

6-09-198

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SHEET 1

SHEET 1

APPROVED  
RAG DEF GEN

BY CH.

CUSTOMER REFERENCE SPECIFICATION

A-188078

12 KV 3 PHASE SERVICE  
INSTRUMENT TRANSFORMER ARRANGEMENT  
IN CUSTOMER-OWNED TRANSFORMER VAULT OR ENCLOSURE

UNDERGROUND SUPPLY

This specification defines the customer's responsibilities and requirements necessary for 12 KV three phase service, underground supply. All details of this specification must be strictly followed. The vault location and equipment installation must be approved by the PP&L Supervisor - Division Metering and the Division Distribution Engineering Department. Any deviations from this specification must be approved. Unapproved deviations are usually costly for the customer to correct and can result in delays or possible refusal to connect service.

Revised spec. format and added caution marks on cover.

REVISION

Issue Date 9-8-86

PENNSYLVANIA POWER & LIGHT CO.  
ALLENTOWN, PA

12 KV 3 PHASE METERING  
INSTRUMENT TRANSFORMER ARRANGEMENT  
IN CUSTOMER VAULT OR ENCLOSURE

SPONSOR: JLV  
DEF

APPR: F. R. NICKEL  
MANAGER-DISTRIBUTION

DATE: 7/19/83

A-188078-1

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NO. DATE ER.

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NOTES:

1. All equipment and materials, except bill of material items #1 thru 5, are to be furnished, installed, and maintained by customer.
2. Tighten clamp for snug support. Do not deform the cable insulation.
3. Use conduit to extend to meter panel outside of vault. If CTs and VTs are indoor, omit conduit and use condulets with four-hole cover.
4. Ground leads from the voltage transformers to the ground bus must have the equivalent ampacity of the primary phase conductors. Customer must make all grounding connections using compression connectors, and all primary connections using cable-to-flat or stem connectors as appropriate.
5. Do not overtighten the tie wires.

BILL OF MATERIAL

ITEM	QUANT.	DESCRIPTION	CATALOG OR DRAWING NO.
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MATERIAL SUPPLIED BY PP&L

1	A	1	Lot, steel for mounting CTs and VTs, indoor type	500135
	B	1	Lot, steel for mounting CTs and VTs, outdoor type	500136
2		3	Transformer, voltage, type and size as specified	Meter Dept.
3		3	Transformer, current, type and size as specified	Meter Dept.
4		1	Meter panel	Meter Dept.
5		*	Ft., wiring from meter panel to inst. transf.	Meter Dept.

MATERIAL SUPPLIED BY CUSTOMER

6		3	Insulator, outdoor, 15 KV	
		3	Clamp, bus support	
7		1	Lot, 1-1/4" rigid metal and flexible weatherproof metal conduit, condulets, fittings, etc.	
8		1	Clamp, ground, for 1-1/4" conduit	
9		3	Wire holder, lag screw	
10		*	Ft., cable, 15 KV, non-shielded, 1/C	
11		3	Bracket, mounting, for cable terminator	
		3	Terminator, cable, 15 KV, indoor or outdoor	As Specified
12		*	Ft., cable, 15 KV, shielded, 1/C	
13		3	Clevis, insulated	
14		3	Bar, 1/4" x 2" x 4-1/2" long, copper	(Detail B)
		6	Bolt, machine, 1/2" x 1-1/2" long, silicon bronze	
15		6	Connector, terminal, closed end	(Detail B)
		12	Bolt, machine, 1/4" x 3/4" long, silicon bronze	
16		3	6"x6"x4" watertight junction box, outdoor arrangement only	

\* As Required

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Edited Notes #1 and 4. Added Item 16 to B/M.

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SHEET 3

SHEET 3

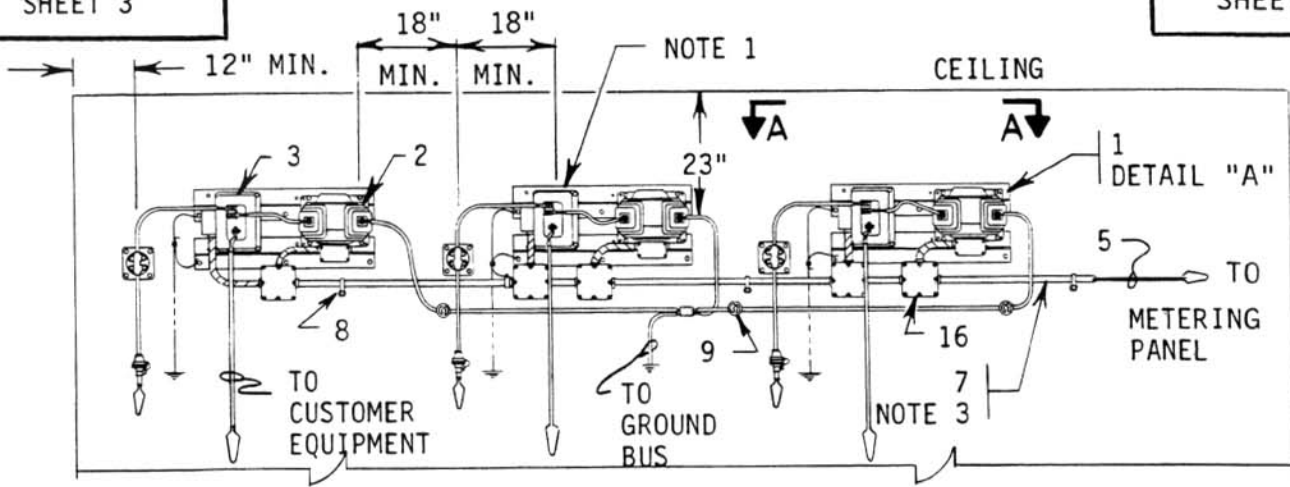
APPROVED

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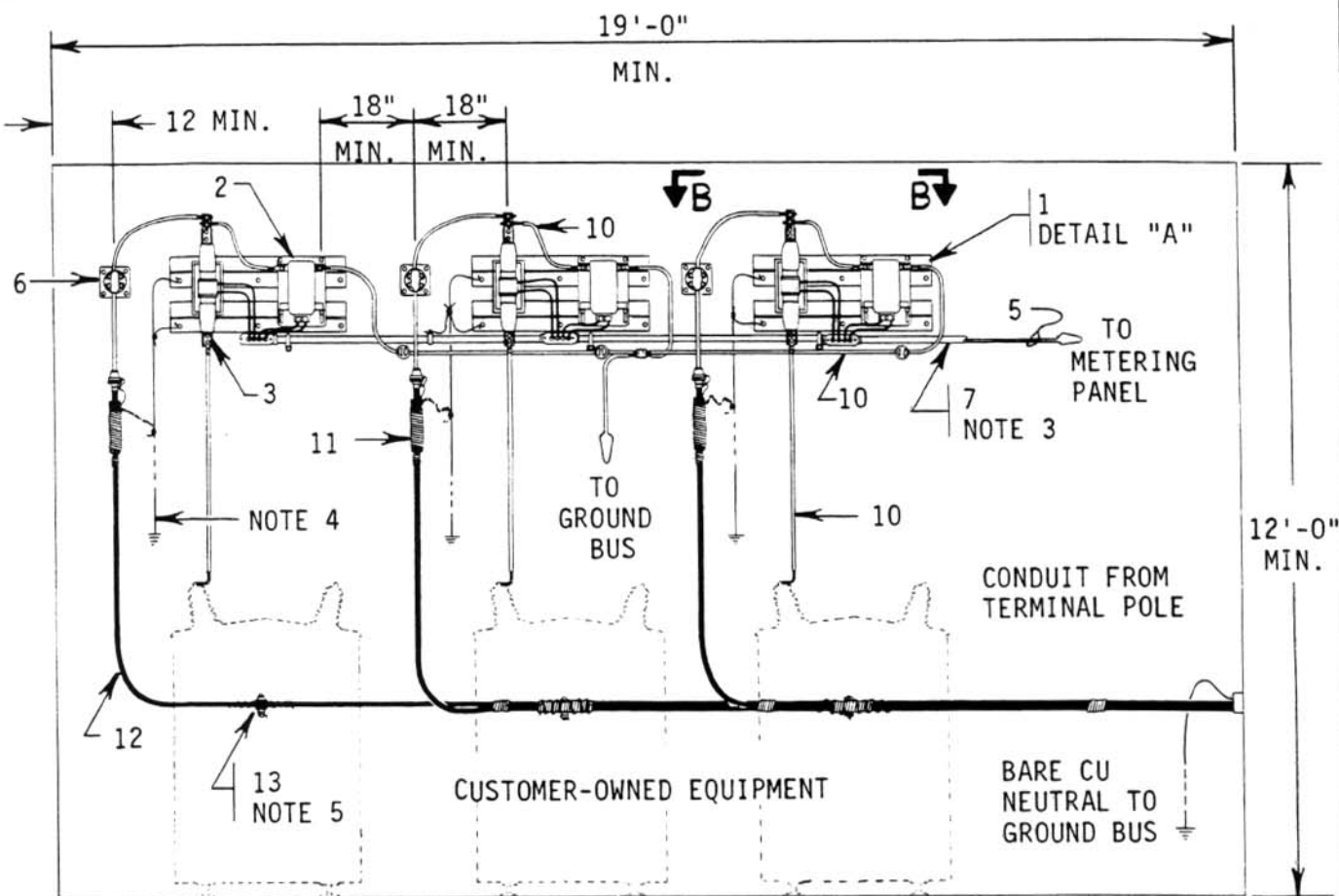
Redrawn for clarity and added Item 16.

REVISION NO. DATE ER.

12KV 3PH MTRG CUST VAULT



ARRANGEMENT OF EQUIPMENT WHEN OUTDOOR TYPE INSTRUMENT TRANSFORMERS ARE INSTALLED



ARRANGEMENT OF EQUIPMENT WHEN INDOOR TYPE INSTRUMENT TRANSFORMERS ARE INSTALLED

REFERENCE: "RULES FOR ELECTRIC METER AND SERVICE INSTALLATION" - SKETCH #36.

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12 KV 3 PHASE METERING  
INSTRUMENT TRANSFORMER ARRANGEMENT  
IN CUSTOMER VAULT OR ENCLOSURE

A-188078-1  
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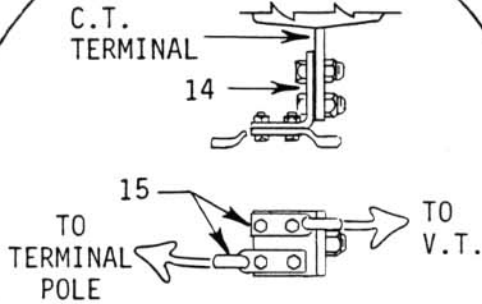
BY CH.

NOTE 2

3

2

SECTION A-A



DETAIL "B"

NOTE 2

3

2

SECTION B-B

VAULT CEILING

23"

C.T.

V.T.

A-4 (INDOOR TYPE)

A-2 (OUTDOOR TYPE)

A-1

A-5 (INDOOR TYPE)

A-3 (OUTDOOR TYPE)

A-1

9"

DETAIL "A"  
(ITEM 1)

Redrawn for clarity and added Item 16.

REVISION

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ER-

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DATE

1

NO.

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7/19/83  
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INSTRUMENT TRANSFORMER ARRANGEMENT  
IN CUSTOMER VAULT OR ENCLOSURE

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