costs and lead times incurred for the quoted scope of work and has an anticipated validity though the proposal expiration date only. Although unanticipated, either may be adjusted if unforeseen cost increases and/or extended lead times from major suppliers are incurred. Pricing and lead times for all future orders (including options quoted in this proposal, but not selected at time of order) may increase after the expiration date of this proposal.





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### **Documentation Control**

All project documentation and corresponding transmittals, unless agreed otherwise and shown the Project Engineering Deliverables Schedule, shall be made in accordance with Myers Power Products, Inc. document control process as outlined below:

Media Type: Electronic

File Format: Adobe PDF (Non-OCR Enabled)

Transmittal Method: Bulk upload/download via Myers Power Products, Inc. document control portal (major sub-supplied equipment drawing packages are subject to sub-supplier's standard documentation and transmittals).

### **Project Documentation**

Myers Power Products, Inc. standard engineering documentation covers the following technical information as applicable to the equipment ordered:

#### **General:**

- Equipment Data Sheets
- Bill of Materials and nameplate information
- Recommended Startup and Spare parts

#### **Mechanical:**

- Plan, arrangement, front and sectional views
- Main bus bar location and arrangement
- Equipment interfaces and assembly details
- Equipment weight and anchoring locations
- Center of gravity and lifting details

#### **Electrical:**

- Single line and three-line diagrams
- Protection and relay control schematics for electrically operated devices
- AC/DC distribution and equipment utility diagrams (space heater circuits, lighting, small power, etc.)
- Device, terminal connection and switch development information
- Panel and cable schedules
- Automation/PLC I/O circuits

Please refer to the Project Engineering Deliverables sheet(s) for equipment specific documentation details

### **Warranty Period**

Standard warranty 12 months after delivery. Myers Power Products, Inc. standard terms and conditions of sale shall apply.

### **LD's / Backcharges**

Myers Power Products, Inc. does not accept any Liquidated Damages or Back Charges



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**WBE/CPUC**

\*\*WBENC CERTIFIED – NATIONAL CERTIFICATE #2005122921

\*\*CPUC CERTIFIED

**For FBO Equipment (Furnished by others)**

Myers Power Products, Inc. is to be provided with a current Certificate of Insurance and shown as additional insured prior to our company receiving any/all customer furnished material. The Certificate of Insurance is due two (2) weeks after order placement; however, prior to our receipt of FBO (furnished by others) material. If FBO material is shipped to Myers prior to our receipt of the Certificate of Insurance showing Myers Power Products, Inc. as additional insured, the material will be turned away at the dock.

**Other Terms and Conditions**

Unless otherwise noted, Myers Power Products, Inc. standard Terms & Conditions or those applicable to a signed and active Master Service Agreement (MSA) apply to the scope of work outlined in this proposal, including equipment, services, pricing, availability, etc. If additional Terms & Conditions are required, the company reserves the right to update any or all aspects of the proposed scope of work.



# MYERS Power Products, Inc.

## General Terms and Conditions of Sale

**MYERS POWER PRODUCTS, INC.** is referred to herein as "Seller". The person, firm, or corporation to whom or which these Standard Terms and Conditions of Sale apply is called "Purchaser". The MYERS products covered by these terms are referred to herein as the "Products". These Standard Terms and Conditions of Sale are referred to herein as "Terms and Conditions" and shall remain in full force and effect unless superseded by "Special Terms and Conditions" as submitted by Myers Power Products.

**(1) TERMS OF OFFER (QUOTATION)** - This quotation constitutes an offer to sell according to the terms set forth herein. Unless otherwise indicated this offer shall remain open for thirty (30) days only from the date of this quotation, and shall be deemed accepted by the purchaser only upon receipt and acceptance by the seller of a purchase order from the purchaser. Acceptance of this offer by the purchaser is expressly limited to the terms hereof and in the event that the purchase order from the purchaser states terms additional to or different from those set forth herein, this offer shall be deemed a notice of objection to such additional or different terms and rejection thereof. Any acknowledgment sent by the seller to the purchaser subsequent to the seller's receipt of a purchase order from the purchaser shall not be deemed to be an acceptance by the seller of any offer by the purchaser, and shall not alter the Terms and Conditions of this offer.

**(2) PRICES AND TERM** - These products are sold F.O.B. point of shipment. If FOB destination required, add 2% to sell price.

1. Published prices cover standard domestic packing only.
2. Unless otherwise indicated, terms of payment are net thirty (30) days from date of shipment.
3. Payments not made when due shall bear interest at 2% per month until payment is made.
4. Minimum charge on any order is five hundred dollars (\$500.00) plus transportation costs.
5. When drawings for approval are required for any Product(s), the drawings applicable to those Products must be returned within 30 calendar days from the date of the original mailing of the drawings by Seller. The return drawings must be released for manufacture and shipment and must be marked "APPROVED" or "APPROVED AS NOTED." Drawing re-submittals which are required for any other reason than to correct Seller errors will not extend the 30-day period.
6. If the Buyer initiates or in any way causes delays in shipment, provision of Services or return of approval drawings beyond the periods stated above, the price of the Products or Services shall be increased a minimum of 1% per month or fraction thereof up to a maximum of 18 months from the date of the Buyer's order. For delays resulting in shipment or provision of Services beyond 18 months from the date of the Buyer's order, the price must be renegotiated.
7. A \$100 lift gate will be charged for each delivery requiring a lift gate

Prices are subject to change without notice. Unless otherwise indicated seller reserves the right to invoice at prices in effect on date of shipment.

**(3) PAYMENTS** - Unless otherwise indicated, pro rata payments shall become due as shipments are made. If shipments are delayed by the purchaser, then payments shall become due on the date that the seller is prepared to make shipment. If the work to be performed hereunder is delayed by the purchaser, payments shall be made based on the purchase price and the percentage of completion. Equipment held for the purchaser shall be at the risk and expense of the purchaser. If the financial condition of the purchaser at any time does not, in the judgment of the seller, justify continuance of the work to be performed by the seller hereunder on the terms of payment as agreed upon, the seller may require full or partial payment in advance or shall be entitled to cancel any order then outstanding and shall receive reimbursement for its reasonable and proper cancellation charges, and in the event of bankruptcy or insolvency of the purchaser or in the event any proceeding is brought against the purchaser, voluntarily or involuntarily, under the bankruptcy or any insolvency laws, the seller shall be entitled to cancel any order then outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its reasonable and proper cancellation charges.

**(4) DELAYED PAYMENT** - If payments are not made in accordance with these terms, a service charge will without prejudice to the right of Seller to immediate payment, be added in an amount equal to the lower of 2% per month or fraction thereof or the highest legal rate on the unpaid balance. A grace period for the first month is 15 days.

**(5) FINANCIAL CONDITION OF BUYER** - If the financial condition of the Buyer at any time is such as to give the Seller, in its sole judgment, reasonable grounds for insecurity

concerning Buyer's ability to perform its obligations under this Agreement, Seller may require full or partial payment in advance and suspend performance hereunder, until such payment has been received. Failure to furnish such payment within ten (10) days of demand by Seller shall constitute a breach of this Agreement.

**(6) COLLECTION COSTS** - Buyer shall pay to Seller reasonable costs of collection of money due and unpaid, including reasonable attorney's fees.

**(7) TAXES** - The amount of any federal, state or municipal tax applicable to the product, which the seller shall be required to pay, either on its behalf or on behalf of the purchaser, shall be added to the prices contained herein and paid by the purchaser unless stated otherwise.

**(8) DRAWING APPROVAL** - Seller will design the Products in line with, in Seller's judgment, good commercial practice. If at drawing approval Buyer makes changes outside of the design as covered in their specifications, Seller will then be paid reasonable charges and allowed a commensurate delay in shipping date based on the changes made.

**(9) DELIVERY** - Delivery dates are estimates of approximate dates of delivery, not a guarantee of a particular day of delivery, and are based on the prompt receipt of all necessary information from the purchaser and return of approval drawings within two (2) weeks after submittal when applicable. Furthermore, delivery dates are based on an assumed ration of acceptances. If this assumption should prove incorrect, the seller may have to allocate its production time and thereby adjust the delivery dates. Customer's failure to receive goods within a reasonable period of time may result in a price increase at the discretion of Seller.

**(10) PREPAID FREIGHT DELIVERY** - The method and route of all prepaid freight shipments are optional with the seller. Where the purchaser specifies that shipment be made other than the usual method and route of shipment, the additional expense will be borne by the purchaser.

If destination may be reached in part by boat shipment only, water shipment will be made at the purchaser's expense collect. In addition to the water shipping charges, cartage to the boat will be made at purchaser's expense. If shipment is accepted by the purchaser at one destination and re-forwarded by him, the re-forwarding is at the purchaser's expense. No allowance will be made for freight if purchaser accepts shipments at the factory or if collect shipments are requested.

**(11) TITLE AND INSURANCE** - Title to the product(s) and risk of loss or Damage shall pass to Purchaser at the F.O.B. point, except that a security interest in the product(s) and proceeds and any replacement shall remain in Seller, regardless of mode of attachment to realty or other property, until the full price has been paid in cash. Purchaser agrees to do all acts necessary to perfect and maintain said security interest, and to protect Seller's interest by adequately insuring the product(s) against loss or damage from any external cause with Seller named as insured or co-insured.

**(12) FORCE MAJEURE** - The seller shall not be liable to the purchaser for any failure or delay in complying with the Terms and Conditions of this agreement if such failure or delay shall be due to any act of God, nature or the public enemy, accident, explosion, operation malfunction or interruption, fire, storm, earthquake, flood, drought, perils of the sea, strikes, lockouts, labor disputes, riots, sabotage, embargo, war (whether or not declared and whether or not the United States is a participant), federal, state, or municipal legal restriction or limitation or compliance therewith, failure or delay of transportation, shortage of, or inability to obtain raw materials, supplies, equipment, fuel, power, labor or other operational necessities, interruption or curtailment of power of other energy or fuel supply or any other circumstances of a similar nature beyond the reasonable control of the seller. In this connection, the seller shall not be required to resolve labor disputes or disputes with supplier of raw materials, supplies, equipment, fuel or power, but may in accordance with its best interest do so. This section shall be cumulative with the provisions of the applicable section of the Uniform Commercial Code, or similar laws, enacted in the state described in the paragraph captioned "Governing Laws", relating to excuse of seller by reason of the failure of presupposed conditions.

**(13) CLAIMS FOR SHORTAGES OR SHIPPING DAMAGES** - Any material received damaged must be so noted on the delivery receipt by the delivering carrier at time of delivery and reported to the seller no later than seven (7) days after receipt of shipment. Concealed damage claims must be reported and confirmed in writing to the delivering carrier no later than ten (10) days from date shipment was originally received in accordance with ICC

regulations. Claims for shortage material, in writing, must be made to the seller within twenty (20) days after receipt of shipment. For any claims under this Paragraph (13) for which the seller may be liable, the purchaser's exclusive remedy shall be the repair or replacement, F.O.B. factory, as the seller may elect, of such material and NO in and out charges are allowed.

**(14) CONCEALED DAMAGE** - Except in the event of F.O.B. destination shipments, Seller will not participate in any settlement of claims for concealed damage. When shipment has been made on an F.O.B. destination basis, the Buyer must unpack immediately and, if damage is discovered must:  
Not move the Products from the point of examination.  
Retain shipping container and packing material.  
Notify the carrier in writing of any apparent damage.  
Notify Seller representative within 72 hours of delivery.  
Send Seller a copy of the carrier's inspection report.

**(15) RETURN OF MATERIAL** - The seller's permission must be obtained in writing before any products are returned to it by the purchaser for any reason whatsoever. If products are returned without such permission, purchaser authorizes the seller, in addition to such other remedies as it may have, to hold the returned products at purchaser's sole risk and expense. When the purchaser requests authorization to return material for reasons of his own, the purchaser will be charged for placing the returned goods in salable condition, restocking charges and for any outgoing and incoming transportation paid by the seller.

**(16) STORAGE** - Any item of the product(s) on which manufacture or shipment is delayed by causes within Purchaser's control, or by causes which affect Purchaser's ability to receive the product(s), may be placed in storage for an agreed upon amount by Seller for Purchasers account and risk.

**(17) WARRANTY** - Seller warrants title to the product(s) and, except as noted below with respect to items not of Sellers manufacture, also warrants the product(s) on date of shipment to Purchaser, to be of the kind and quality described herein, merchantable, and free of defects in workmanship and material.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, AND CONSTITUTES THE ONLY WARRANTY OF SELLER WITH RESPECT TO THE PRODUCT(S).

If within one year from date of delivery Purchaser discovers that such Item was not as warranted above and promptly notifies Seller in writing thereof, Seller shall remedy such nonconformance by, at Seller's option, adjustment or repair or replacement of the item and any affected part of the product(s). Purchaser shall assume all responsibility and expense for removal, re installation, and freight in connection with the foregoing remedies. The same obligations and conditions shall extend to replacement parts furnished by Seller hereunder. Seller shall have the right of disposal of parts replaced by it.

ANY SEPARATELY LISTED ITEM OF THE PRODUCT(S) WHICH IS NOT MANUFACTURED BY SELLER IS NOT WARRANTED BY SELLER, and shall be covered only by the express warranty, if any, of the manufacturer thereof.

THIS STATES PURCHASER'S EXCLUSIVE REMEDY AGAINST SELLER AND ITS SUPPLIERS RELATING TO THE PRODUCT(S), WHETHER IN CONTRACT OR IN TORT OR UNDER ANY OTHER LEGAL THEORY, AND WHETHER ARISING COST OF WARRANTIES, REPRESENTATIONS, INSTRUCTIONS, INSTALLATIONS OR DEFECTS FROM ANY CAUSE. Seller and its suppliers shall have no obligation as to any product which has been improperly stored or handled, or which has not been operated or maintained according to instructions in Seller or supplier furnished manuals.

**(18) WARRANTY FOR SERVICES** - Seller warrants that the Services performed by it hereunder will be performed in accordance with generally accepted professional standards.

The Services, which do not so conform shall be corrected by Seller upon notification in writing by the Buyer within one (1) year after completion of the Services. Unless otherwise agreed to in writing by Seller, Seller assumes no responsibility with respect to the suitability of the Buyer's equipment or with respect to any latent defects in the same. This warranty does not cover damage to Buyer's equipment, components or parts resulting in whole or in part from improper maintenance or operation or from their deteriorated condition. Buyer will, at its cost, provide Seller with unobstructed access to the defective Services, as well as adequate free working space in the immediate vicinity of the defective Services and such facilities and systems, including, without limitation, docks, cranes and utility disconnects and connects, as may be necessary in order that Seller may perform its warranty obligations. The conducting of any tests shall be mutually agreed upon and Seller shall be notified of, and may be present at, all tests that may be made.

Extended Warranties may be purchased prior to shipping for a fee. Fees for Extended Warranties are calculated on a project analysis basis but in no case shall be less than 3% per year for each year the warranty is extended up to a maximum of 5 years.

**(19) CANCELLATIONS** - Cancellations or modifications of an order by the purchaser will only be accepted by the seller in writing and on the basis that the seller will be paid for expenses incurred up to the time that the cancellation or modification is accepted by the seller. A minimum charge of

\$500.00 will be assessed. Unless otherwise provided, if there has been an accumulation of materials engineering or drafting, the cancellation will be based on actual costs incurred, plus a reasonable allowance for overhead and profit up to 100% of selling price.

**(20) LIQUIDATED DAMAGES** - Contracts which include liquidated damage clauses for failure to meet shipping or job completion promises are not acceptable or binding on Seller unless such clauses are specifically accepted in writing by an authorized representative of the Seller at its headquarters office. Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future pandemic.

**(21) BACKCHARGES AND ALTERATIONS** - The seller will not be responsible for any back charges to correct any possible manufacturing error, or any modifications to meet existing conditions or for any reason whatsoever unless authorized by the seller in writing. Any field problem should be reported to MYERS POWER PRODUCTS.

**(22) LIMITATION OF LIABILITY** - The purchaser's exclusive remedy on any claim of any kind for any loss or damage arising out of, connected with, or resulting from this contract, or from the performance or breach thereof, or from the design, manufacture, sale, delivery, resale, or repair or use of any products covered by or furnished under the contract, including but not limited to any claim of negligence or other tortious breach, shall be the repair or replacement, F.O.B. factory, as the seller may elect, or the product or part thereof giving rise to such claim, except that the seller's liability for such repair or replacement shall in no event exceed the contract price allocable to the products or part thereof which gives rise to the claim. THE SELLER SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

**(23) GENERAL** - Any assignment of the order, or any rights hereunder, by the purchaser without written consent of the seller shall be void. The provisions of any contract resulting from the order are for the benefit of the parties thereto and not for any other person. No waiver, alteration, or modification of any of the provisions hereof shall be binding unless in writing and signed by a duly authorized representative of the seller. ANY PURCHASE ORDER PURSUANT TO THE ACCOMPANYING QUOTATION SHALL BE SUBJECT TO THE APPROVAL OF SELLER'S CREDIT DEPARTMENT AND SHALL NOT RESULT IN A CONTRACT UNTIL IT IS ACCEPTED AND ACKNOWLEDGED BY SELLER AT SELLER'S FACILITY.

**(24) AUTHORITY OF SELLER'S AGENTS** - No agent, employee or representative of the seller has any authority to bind the Seller to any affirmation, representation or warranty concerning the goods sold under this Agreement, and unless the affirmation, representation, or warranty made by an agent employee or representative is specifically included herein, it has not formed a part of the basis of this bargain and shall not in any way be enforceable.

**(25) PROPRIETARY RIGHTS** - The sale of the goods hereunder to Buyer shall in no way be deemed to confer upon Buyer any right, interest or license in any patents or patent applications Seller may have covering the goods by Seller retains for itself all proprietary rights in and to all designs, engineering details and other data and materials pertaining to any goods supplied Seller and to all discoveries, inventions, patents, and other proprietary rights arising out of the work done in connection with the goods or with any and all products developed as a result thereof, including the sole right to manufacture any and all such products. Buyer warrants that he will not divulge, disclose, or in any way make use of such information (as built drawings, software and design information), and that it will not manufacture or engage to have manufactured such products.

**(26) GOVERNING LAW** - Any contract formed pursuant to this quotation shall be governed by and construed in accordance with the laws of the State of California.

**(27)** These Terms & Conditions shall remain in full force and effect and shall be deemed as accepted upon receipt of Purchase Order from Purchaser unless superseded by a modified T&C, specified and agreed in writing by an Officer of the Company of both Purchaser and Seller.



## Medium Voltage Metal-Clad Switchgear

### 1.0 SCOPE

This scope of supply includes the basic design and functional features for medium voltage metal-clad switchgear with vacuum circuit breakers as outlined herein and as further described in accompanying sections of this proposal.

### 2.0 STANDARDS/REFERENCES

The metal-clad switchgear and all components shall be manufactured and tested in accordance with the latest applicable standards of NEMA SG-4 and SG-5, and IEEE C37.20.2.

### 3.0 GENERAL DESIGN FEATURES/RATINGS

The switchgear shall have a voltage rating of 15KV with breakers and auxiliary compartments are described in the bill of materials of this proposal. The switchgear is designed for operation on a 13,800V, three phase, three wire, 60 hertz system. The circuit breakers are designed with vacuum technology and incorporate a spring-operated mechanism.

#### Switchgear Ratings

Rated Maximum Voltage	15KV
Operating Voltage	13,800V
Main Bus Continuous Rating	1200 Amps
Basic Impulse Level	95KV BIL
Control Bus AC/DC Voltage (nominal)	125VDC
Circuit Breaker Continuous Rating	1200 Amps
Circuit Breaker Interrupting	25KA
Breaker Interrupting Time	3 cycles

### 4.0 GENERAL CONSTRUCTION

The switchgear assembly is indoor, NEMA 1 type equipment.

The switchgear assembly shall consist of individual vertical sections housing various combinations of circuit breakers and auxiliaries, bolted to form a rigid metal-clad switchgear assembly. Metal side sheets shall provide grounded barriers between adjacent structures and solid removable metal barriers shall isolate the major primary sections of each circuit. Two rear covers shall be furnished for each vertical section for circuit isolation and ease of handling. The assembly is provided with top lifting angle members and bottom channel mounting frame to help with installation

The stationary primary contacts shall be silver-plated and recessed within insulating tubes. A steel shutter shall automatically cover the stationary primary disconnecting contacts when the breaker is in the disconnected position or out of the cell. Rails shall be provided to allow withdrawal of each circuit breaker for inspection and maintenance without the use of a separate lifting device.



The assembly finish shall consist of a coat of gray (ANSI-61) enamel paint applied to chemically cleaned steel for external and many internal parts. Galvanized unpainted surfaces are used for specified internal parts.

## 5.0 BUS

### 5.1 Main Bus

The main bus shall be full round edge copper and have flame retardant and track-resistant insulation. The bus supports between units shall be flame-retardant, track resistant. Stand-off bus supports are flame-retardant and track resistant. The switchgear shall be constructed so that all buses, bus supports and connections shall withstand stresses that would be produced by currents equal to the momentary ratings of the circuit breakers. A set of insulated copper main bus shall be provided and have provisions for future extension. All bus joints shall be plated, bolted and insulated with easily installed boots. Bus hardware is ASTM Grade 5, medium carbon steel, quenched, tempered and zinc plated. All bolted joints shall be provided with split-type lock washers, installed and torqued according to appropriate industry standards. The bus shall be braced to withstand fault currents equal to the close and latch rating of the breakers. The temperature rise of the bus and connections are in accordance with ANSI standards.

### 5.2 Riser Bus

Insulated rigid copper riser bus is provided from the circuit breaker/switchgear stationary primary disconnects to cable/bus duct/cable duct compartment location that allows cable lug/bus termination connections. Cable lugs are supplied by the installer unless mentioned elsewhere in this proposal.

### 5.3 Ground Bus

A ¼" x 2" plated copper ground bus shall extend the entire length of the switchgear. The ground bus is connected internally to all breaker compartments and other required equipment ground connection points inside the switchgear. The ground bus will be supplied with clearance holes to allow station ground connections to be made to the equipment.

## 6.0 WIRING/TERMINATIONS

The switchgear assembly shall include suitable terminal blocks for secondary wire terminations. General switchgear secondary wiring is provided with sizes/types are as follows :

#12 AWG – Current transformer secondary - type SIS rated 600 volts, 90 degrees C

#14 AWG – General control - type SIS rated 600 volts, 90 degrees C

#16 AWG – Automation/PLC general control – type FEP rated 600 volts, 200 degrees C

#14 AWG – Grounding - type SIS rated 600 volts, 90 degrees C, Green

Wires traveling in primary compartments are protected by braided metal outer covering. CT and breaker trip circuit wiring is terminated with insulated ring lugs. When wiring is terminated on terminal blocks, the terminal block will be identified using marker strips numbered in agreement with detailed connection diagrams. All wiring is neatly bundled using permanent anchors and tie wrapped.

## 7.0 CIRCUIT BREAKERS



The circuit breakers shall be horizontal draw out type capable of being withdrawn on rails. The breakers shall be operated by a motor-charged stored energy spring mechanism, charged normally by a universal electric motor and in an emergency by a manual charge handle. The primary disconnecting contacts shall be silver-plated copper.

Each circuit breaker shall contain three vacuum interrupters separately mounted in a self-contained, self-aligning pole unit which can be removed. A contact wear gap indicator for each vacuum interrupter shall be provided. The breaker front panel is removable when the breaker is withdrawn to help with inspection and maintenance.

Secondary contacts shall be silver-plated and shall automatically engage in the breaker operating position which can be manually engaged in the breaker test position. Manual or umbilical cord type secondary disconnects are not acceptable.

Breakers shall be racked in and out of the compartment using a screw type racking mechanism and shall be capable of being moved into and out of the connected and disconnected position using a manual racking crank or optionally using integrated electrical remote racking if required by the project safety directive or NFPA 70E compliance.

Interlocks shall be provided to prevent closing of a breaker between operating and test positions, to trip breakers upon insertion or removal from housing and to discharge stored energy mechanisms upon insertion or removal from the housing. The breaker shall be secured positively in the housing between and including the operating and test positions. Manual racking of the circuit breaker using a levering in crank accessory is provided. Breakers also have manual close and open pushbutton located on their face along with open and close indicators.

## 8.0 INSTRUMENT /CONTROL POWER TRANSFORMERS

### 8.1 Current Transformers

Ring type current transformers (CT's) shall be furnished as indicated herein. The thermal and mechanical ratings of the current transformers shall be coordinated with the circuit breakers. Their accuracy rating shall be equal to or higher than ANSI standard requirements. The standard location of the current transformers on the bus side and line side of the breaker units shall be front accessible to permit adding or changing current transformers without removing high voltage insulation connections. Shorting terminal blocks shall be furnished on the secondary of all the current transformers.

### 8.2 Voltage Transformers

Voltage (VT's) shall be mounted in drawout drawers contained in an enclosed auxiliary compartment. Shutters shall isolate primary bus stabs when the VT drawer is withdrawn.

### 8.3 Control Power Transformers

Control power transformers (CPT's) shall be mounted in draw out drawers contained in an enclosed auxiliary compartment. Control power transformers up to 15KVA single phase shall be mounted in drawout drawers. Control power transformers above 15KVA shall be fixed mounted with primary fuses in drawout drawers. Shutters shall isolate primary bus stabs when CPT and/or fuse drawers are withdrawn. A mechanical interlock is provided that requires CPT secondary breakers to be opened before CPT drawers or CPT primary fuse drawers can be withdrawn.



All VT, CPT and fuse drawers are arranged so they can be withdrawn from the primary circuit operating position safely for general maintenance and inspection.

The primary connection to VT, CPT and fuse drawers is single conductor cable insulated to match the same ratings as the switchgear main bus. These internal cable runs are braced and supported to meet the bracing requirements of the equipment.

#### 9.0 PROTECTIVE RELAYS

Protective relays shall be solid state or multi-function digital type devices as listed herein on the specific bill of material. Each protective relay shall be housed in a drawout case where possible and shall have provisions for testing. Protective relays are housed in the switchgear low voltage compartment unless noted otherwise in this proposal.

Protective relays shall have settings that are readily visible and accessible from the front of the device. Where required, relays shall include target indicators. Multi-function protective relays shall have readily visible and accessible settings and controls and shall be housed in substantial cases appropriate for the application.

#### 10.0 GENERAL CONTROL AND METERING

Transfer and control switches shall be rotary type, heavy duty switchboard grade complete with front operating handle and escutcheon plates. Where required by the specifications, the switch contacts shall be housed in a protective casing.

Control fuses are provided in each breaker charge, close and trip circuit as well as all AC/DC control busses for other control power requirements within the switchgear. Control fuses are located in the switchgear low voltage compartment unless noted otherwise in this proposal.

#### 11.0 NAMEPLATES

Engraved nameplates are laminated with two color material and provided to identify all door mounted devices and to identify switchgear sections/compartments. Exterior nameplates are attached using 4-40 tapped stainless steel screws. Nameplates are white with black letters unless specified elsewhere in this proposal

#### 12.0 BILL OF MATERIALS

##### **Medium Voltage Switchgear #1 - 13.8kV - 1200A - 23kA - NEMA 1 Indoor**

##### **Section No. 1 - Circuit Breakers**

- 2 Vacuum Circuit Breaker Elements, 15kV 1200A 25kA 3 cycle
- 2 Vacuum Circuit Breaker Stationary Compartment, 1200A, glass polyester supports
- 2 Vacuum Circuit Breaker MOC/TOC Switch
- 6 Current Transformers, 800:5A, C200 class donut style
- 1 Circuit Breaker Control Switch
- 2 Circuit Breaker Status Lights





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- 1 Control Switch - Device 43
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 2 Set, 1200A breaker line side buswork
- 2 Set, 1200A breaker load side buswork
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch

**Section No. 2 - VT Auxiliaries**

- 1 Excitation Voltage Transformer Drawout Tray
- 2 Excitation Voltage Transformers
- 1 Generator Governor Drive Motor Voltage Transformer Drawout Tray
- 1 Generator Governor Drive Motor Voltage Transformer
- 1 Generator Metering/Relaying Voltage Transformer Drawout Tray
- 2 Generator Metering/Relaying Voltage Transformers
- 1 Current Transformer, 800:5A, C200 class donut style
- 3 Station Class Lightning Arrestors, 18kV, 15.3 MCOV
- 3 Surge Capacitor, 13.8kV, single phase, 0.75mF, ABB Hitachi #2GUS138750F2109
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 1 Set, bus risers for generator connections
- 3 Set, power cabling and supports for VT auxiliaries
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch

**Section No. 3 - Neutral Grounding Resistor**

- 1 Grounding Transformer, 15kVA, single phase, 13.8kV primary, 120/240V secondary
- 1 Grounding Resistor, 10 second duty, 380A, 0.5 Ohms
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 1 Set, bus risers for generator neutral connection
- 3 Set, power cabling and supports for Grounding transformer
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch

**System Components**

- 1 Set, circuit breaker standard accessories
- 1 Circuit breaker lift truck and lifting yoke



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## Medium Voltage Switchgear #2 - 13.8kV - 1200A - 23kA - NEMA 1 Indoor

### **Section No. 1 - Circuit Breakers**

- 2 Vacuum Circuit Breaker Elements, 15kV 1200A 25kA 3 cycle
- 2 Vacuum Circuit Breaker Stationary Compartment, 1200A, glass polyester supports
- 2 Vacuum Circuit Breaker MOC/TOC Switch
- 6 Current Transformers, 800:5A, C200 class donut style
- 1 Circuit Breaker Control Switch
- 2 Circuit Breaker Status Lights
- 1 Control Switch - Device 43
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 2 Set, 1200A breaker line side buswork
- 2 Set, 1200A breaker load side buswork
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch

### **Section No. 2 - VT Auxiliaries**

- 1 Excitation Voltage Transformer Drawout Tray
- 2 Excitation Voltage Transformers
- 1 Generator Governor Drive Motor Voltage Transformer Drawout Tray
- 1 Generator Governor Drive Motor Voltage Transformer
- 1 Generator Metering/Relaying Voltage Transformer Drawout Tray
- 2 Generator Metering/Relaying Voltage Transformers
- 1 Current Transformer, 800:5A, C200 class donut style
- 3 Station Class Lightning Arrestors, 18kV, 15.3 MCOV
- 3 Surge Capacitor, 13.8kV, single phase, 0.75mF, ABB Hitachi #2GUS138750F2109
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 1 Set, bus risers for generator connections
- 3 Set, power cabling and supports for VT auxiliaries
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch

### **Section No. 3 - Neutral Grounding Resistor**

- 1 Grounding Transformer, 15kVA, single phase, 13.8kV primary, 120/240V secondary
- 1 Grounding Resistor, 10 second duty, 380A, 0.5 Ohms
- 1 Section, indoor NEMA 1 metal-clad vertical housing
- 1 Section, 1200A main copper insulated buswork
- 1 Set, bus risers for generator neutral connection
- 3 Set, power cabling and supports for Grounding transformer
- 2 Cabinet Space Heater
- 2 Cabinet Thermostat
- 1 Cabinet interior light and switch



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## **System Components**

- 1 Set, circuit breaker standard accessories
- 1 Circuit breaker lift truck and lifting yoke

## 13.0 FACTORY TESTING

13.1 The control circuits shall be operated at the normal voltage and current for proper operation of circuit breakers, circuit breaker simulators, switches, contactors, interlocks, etc.

13.2 Instruments shall be energized from the low voltage winding of the potential transformers and the low current winding of current transformers. Where practical, each instrument shall be operated through its range of voltage, current and/or phase angle and frequency to produce deflections over the entire scale.

13.3 The ratio and interconnections of all potential transformers shall be functionally checked to verify conformance to the electrical drawings and electrical bills of material.

13.4 Protective relays shall be tested by applying rated current and/or voltage as required to determine proper performance characteristics. Each relay shall be tested to determine its proper operation in itself and also in the total overall circuit performance. Factory settings are intended for production testing only and should not be used for final equipment commissioning settings.

13.5 A static circuit check shall be performed for auxiliary switches, external circuit connections and parts of circuitry that have not been checked or cannot be checked functionally. The devices shall be checked for mechanical function and for conformance to the schematic and wiring diagrams.

13.6 After all electrical tests and mechanical checks have been completed and corrections have been signed off, each power bus shall be given a high voltage withstand test from phase to phase and phase to ground at the specified voltage, frequency and time duration indicated in the Standard C37.20.2

NOTE: There will be no medium voltage applied and the testing will be conducted in the low voltage test area.

## 14.0 ENGINEERING DATA PROVIDED

Myers Power Products, Inc. standard engineering document packages depict the equipment as specified and ordered. Standard drawing packages from Myers Power Products, Inc. consist of :

Bill of Material showing all components used in the manufacturing of the switchgear, called out by original manufacturer and part number

Structural Drawings with critical dimensions showing :

- Arrangement
- Plan, front view and sectional views
- Conduit, bus duct or cable tray entrance locations and dimensions for both top and/or bottom entrance



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- Main bus bar location and arrangement
- Incoming and outgoing power cable termination positions
- Anchor locations
- Data sheet with weight of equipment, general ratings and notes
- Nameplate schedule

Elementary One Line and Three Line Diagrams

- One-line diagrams with ANSI device function numbers
- Three-line diagrams showing instrument transformers, protective relays, control devices, meters and meter switches, breakers and pertinent like devices

Control Schematic Diagrams showing

- Electrically operated breaker / relay control schemes
- Device and terminal block terminals for equipment internal and customer connections
- Control switch developments
- Control busses
- Space heater circuits
- Automation/PLC I/O circuits



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## Clarifications, Comments, and Exceptions

NOTE: THE FOLLOWING CLARIFICATIONS, COMMENTS AND EXCEPTIONS MUST BE ACKNOWLEDGED AND RESOLVED IN WRITING PRIOR TO ANY PROJECT AWARD.

### Medium Voltage Switchgear

- Circuit breakers are quoted as standard IEEE C37 vacuum drawout breaker elements. We have not quoted generator breakers tested to C37.013 and C37.013a.
- Current transformers are donut style devices, 800:5A ratio, C200 accuracy class. We have not quoted bar type CTs.
- We are quoting a power resistor for the neutral grounding system that is rated per the inquiry single line diagram at 380A, 0.5 Ohm. We are quoting a 10 second duty cycle neutral grounding resistor. If another type or style of resistor is desired, we would be pleased to adjust our offering accordingly.

### General

- Initial submittals shall be based on this quotation and the information provided at time of quotation.
- Standard Myers Power Products, Inc. inspection and test procedures will be performed on all Myers Power Products, Inc. furnished equipment in an ISO 9001 certified facility. Myers Power Products, Inc. standard documentation package is quoted.
- Commissioning and two-year spare parts list will be finalized after BOM acceptance.
- Welding will be per AWS D1.1.
- Material origins were not specified and shall be determined by Myers Power Products, Inc. and our sub-vendors.
- Drawings shall be provided in electronic (.DWG & .PDF) format, or B-Size 11x17" prints
- Customer shall be responsible for any applicable taxes or fees.
- Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic.
- Our proposal is based on the above bill of material. Any items, material, or work, which are not specifically addressed in this quotation are not included. Changes can be provided if required at an additional cost.



**MYERS POWER PRODUCTS, INC.**

**Standard Switchgear Limited Warranty**

Myers Power Products, Inc., warrants to the original purchaser that the complete switchgear, together with all parts included in the original purchase (the “Switchgear”), has been designed in accordance with the specifications of the original purchaser, and that the Switchgear will be free from defects in material and workmanship under normal use and service for a period of one (1) year from date of delivery of the Switchgear at its destination from the factory. Myers Power Products, Inc.’s liability under this limited warranty does not extend to defects/or damage caused by vandalism, improper installation, improper maintenance, alterations by purchaser, purchaser-furnished materials, or improper operation for this limited warranty to be valid.

Should defects in material and / or workmanship during the standard limited warranty period occur, Myers Power Products, Inc.’s liability and purchaser’s remedies under this limited warranty shall be limited solely to repair or replacement of defect. Purchaser shall give Myers Power Products, Inc. prompt written notice of any claim hereunder. Myers Power Products, Inc. shall be given a reasonable opportunity to investigate all claims, and no parts may be returned to Myers Power Products, Inc. without advance authorization and instructions from the Customer Service Department.

**THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MYERS POWER PRODUCTS, INC., SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES OF ANY KIND, INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS.**

**Myers Power Products, Inc. • 2950 E. Philadelphia Street, Ontario, California 91761 • (909) 923-1800**

Contact Vendor: Tony Williams, Myers Power Products by phone at 866-MY-MYERS or email [Repairs@MyersPower.com](mailto:Repairs@MyersPower.com)

Provide SW# \_\_\_\_\_

Provide Product Serial Number \_\_\_\_\_

**Myers Power Products, Inc.**

2950 E. Philadelphia Street, Ontario, California 91761

O: (909) 923-1800 | Fax: (909) 923-1806 | [www.myerspwr.com](http://www.myerspwr.com) 