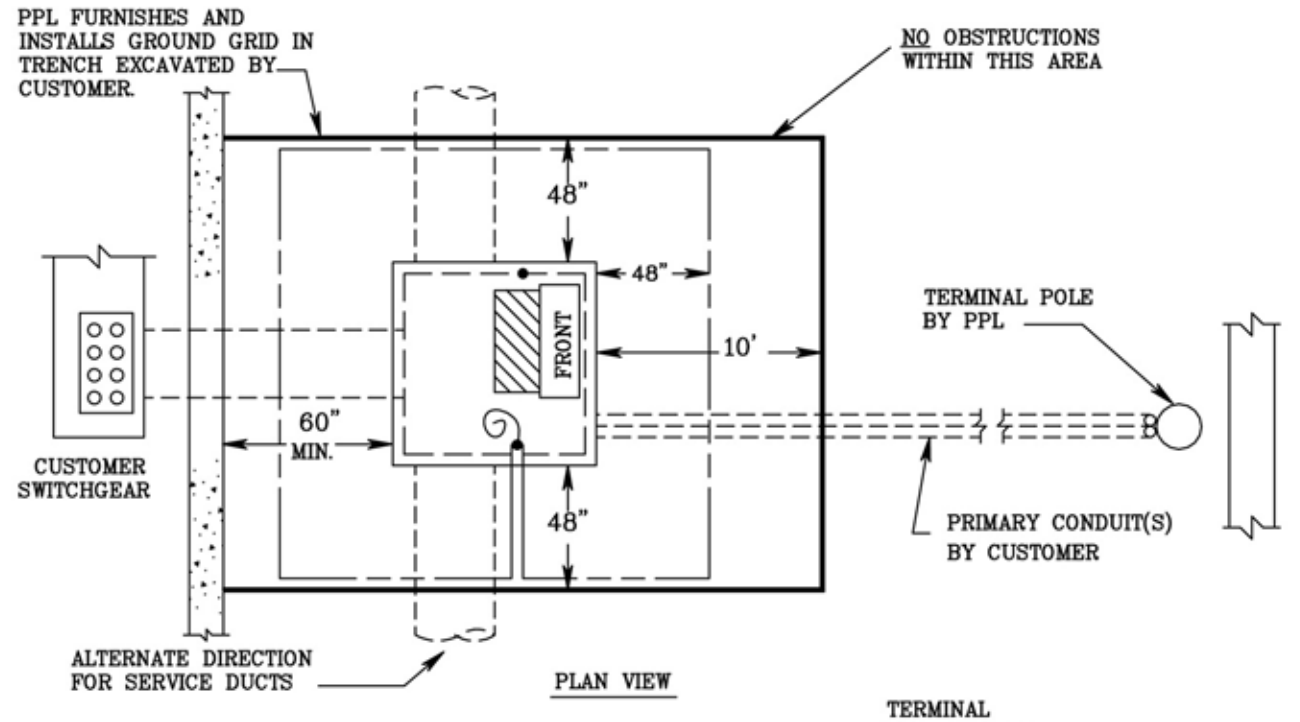
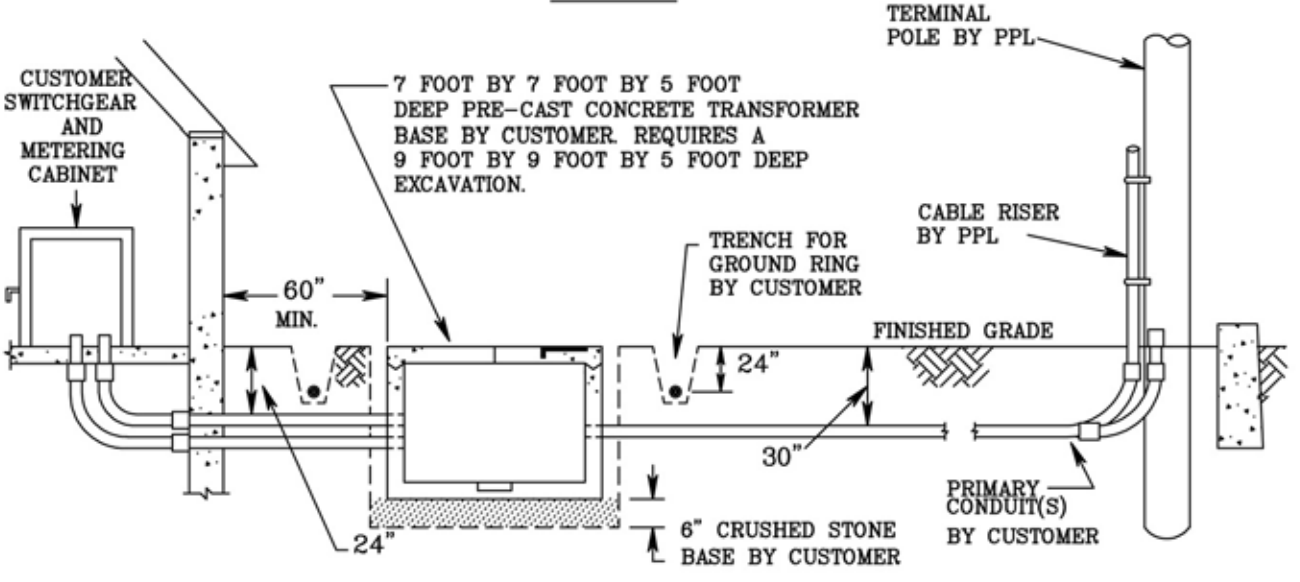
SKETCH #40	High Voltage Underground Supply from Overhead–Secondary Voltage Source Typical Arrangement of Structural Facilities Installed by Customer to Accommodate Underground Service from a Three Phase Pad–Mounted Distribution Transformer, 75 KVA to 2500 KVA Capacity	SKETCH #40
SHEET 40		SHEET 40



PLAN VIEW



ELEVATION VIEW

CUSTOMER IS RESPONSIBLE FOR INSTALLING STRUCTURAL FACILITIES AS NOTED ABOVE. THEY SHALL BE INSTALLED IN ACCORDANCE WITH PPL PLANS AND SPECIFICATIONS, SUBJECT TO PPL INSPECTION. UPON COMPLETION, OWNERSHIP OF ALL STRUCTURAL FACILITIES LOCATED OUTSIDE THE BUILDING ON THE SOURCE SIDE OF THE POINT OF DELIVERY SHALL VEST IN PPL. IT IS THE CUSTOMER'S RESPONSIBILITY TO COMPLY WITH THE NATIONAL ELECTRIC CODE, LOCAL MUNICIPAL OR INSURANCE REGULATIONS REGARDING THE LOCATION OF AN OIL FILLED TRANSFORMER.

*REFERENCE CRS 6–17–122 (CRS–1002), CRS 6–19–100

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 9 REMSI_S040.dwg **Date:** 6/25/04 **Engr:** RPV

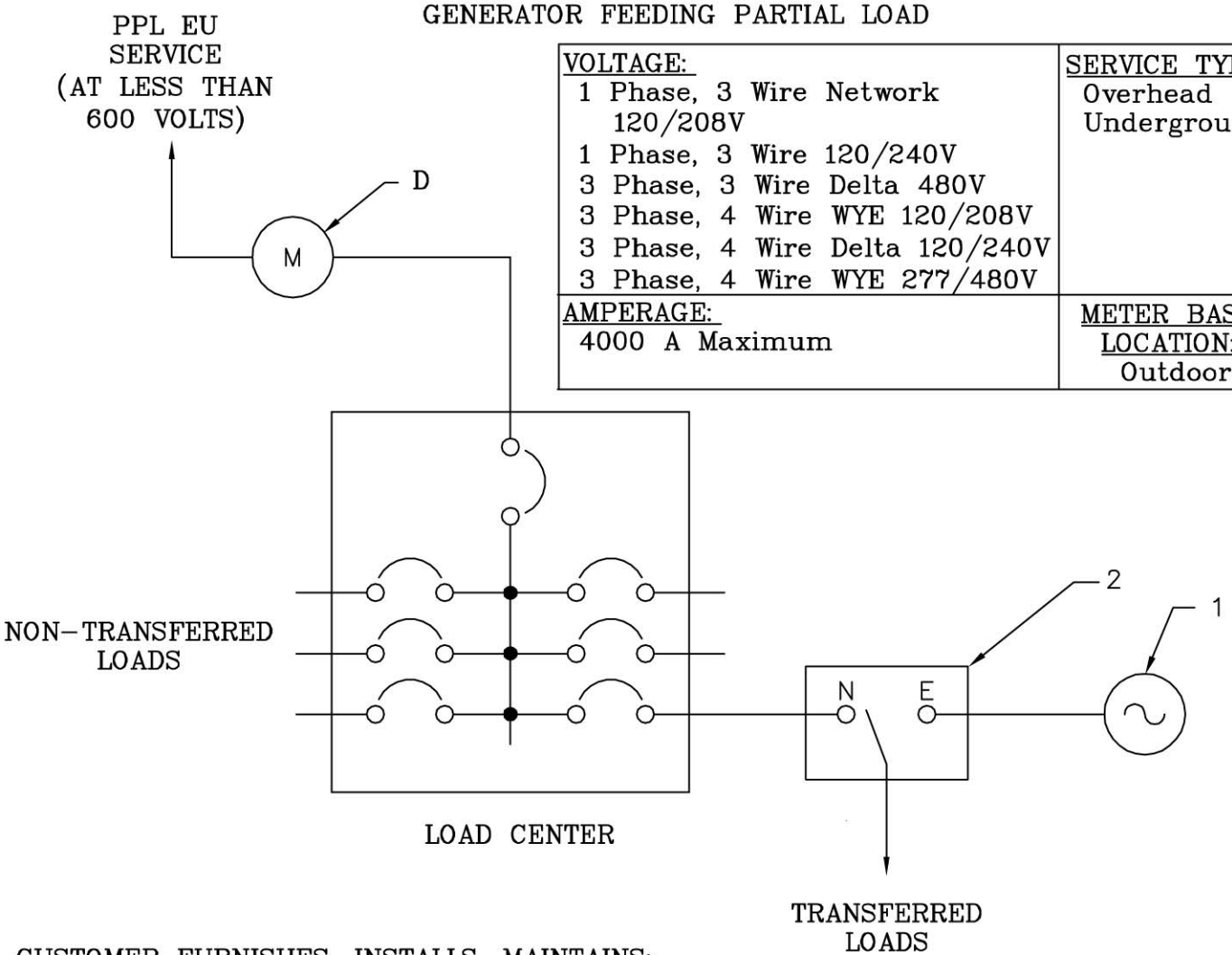
Sketch 41 Series Organization Map

Voltage		Transfer Method	Load	Sketch #
Less than 600 V		Manual	Partial	41P1
			Full	41P2
		Automatic	Partial	41AP1
			Full	41AP2
12kV	Pole Mount	Manual	Partial	41BP1
			Full	41BP2
		Automatic	Partial	41CP1
			Full	41CP2
	Switchgear	Manual	N/A	41D
		Automatic	N/A	41E

Manual Double Throw Transfer Switch Connection for Emergency (Stand-by) Generation Service

SKETCH #41
SHEET 1 of 2

GENERATOR FEEDING PARTIAL LOAD



VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V 1 Phase, 3 Wire 120/240V 3 Phase, 3 Wire Delta 480V 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 4000 A Maximum	METER BASE LOCATION: Outdoor

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION
2. MANUAL DOUBLE THROW SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THIS APPLICATION. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTE:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. INDEPENDENT ELECTRICAL INSPECTION OF MANUAL DOUBLE THROW TRANSFER SWITCH MAY BE REQUIRED BY NEC OR ANY OTHER APPLICABLE CODE.

C. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

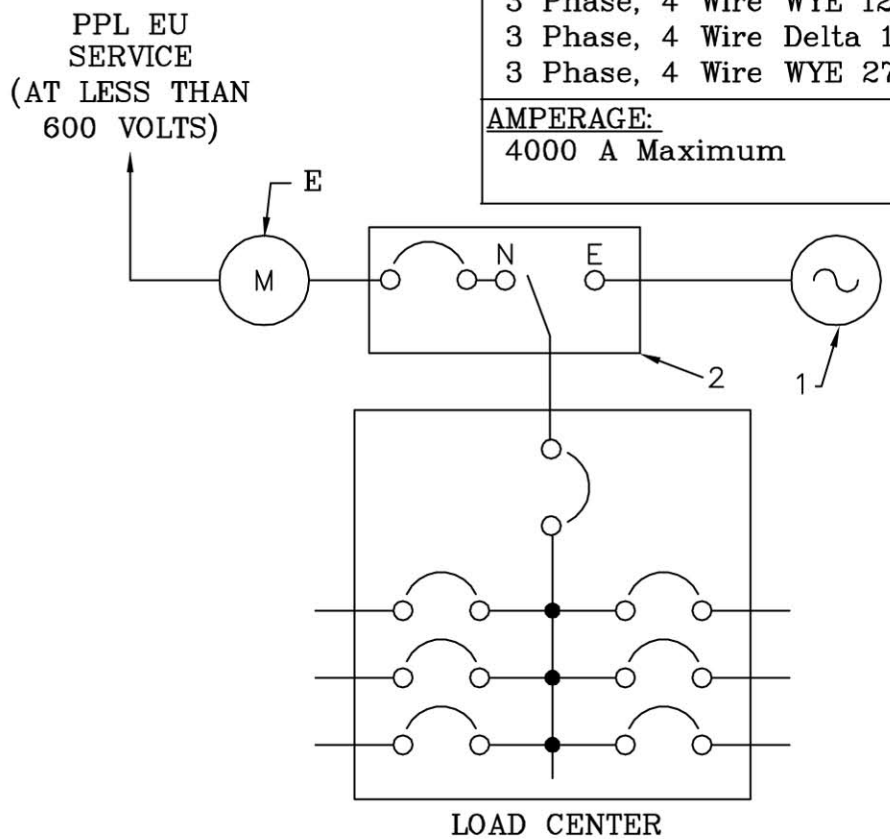
D. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

Manual Double Throw Transfer Switch Connection for Emergency (Stand-by) Generation Service

SKETCH #41
SHEET 2 of 2

GENERATOR FEEDING FULL LOAD

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V 1 Phase, 3 Wire 120/240V 3 Phase, 3 Wire Delta 480V 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 4000 A Maximum	METER BASE LOCATION: Outdoor



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION
2. BREAKER AND MANUAL DOUBLE THROW SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THIS APPLICATION. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTE:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE. (NEC)

B. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION OF MANUAL DOUBLE THROW TRANSFER SWITCH.

C. THE INSPECTOR IS REQUIRED TO VERIFY THE OPERATION OF THE MANUAL DOUBLE THROW SWITCH WITHOUT LOAD.

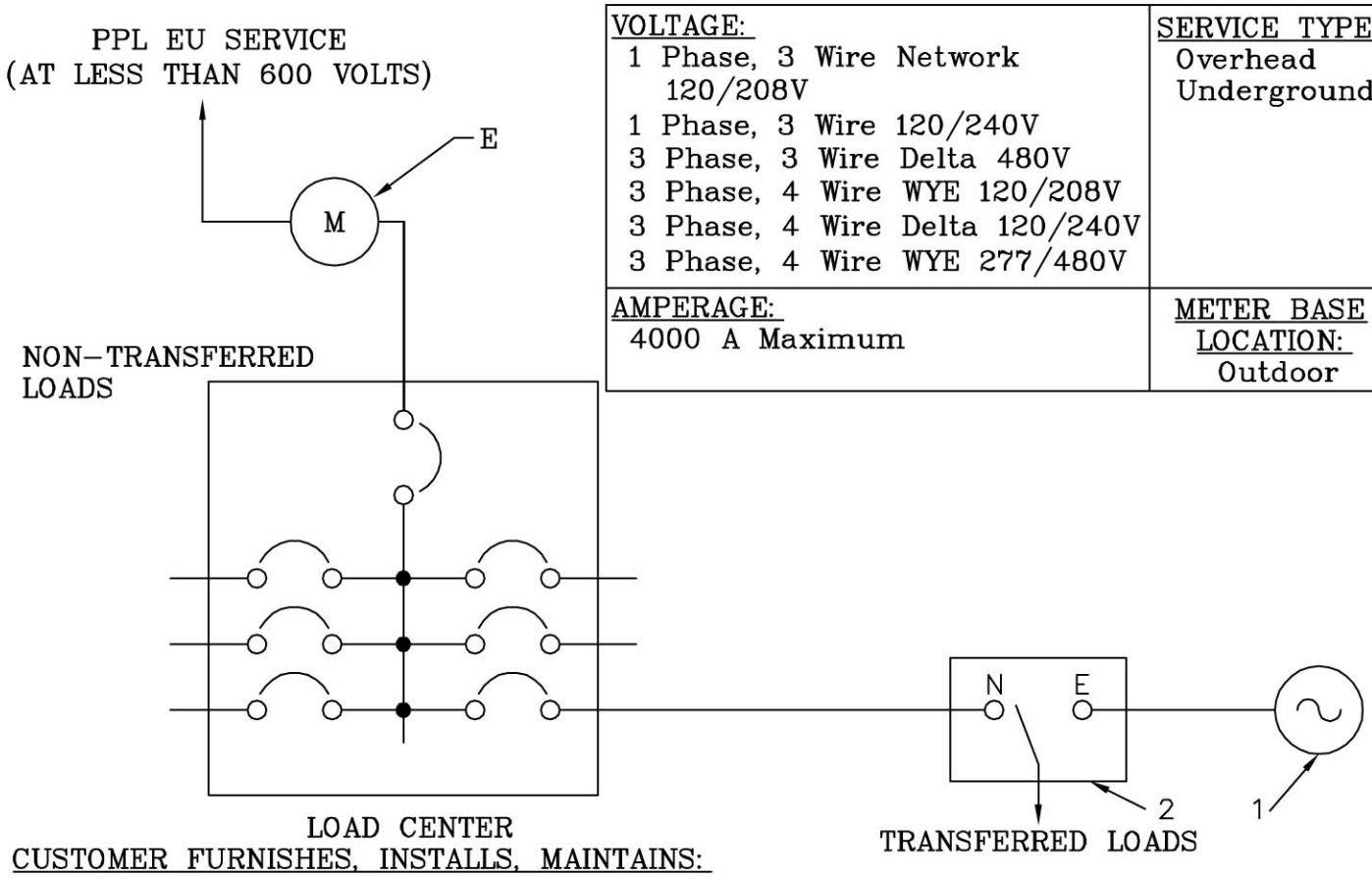
D. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

E. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

Automatic Transfer Switch
Connection for Emergency (Stand-by) Generating Service

SKETCH #41A
SHEET 1 of 2

GENERATOR FEEDING PARTIAL LOAD



VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V 1 Phase, 3 Wire 120/240V 3 Phase, 3 Wire Delta 480V 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 4000 A Maximum	**METER BASE LOCATION:** Outdoor

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.

2. AUTOMATIC TRANSFER SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THE APPLICATION, OPEN TRANSITION. SEE APPROVED AUTOMATIC TRANSFER SWITCH TABLE. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. FOR AUTOMATIC TRANSFER SWITCH TYPES NOT ON APPROVED AUTOMATIC TRANSFER SWITCH TABLE, PLEASE CONTACT PPL EU BEFORE PROCEEDING WITH ENGINEERING AND MATERIAL/EQUIPMENT PURCHASE.

C. INDEPENDENT ELECTRICAL INSPECTION AND WITNESS OF PERFORMANCE TEST OF AUTOMATIC TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY THE NEC OR ANY OTHER APPLICABLE CODE.

D. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PADMOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

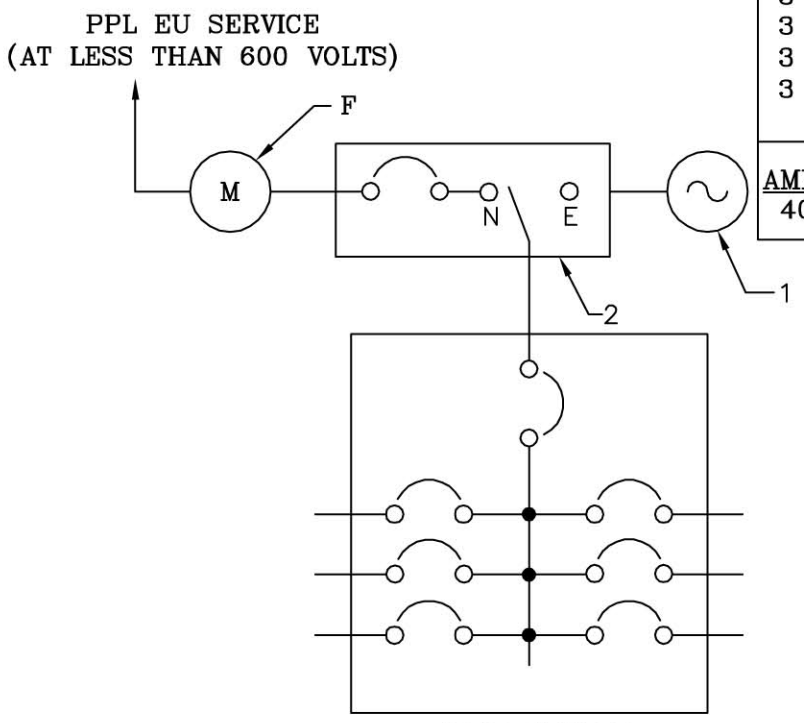
E. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

Automatic Transfer Switch
Connection for Emergency (Stand-by) Generating Service

SKETCH #41A
SHEET 2 of 2

GENERATOR FEEDING FULL LOAD

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V 1 Phase, 3 Wire 120/240V 3 Phase, 3 Wire Delta 480V 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 4000 A Maximum	**METER BASE LOCATION:** Outdoor



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION

2. AUTOMATIC TRANSFER SWITCH (BREAK-BEFORE-MAKE), APPROPRIATELY SIZED FOR THE APPLICATION, OPEN TRANSITION. SERVICE ENTRANCE RATED (OR WITH UPSTREAM PROTECTION TO MEET AUTOMATIC TRANSFER SWITCH EQUIPMENT SPECS). SEE APPROVED AUTOMATIC TRANSFER SWITCH TABLE. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. FOR AUTOMATIC TRANSFER SWITCH TYPES NOT ON APPROVED AUTOMATIC TRANSFER SWITCH TABLE, PLEASE CONTACT PPL EU BEFORE PROCEEDING WITH ENGINEERING AND MATERIAL/EQUIPMENT PURCHASE.

C. WITNESS OF PERFORMANCE TEST OF AUTOMATIC TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY THE NEC OR ANY OTHER APPLICABLE CODE.

D. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION.

E. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

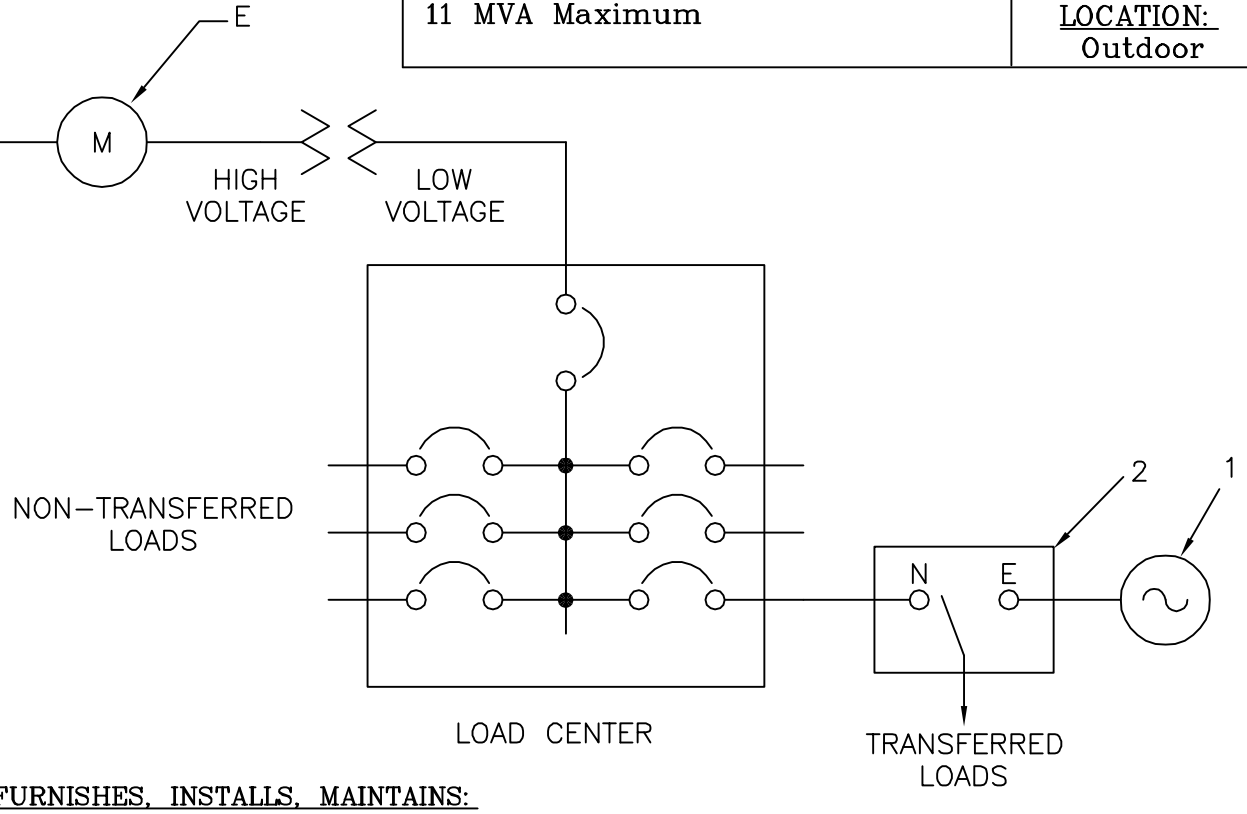
F. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

SKETCH #41B SHEET 1 of 2	Manual Transfer Switch Connection for Emergency (Stand-By) Generating Service	SKETCH #41B SHEET 1 of 2

PPL EU SERVICE
(12KV NOMINAL)

GENERATOR FEEDING PARTIAL LOAD

VOLTAGE: 1 Phase, 7,200V 3 Phase, 4 Wire WYE 7,200/12,470V	SERVICE TYPE: Overhead
AMPERAGE: 11 MVA Maximum	METER BASE LOCATION: Outdoor



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.

2. MANUAL DOUBLE THROW SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THIS APPLICATION. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. INDEPENDENT ELECTRICAL INSPECTION OF MANUAL DOUBLE THROW TRANSFER SWITCH MAY BE REQUIRED BY THE NEC OR ANY OTHER APPLICABLE CODE.

C. SEE REMSI SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34.

D. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER PANEL (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

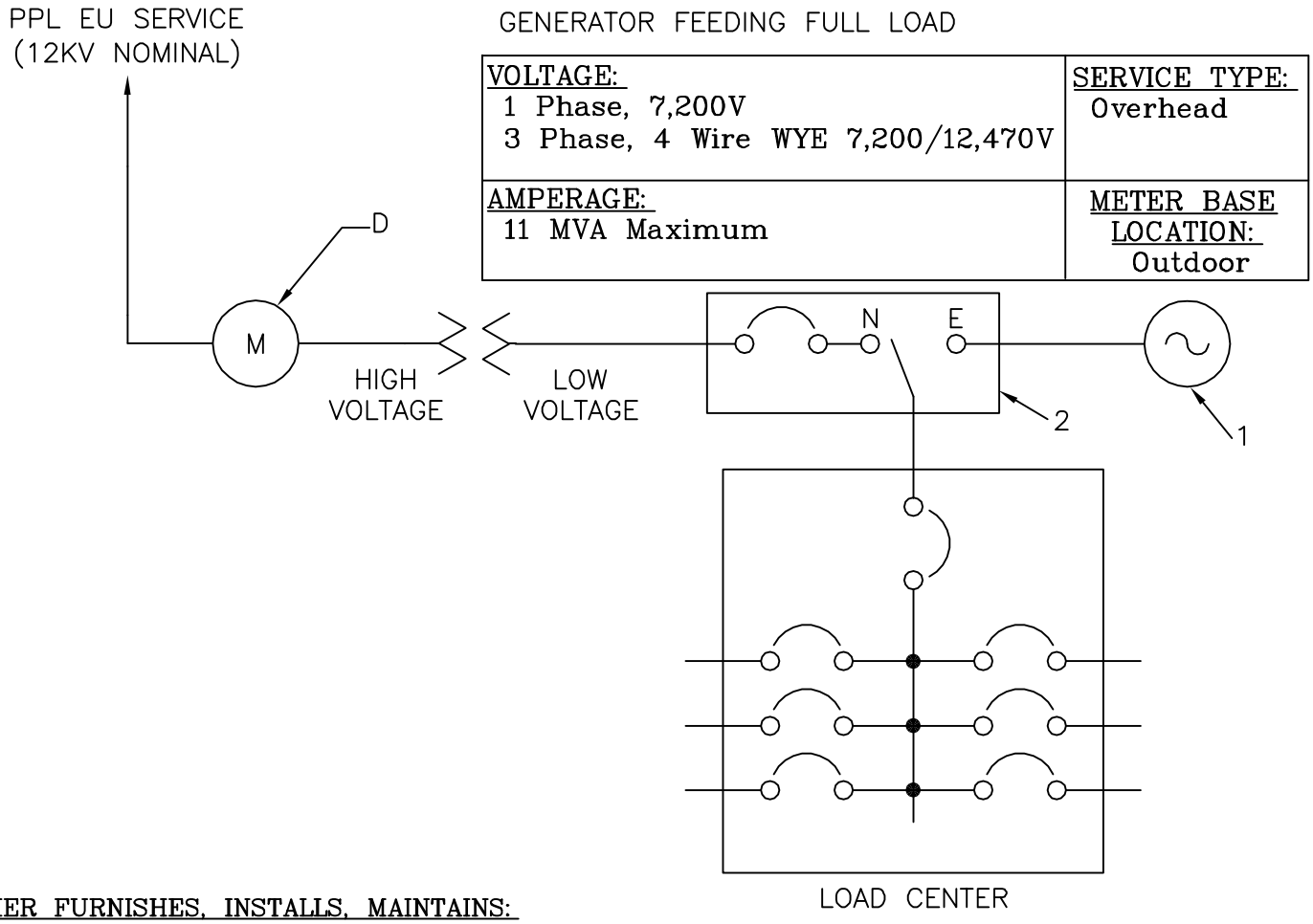
E. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

REFERENCE: SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 12, 26 REMSI_S41BP1.dwg **Date:** 7/29/11 **Engr:** MDB

Manual Transfer Switch
Connection for Emergency (Stand-By) Generating Service

SKETCH #41B
SHEET 2 of 2



CUSOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.

2. BREAKER AND MANUAL TRANSFER SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THE APPLICATION. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION OF MANUAL DOUBLE THROW TRANSFER SWITCH.

C. THE INSPECTOR IS REQUIRED TO VERIFY THE OPERATION OF THE MANUAL DOUBLE THROW SWITCH WITHOUT LOAD.

D. SEE REMSI SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34.

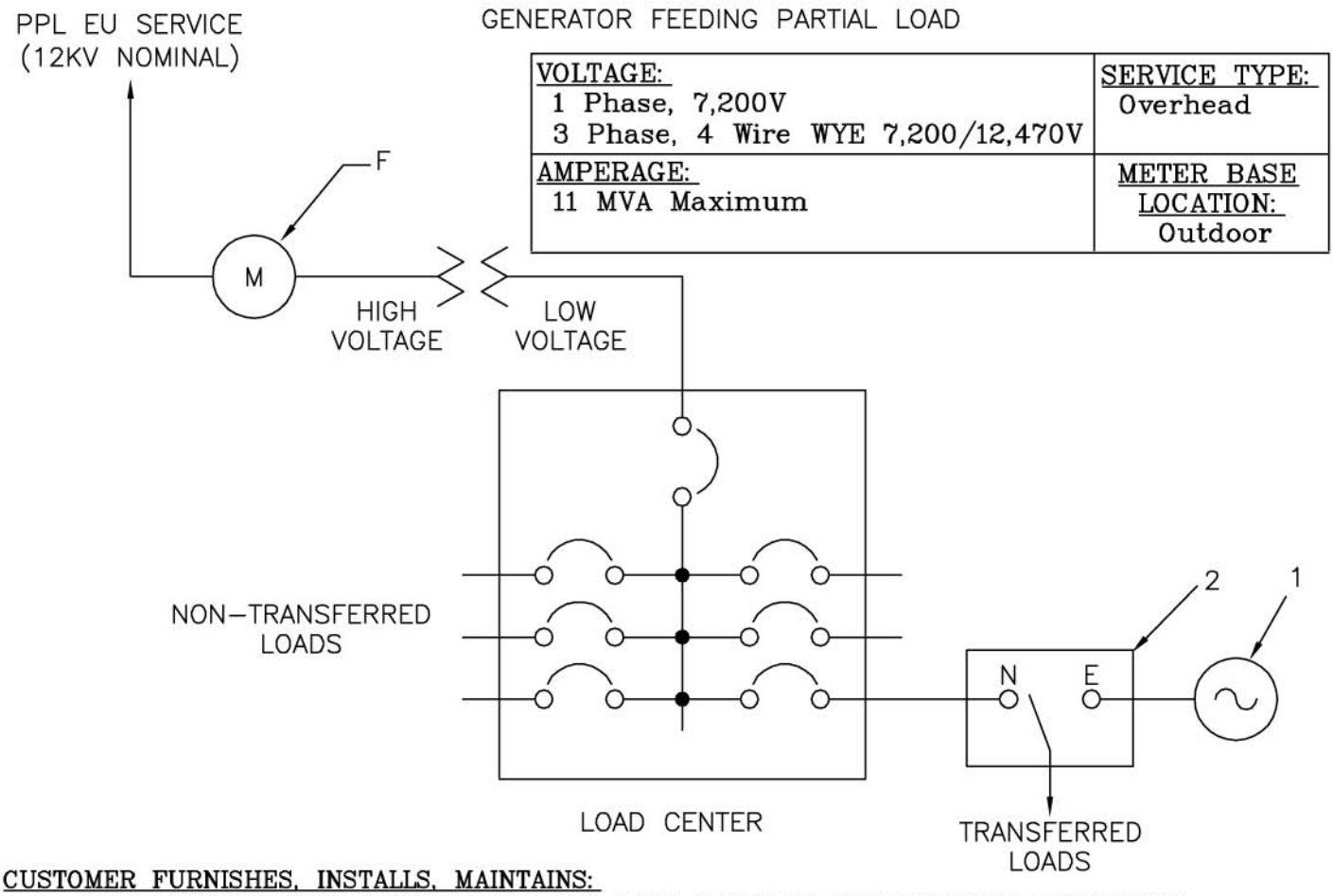
E. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

F. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

REFERENCE: SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 12, 26 REMSI_S41BP2.dwg **Date:** 7/29/11 **Engr:** MDB

SKETCH #41C	Automatic Transfer Switch Connection for Emergency (Stand-By) Generating Service	SKETCH #41C
SHEET 1 of 2		SHEET 1 of 2



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.

2. AUTOMATIC TRANSFER SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THIS APPLICATION, OPEN TRANSITION. SERVICE ENTRANCE RATED, (OR WITH UPSTREAM PROTECTION TO MEET AUTOMATIC TRANSFER SWITCH EQUIPMENT SPECS). SEE APPROVED AUTOMATIC TRANSFER SWITCH TABLE. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A. INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).

B. FOR AUTOMATIC TRANSFER SWITCH TYPES NOT ON APPROVED AUTOMATIC TRANSFER SWITCH TABLE BEFORE PROCEEDING WITH ENGINEERING AND MATERIAL/EQUIPMENT PURCHASE.

C. INDEPENDENT ELECTRICAL INSPECTION AND WITNESS OF PERFORMANCE TEST OF AUTOMATIC TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY THE NEC OR ANY OTHER APPLICABLE CODE.

D. SEE REMSI SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34.

E. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER PANEL (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECIEPT OF INSPECTION.

F. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

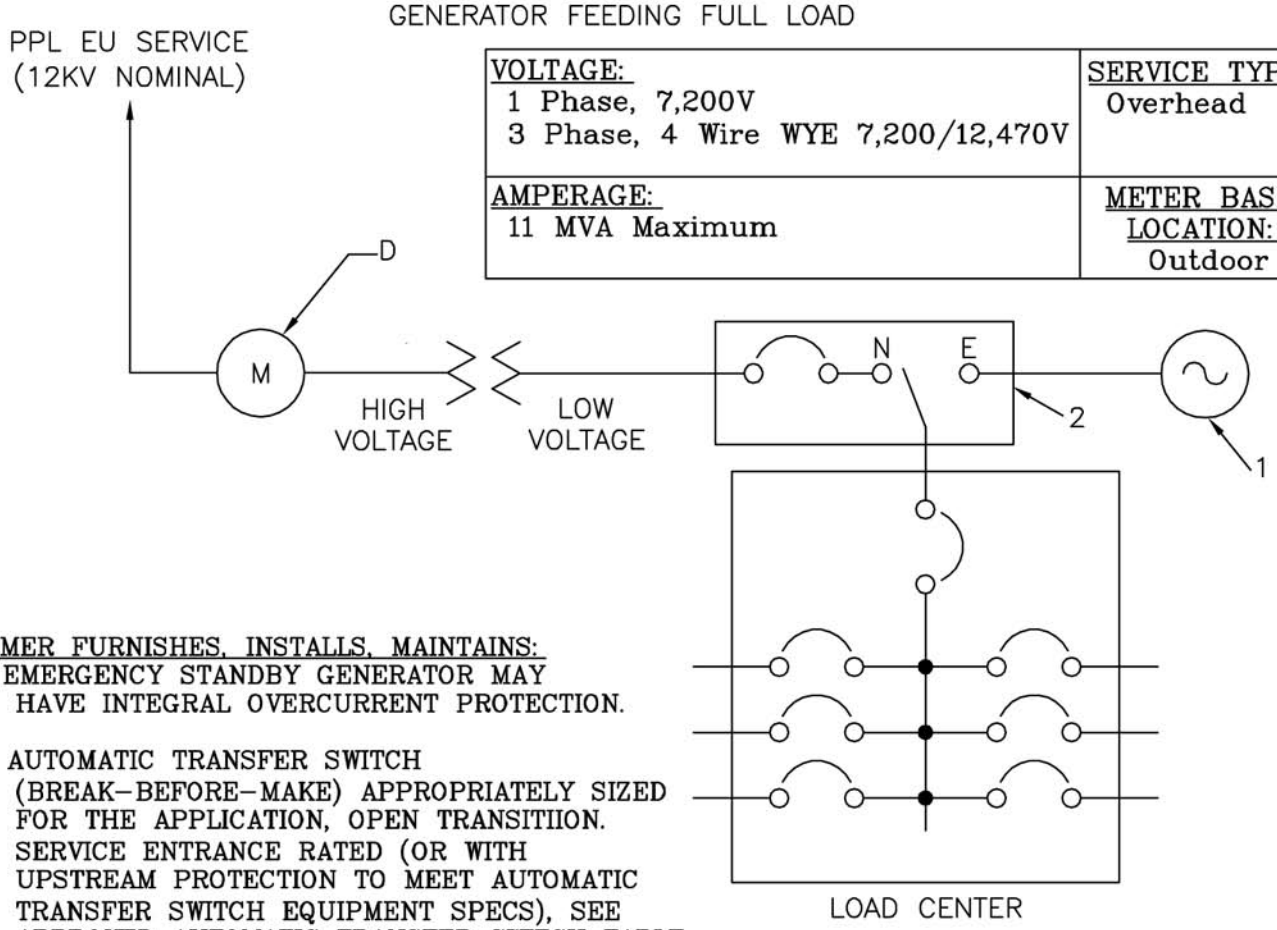
REFERENCE: SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 12, 26 **Date:** 7/29/11 **Engr:** MDB	REMSI_S41CP1.dwg

Automatic Transfer Switch Connection for Emergency (Stand-By) Generating Service

SKETCH #41C
SHEET 2 of 2

GENERATOR FEEDING FULL LOAD



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.
2. AUTOMATIC TRANSFER SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THE APPLICATION, OPEN TRANSITIION. SERVICE ENTRANCE RATED (OR WITH UPSTREAM PROTECTION TO MEET AUTOMATIC TRANSFER SWITCH EQUIPMENT SPECS), SEE APPROVED AUTOMATIC TRANSFER SWITCH TABLE. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).

NOTES:

A INSTALLATION AND EQUIPMENT MUST ADHERE TO REQUIREMENTS OF THE NATIONAL ELECTRIC CODE (NEC).

B. FOR AUTOMATIC TRANSFER SWITCH TYPES NOT ON APPROVED AUTOMATIC TRANSFER SWITCH TABLE, PLEASE CONTACT PPL EU BEFORE PROCEEDING WITH ENGINEERING AND MATERIAL/ EQUIPMENT PURCHASE.

C. WITNESS OF PERFORMANCE TEST OF AUTOMATIC TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY TEH NEC OR ANY OTHER APPLICABLE CODE.

D. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION.

E. SEE SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34.

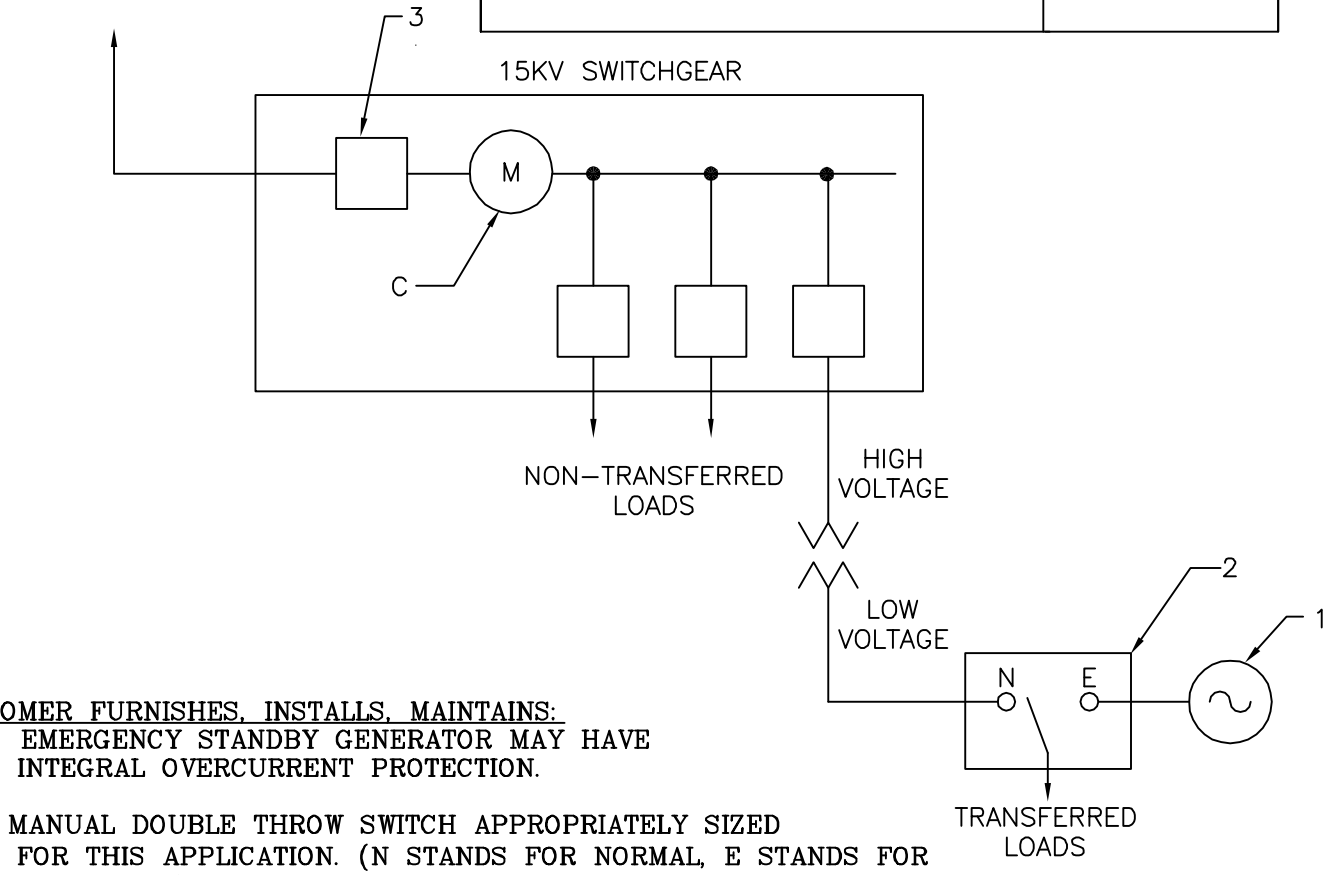
F. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER PANEL (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

G. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

REFERENCE: SKETCH #30, SKETCH #31, SKETCH #33, SKETCH #34

SKETCH #41D SHEET 1 of 1	Manual Transfer Switch Connection for Emergency (Stand-by) Generating Service	SKETCH #41D SHEET 1 of 1

VOLTAGE: 3 Phase, 4 Wire WYE 7,200/12,470V	SERVICE TYPE: Overhead Underground
AMPERAGE: 11 MVA Maximum	METER BASE LOCATION Indoor Outdoor



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.
2. MANUAL DOUBLE THROW SWITCH APPROPRIATELY SIZED FOR THIS APPLICATION. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).
3. FAULT INTERRUPTING DEVICE CAN BE CIRCUIT BREAKER OR FUSE.

NOTES:

A. INDEPENDENT ELECTRICAL INSPECTION AND WITNESS OF PERFORMANCE TEST OF MANUAL TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY THE NATIONAL ELECTRIC CODE OR ANY OTHER APPLICABLE CODE.

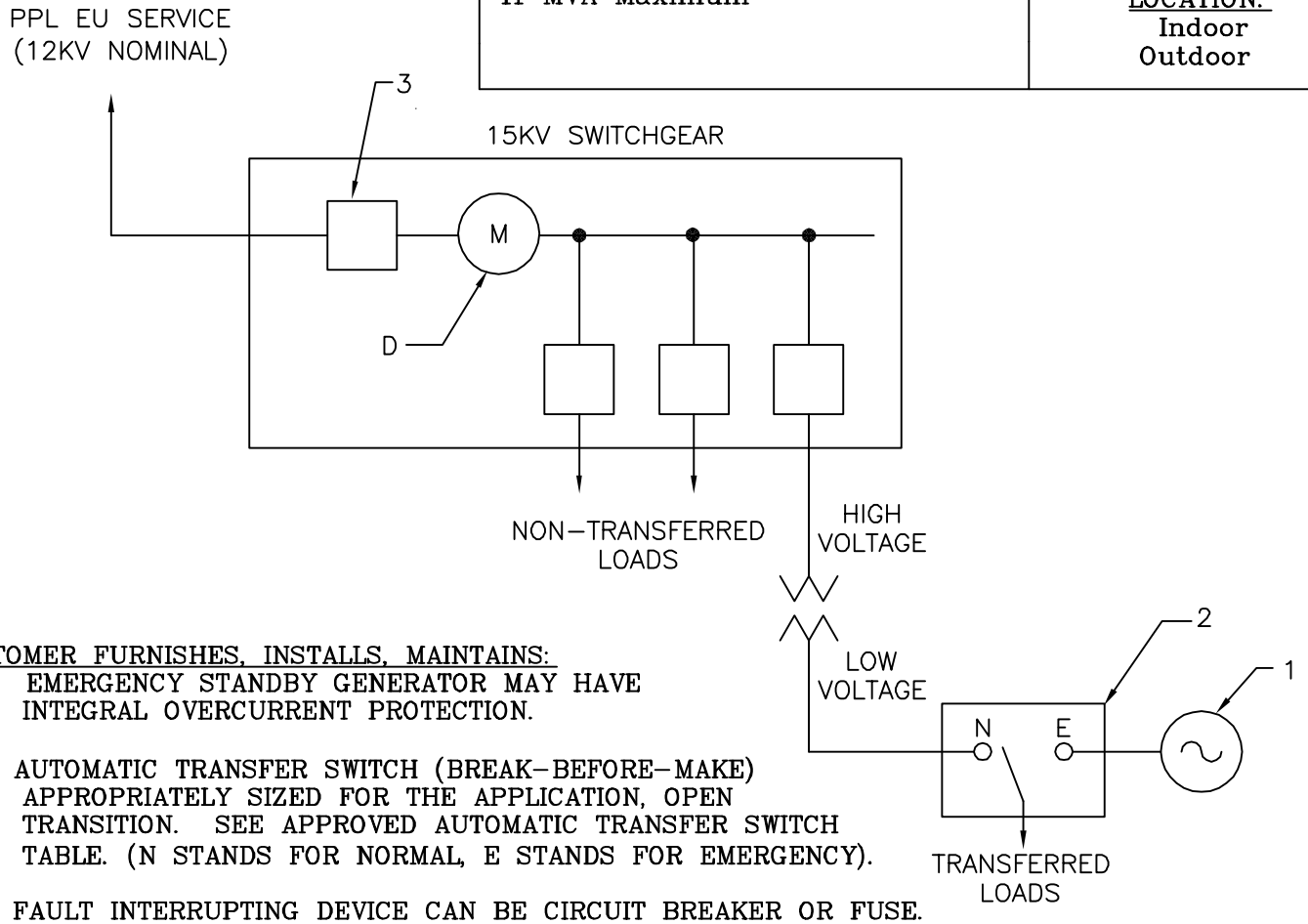
B. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER PANEL (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

C. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 12 **Date:** 7/29/11 **Engr:** MDB	REMSI_S41DP1.dwg

SKETCH #41E SHEET 1 OF 1	Automatic Transfer Switch Connection for Emergency (Stand-by) Generating Service	SKETCH #41E SHEET 1 of 1

VOLTAGE: 3 Phase, 4 Wire WYE 7,200/12,470V	SERVICE TYPE: Overhead Underground
AMPERAGE: 11 MVA Maximum	METERING EQUIPMENT LOCATION: Indoor Outdoor



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. EMERGENCY STANDBY GENERATOR MAY HAVE INTEGRAL OVERCURRENT PROTECTION.
2. AUTOMATIC TRANSFER SWITCH (BREAK-BEFORE-MAKE) APPROPRIATELY SIZED FOR THE APPLICATION, OPEN TRANSITION. SEE APPROVED AUTOMATIC TRANSFER SWITCH TABLE. (N STANDS FOR NORMAL, E STANDS FOR EMERGENCY).
3. FAULT INTERRUPTING DEVICE CAN BE CIRCUIT BREAKER OR FUSE.

NOTES:

A. FOR AUTOMATIC TRANSFER SWITCH TYPES NOT ON APPROVED AUTOMATIC TRANSFER SWITCH TABLE, PLEASE CONTACT PPL EU BEFORE PROCEEDING WITH ENGINEERING AND MATERIAL/EQUIPMENT PURCHASE.

B. INDEPENDENT ELECTRICAL INSPECTION AND WITNESS OF PERFORMANCE TEST OF AUTOMATIC TRANSFER SWITCH OPERATION RECOMMENDED BY PPL EU AND MAY BE REQUIRED BY THE NATIONAL ELECTRICAL CODE OR ANY OTHER APPLICABLE CODE.

C. PPL EU WILL INSTALL PERMANENT LABELING ON THE METER PANEL (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.

D. METERING EQUIPMENT-SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 12 REMSI_S41EP1.dwg **Date:** 7/29/11 **Engr:** MDB

SKETCH #42	Secondary Service Multi-Meter Installation for Overhead Service Drop Attachment for Mobile Home Court	SKETCH #42
SHEET 42		SHEET 42

PPL FURNISHES, INSTALLS, MAINTAINS:

1 – SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS.

2 – METERS.

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

3 – SERVICE SUPPORT, EITHER GUYED 3 INCH MINIMUM STEEL PIPE SET 5 FEET IN CONCRETE OR CLASS 5 MINIMUM WOOD POLE IN ACCORDANCE WITH SKETCH #47.

4 – SERVICE ENTRANCE CONDUCTORS, SEE RULE 5.

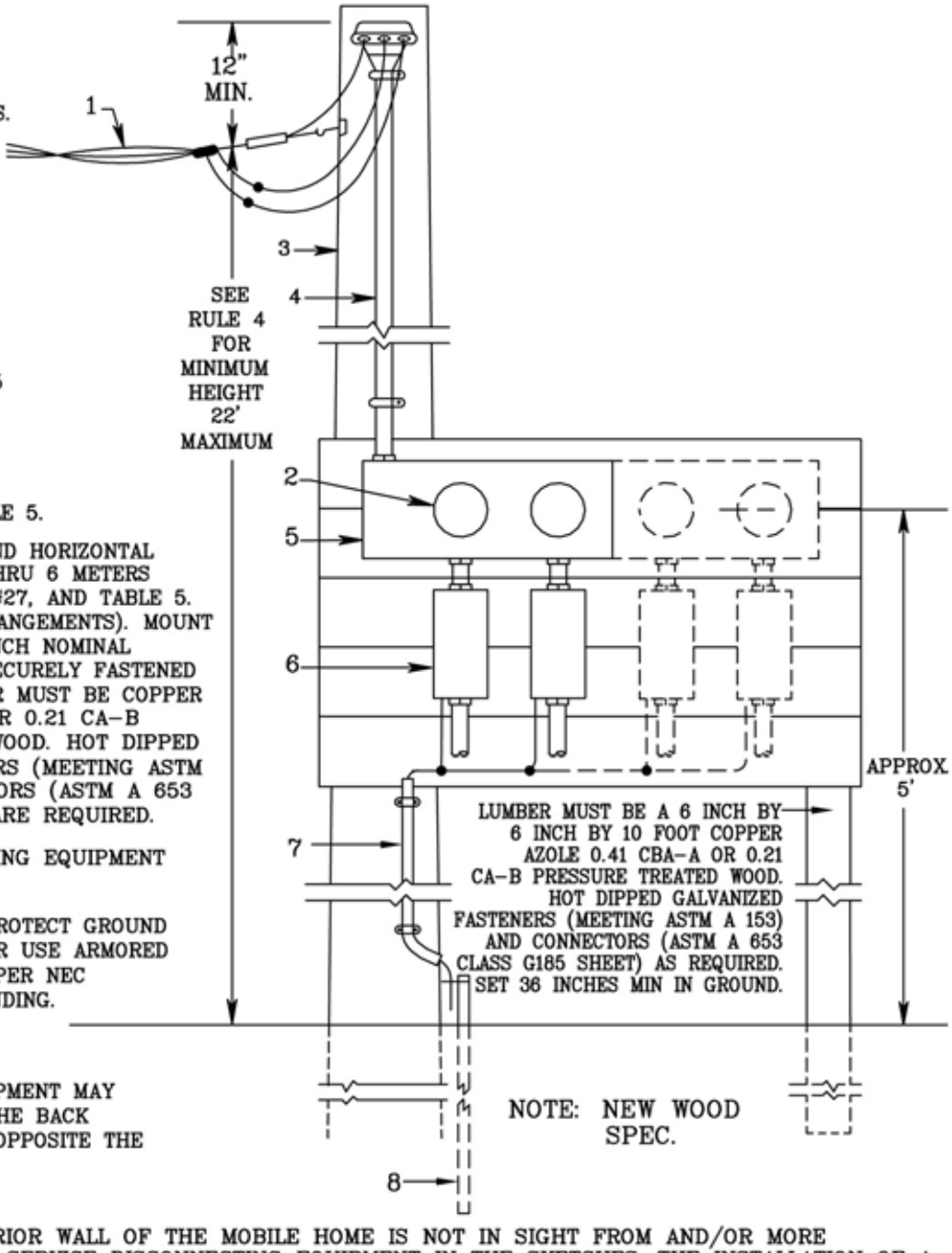
5 – SERVICE ENTRANCE AND HORIZONTAL METER BASE FOR 2 THRU 6 METERS (SEE SKETCHES #26, #27, AND TABLE 5. FOR METER BASE ARRANGEMENTS). MOUNT METER BASES ON 2 INCH NOMINAL THICKNESS LUMBER SECURELY FASTENED TO SUPPORTS. LUMBER MUST BE COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED.

6 – SERVICE DISCONNECTING EQUIPMENT (SEE NOTES).

7 – SERVICE GROUND – PROTECT GROUND WIRE WITH MOLDING OR USE ARMORED GROUND CABLE. SIZE PER NEC ARTICLE 250 – GROUNDING.

8 – GROUND ROD.

NOTE 1: SERVICE EQUIPMENT MAY ALSO BE MOUNTED ON THE BACK OF THE TREATED WOOD OPPOSITE THE METER BASE.



NOTE 2: WHEN THE EXTERIOR WALL OF THE MOBILE HOME IS NOT IN SIGHT FROM AND/OR MORE THAN 30 FEET FROM THE SERVICE DISCONNECTING EQUIPMENT IN THE SKETCHES, THE INSTALLATION OF A SECOND CIRCUIT BREAKER OR SWITCH AND FUSES IN SERIES WITH THE SHOWN SERVICE DISCONNECTING EQUIPMENT IS ACCEPTABLE. IF A POST IS USED TO MOUNT THE SECOND DISCONNECT, USE A 4 INCH BY 4 INCH CROSS SECTION COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED – 24 INCHES MINIMUM IN GROUND. THE SECOND DISCONNECT IS THE MOBILE HOME SERVICE EQUIPMENT. INSTALL THREE–WIRE UNDERGROUND CABLE BETWEEN THE TWO DISCONNECTS AND FOUR–WIRE FEEDER CABLE BETWEEN THE SECOND DISCONNECT AND THE MOBILE HOME. INSTALL GROUNDS AT BOTH DISCONNECTS.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 4, 5, 16, 27 **Date:** 7/28/04 **Engr:** RPV	REMSI_S042.dwg

SKETCH #43	Secondary Service Multi-Meter Installation for Underground Service Lateral Attachment for Mobile Home Court	SKETCH #43
SHEET 43		SHEET 43

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1 – SERVICE ENTRANCE AND HORIZONTAL METER BASE (SKETCH #26) OR HORIZONTAL AND VERTICAL SEALABLE WIRE TROUGHS AND INDIVIDUAL METER BASES (SKETCH #27) FOR 2 TO 6 METERS. SEE TABLE 5 OR 11.

2 – MINIMUM 3 INCH GALVANIZED RIGID OR INTERMEDIATE STEEL, OR GRAY SCHEDULE 40 PVC CONDUIT. BEFORE INSTALLING, CONTACT PPL TO DETERMINE SIZE REQUIRED.

3 – SERVICE GROUND – PROTECT GROUND WIRE WITH MOLDING OR USE ARMORED GROUND CABLE SIZE PER NEC ARTICLE 250 – GROUNDING.

4 – SERVICE DISCONNECTING EQUIPMENT (SEE NOTES 1 & 4 BELOW).

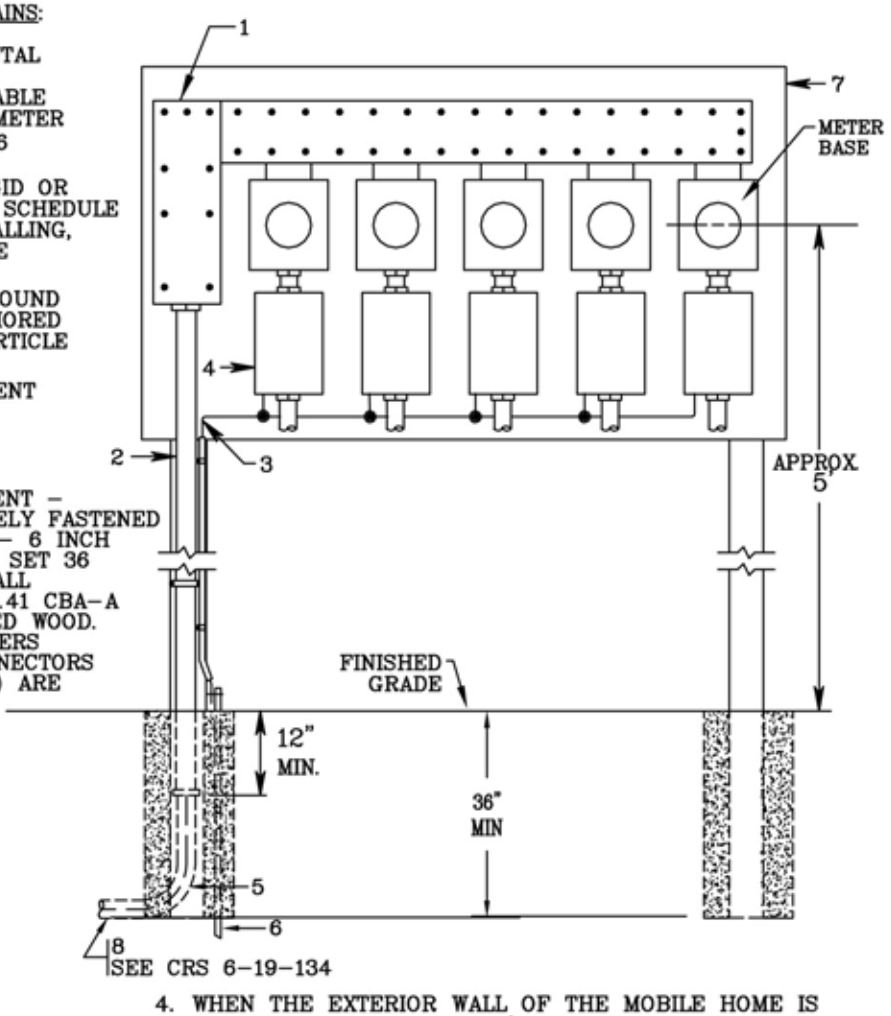
5 – 36" RADIUS SWEEP, 90° ELBOW

6 – GROUND ROD

7 – MOUNTING FOR SERVICE EQUIPMENT – 2 INCH NOMINAL LUMBER SECURELY FASTENED TO SUPPORTS CONSISTING OF 2 – 6 INCH BY 6 INCH BY 10 FOOT TIMBERS SET 36 INCHES MINIMUM IN CONCRETE. ALL LUMBER TO BE COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED.

PPL FURNISHES, INSTALLS, MAINTAINS:

8 – SERVICE LATERAL AND MAKES CONNECTION BETWEEN THE SERVICE LATERAL CABLES AND LINE SIDE TERMINALS OF THE COMMON BUS IN CUSTOMER'S HORIZONTAL METER BASE OR THE SERVICE CONDUCTORS IN CUSTOMER'S VERTICAL WIRE TROUGH.



NOTES (NOT SHOWN):

1. SERVICE EQUIPMENT MAY ALSO BE MOUNTED ON THE BACK OF THE TREATED WOOD OPPOSITE THE WIRE TROUGH.

2. IN HORIZONTAL WIRE TROUGHS, ALL CONNECTIONS FROM THE COMMON BUS IN THE WIRE TROUGH TO METER BASES ARE THE RESPONSIBILITY OF THE CUSTOMER.

3. IN WIRE TROUGH INSTALLATIONS, CUSTOMER MAKES ALL TAPS TO INDIVIDUAL METER BASES FROM CUSTOMER'S BUS.

4. WHEN THE EXTERIOR WALL OF THE MOBILE HOME IS NOT IN SIGHT FROM AND/OR MORE THAN 30 FEET FROM THE SERVICE DISCONNECTING EQUIPMENT SHOWN IN THE SKETCHES, THE INSTALLATIION OF A SECOND CIRCUIT BREAKER OR SWITCH AND FUSES IN SERIES WITH THE SERVICE DISCONNECTING EQUIPMENT IS ACCEPTABLE. IF A POST IS USED TO MOUNT THE SECOND DISCONNECT, USE A 4 INCH BY 4 INCH CROSS SECTION COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED – SET 36 INCHES MINIMUM IN GROUND. THE SECOND DISCONNECT IS THE MOBILE HOME SERVICE EQUIPMENT. INSTALL THREE–WIRE UNDERGROUND CABLE BETWEEN THE TWO DISCONNECTS AND FOUR–WIRE FEEDER CABLE BETWEEN THE SECOND DISCONNECT AND THE MOBILE HOME. INSTALL GROUNDS AT BOTH DISCONNECTS.

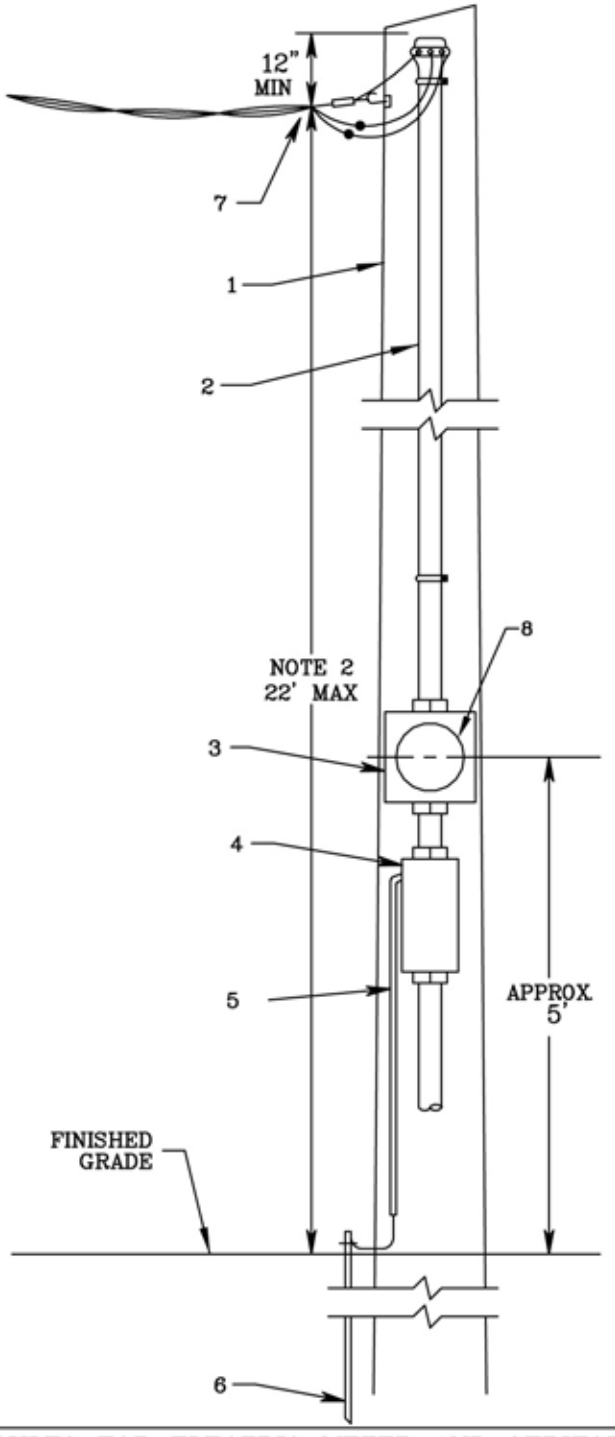
5. CUSTOMER EXCAVATES, BACKFILLS AND RESTORES SURFACE OF TRENCH.

REFERENCE: CRS 6-19-134

REMSI_S043.dwg

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 5, 6, 16, 27 **Date:** 7/28/04 **Engr:** RPV

SKETCH #44	Service Drop Attachment to Customer-Owned Service and Meter Pole for a Mobile Home Single Phase 120/240 Volts – Self-Contained Meter	SKETCH #44
SHEET 44		SHEET 44



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1 – SERVICE SUPPORT – EITHER GUYED 3 INCH – MINIMUM STEEL PIPE SET 5 FEET IN CONCRETE OR CLASS 5 MINIMUM WOOD POLE IN ACCORDANCE WITH SKETCH 47.

2 – SERVICE ENTRANCE CONDUCTORS, SEE RULE 5.

3 – METER BASE. SEE TABLE 1.

4 – SERVICE DISCONNECTING EQUIPMENT (SEE NOTE 1).

5 – SERVICE GROUND – PROTECT GROUND WIRE WITH MOLDING OR USE ARMORED GROUND CABLE. SIZE PER NEC ARTICLE 250 – GROUNDING.

6 – GROUND ROD

PPL FURNISHES, INSTALLS, MAINTAINS:

7 – SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS.

8 – METER

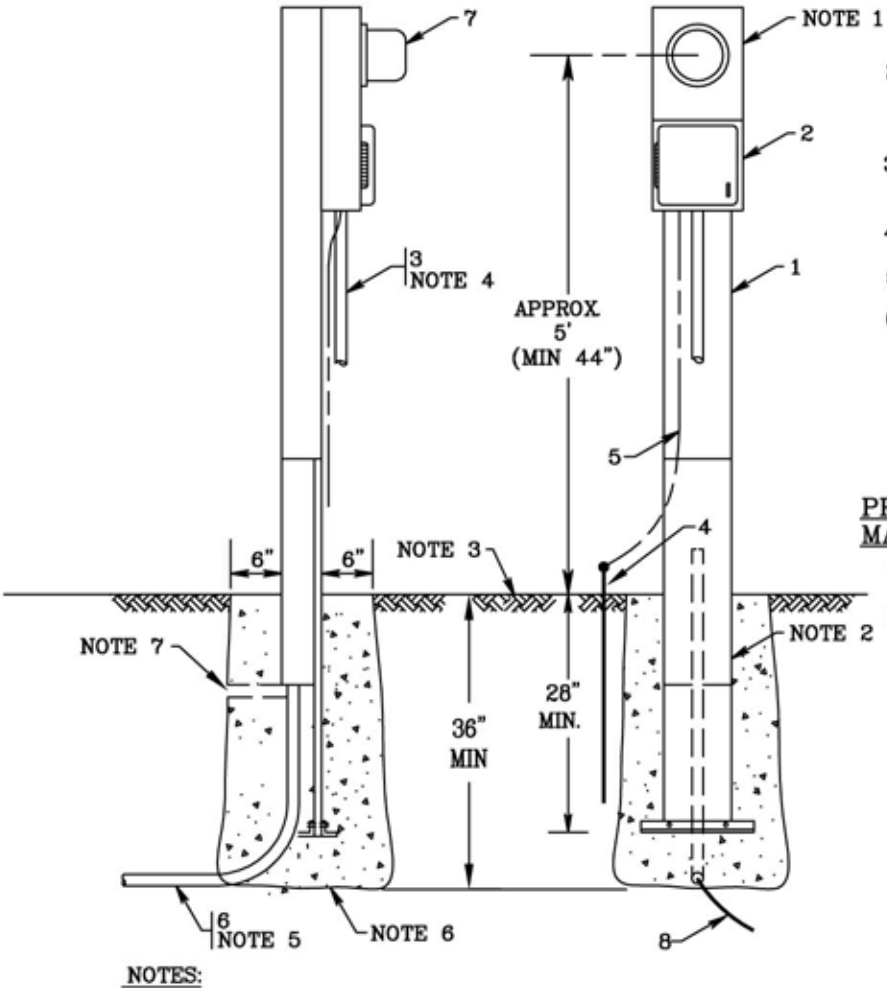
NOTES:

1. WHEN THE EXTERIOR WALL OF THE MOBILE HOME IS NOT IN SIGHT FROM AND/OR MORE THAN 30 FEET FROM THE SERVICE DISCONNECTING EQUIPMENT SHOWN IN THE SKETCHES, THE INSTALLATION OF A SECOND CIRCUIT BREAKER OR SWITCH AND FUSES IN SERIES WITH THE SERVICE DISCONNECTING EQUIPMENT IS ACCEPTABLE. IF A POST IS USED TO MOUNT THE SECOND DISCONNECT, USE A 4 INCH BY 4 INCH CROSS SECTION COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD OR EQUIVALENT SET 24" MINIMUM IN GROUND. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED. THE SECOND DISCONNECT IS THE MOBILE HOME SERVICE EQUIPMENT. INSTALL THREE–WIRE UNDERGROUND CABLE BETWEEN THE TWO DISCONNECTS AND FOUR–WIRE FEEDER CABLE BETWEEN THE SECOND DISCONNECT AND THE MOBILE HOME. INSTALL GROUNDS AT BOTH DISCONNECTS.

2. SEE RULE 4 FOR SERVICE DROP CLEARANCES.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 4, 5, 27 **Date:** 6/25/04 **Engr:** RPV	REMSI_S044.dwg

SKETCH #45	Typical Arrangement of Outdoor Mobile Home Pedestal Underground Service Lateral Single Phase, 3 Wire, 120/208 V or 120/240 V	SKETCH #45
SHEET 45		SHEET 45



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1 – MOBILE HOME METER PEDESTAL (SEE TABLE 10 FOR APPROVED DEVICES)

2 – SERVICE SWITCH (ALL BREAKERS SHALL BE 10,000 A.I.C. MINIMUM)

3 – SERVICE ENTRANCE CONDUCTORS

4 – GROUND ROD

5 – SERVICE GROUND

6 – 3" MIN 90° ELBOW WITH 36" SWEEP – GRAY PVC SCHEDULE 40 OR GALVANIZED STEEL

PPL FURNISHES, INSTALLS, MAINTAINS:

7 – METER

8 – SERVICE CONDUCTORS

NOTES:

1 – METER BASE LUGS SHALL ACCEPT #2 AWG TO 350 KCMIL CONDUCTORS.

2 – THE BASE OF THE PEDESTAL TO 2 INCHES ABOVE GROUND LEVEL SHALL BE FACTORY COATED BOTH INSIDE AND OUTSIDE WITH BITUMASTIC OR EQUIVALENT.

3 – EARTH BACKFILL AROUND PEDESTAL SHALL BE CAREFULLY AND THOROUGHLY COMPACTED.

4 – WHEN CONDUIT IS REQUIRED FOR SERVICE ENTRANCE CONDUCTORS, INSTALL CONDUIT SUPPORTS 36 INCHES BELOW METER BASE.

5 – EXTEND ELBOW INTO PEDESTAL AND OUT THROUGH CONCRETE.

6 – INSTALL PEDESTAL IN CONCRETE FOUNDATION AS SHOWN.

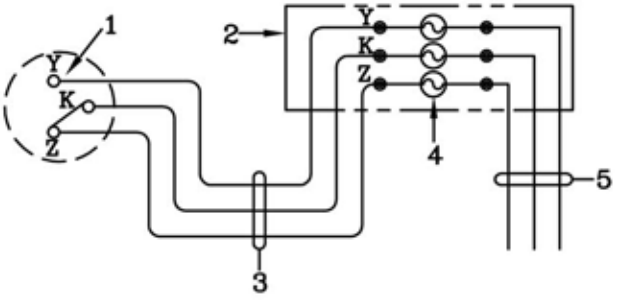
7 – PROVIDE HOLE IN CONCRETE FOR WATER DRAINAGE.

*REFERENCE CRS 6-19-133, CRS 6-19-134

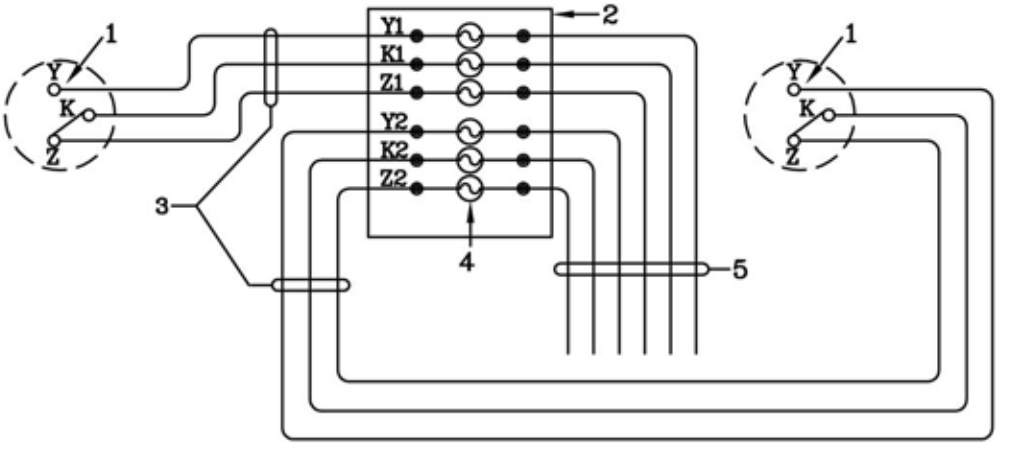
RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 5, 6, 27 **Date:** 11/04/04 **Engr:** RPV	REMSI_S045_R1.dwg

SKETCH #46	Wiring Diagram To Provide Demand Pulses for Customer	SKETCH #46
SHEET 46		SHEET 46

ONE METER INSTALLATION



TWO METER INSTALLATION



1. CONTACT OPTION BOARD IN PPL METER. MAXIMUM OUTPUT CONTACT RATING:
   0.05 AMPS, 120 VOLTS AC
   0.05 AMPS, 150 VOLTS DC

2. CONNECTION TIE BOX PROVIDED AND INSTALLED BY PPL.

3. DEMAND PULSE WIRES BY PPL (SIX FOOT MAXIMUM LENGTH).

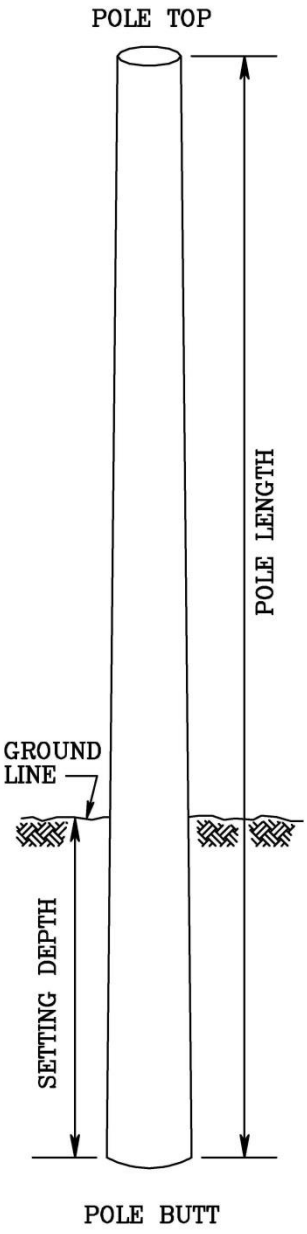
4. THREE (SIX) POLE FUSED TERMINAL BLOCK BY PPL (ONE AMPERE FUSES). UPON INSTALLATION, THE CUSTOMER WILL BE SOLELY RESPONSIBLE FOR MAINTENANCE AND REPLACEMENT OF THE ONE (1) AMPERE FUSES.

5. CUSTOMER PULSE CABLE – SUPPLIED, INSTALLED, AND CONNECTED BY CUSTOMER.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 25A **Date:** 3/11/05 **Engr:** RGR	REMSI_S046_R0.dwg

Sketch #47 Customer wood pole

Dimensional details in accordance with American National Standards Institute (ANSI) 05.1



Minimum Pole Top Circumference, All Wood Species

ANSI Class 1	ANSI Class 2	ANSI Class 3	ANSI Class 4	ANSI Class 5
27 Inches	25 Inches	23 Inches	21 Inches	19 Inches

For Wood Species Douglas Fir And Southern Yellow Pine:

Pole Length (Feet)	Setting Depth (Feet)	Minimum Circumference At 6 Feet From Pole Butt (Inches)				
		ANSI Class 1	ANSI Class 2	ANSI Class 3	ANSI Class 4	ANSI Class 5
20	4.0	-	-	-	25.0	23.0
25	4.5	33.5	31.5	29.5	27.5	25.5
30	5.0	36.5	34.0	32.0	29.5	27.5
35	5.5	39.0	36.5	34.0	31.5	29.0
40	6.0	41.0	38.5	36.0	33.5	31.0
45	6.5	43.0	40.5	37.5	35.0	32.0
50	7.0	45.0	42.0	39.0	36.5	34.0

PRESERVATION

To aid in preventing premature deterioration, company recommends all wood poles be treated full length by a pressure process approved by the American Wood Preservers Association.

TIMBER OPTION

A pole may be replaced by a minimum 6" x 6" timber if the following conditions are met. Use the same setting depth as for a wood pole.

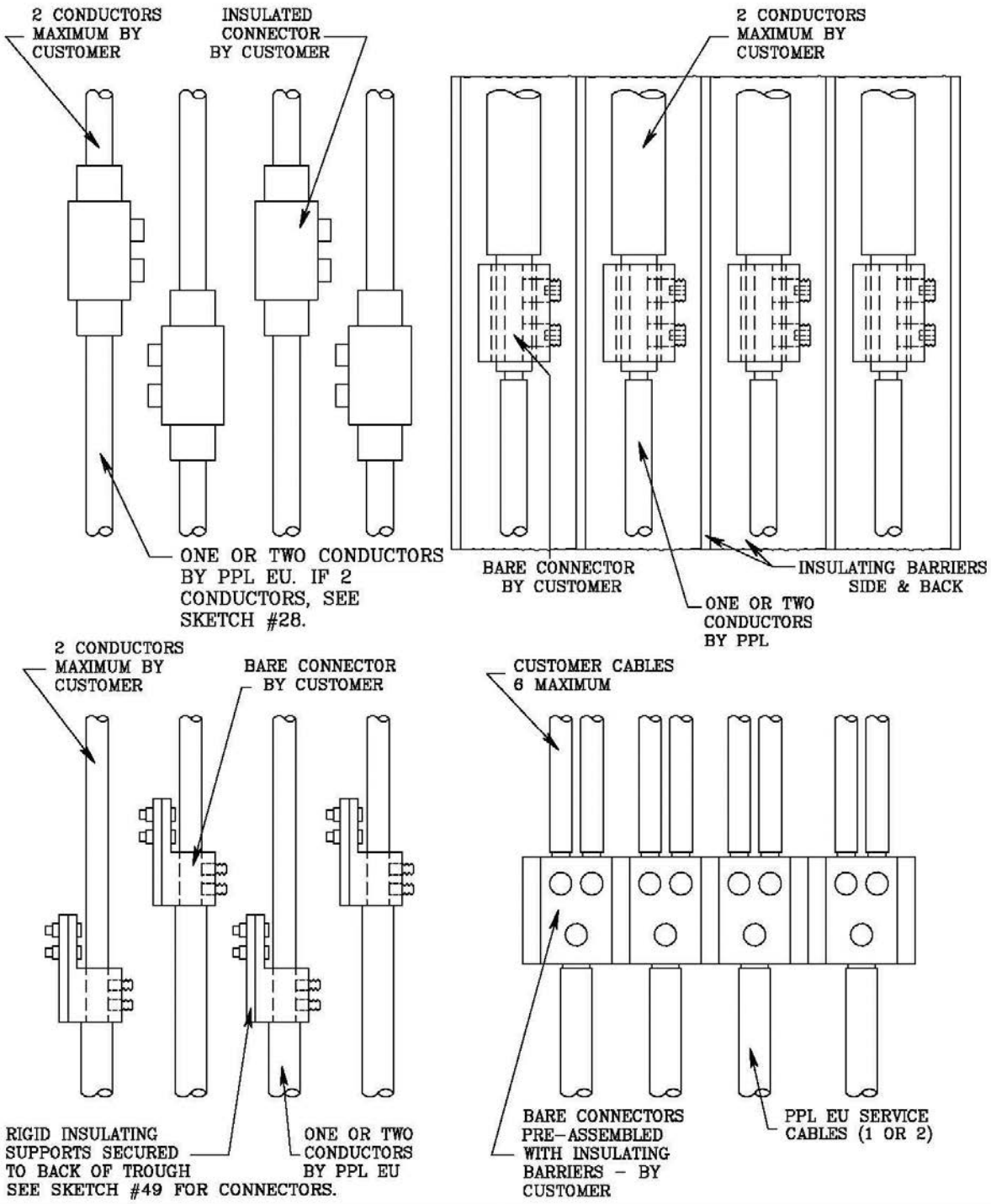
1. The wood species must be either Douglas Fir or Southern Yellow Pine and must be full length treated by a pressure process approved by American Wood Preservers Association.
2. Cannot be less than 20 feet long or more than 25 feet long.
3. The service size must be #4/0 triplex or smaller and 100 feet or less in length.
4. Cannot cross over a public road.
5. 6" x 6" timber setting depth for a 20 ft. Timber is 4.0 ft. A 25 ft. Timber setting depth is 4.5 ft.

POLE INSTALLATION

Customer shall install the pole at the setting depth specified above and carefully tamp the backfill earth and stone to stabilize the pole. Where the pole supports unguyed conductor tensions, the pole shall be further stabilized (keyed). The company will provide details of acceptable keying methods. Customer shall install the pole at a location designated by the company. The pole shall be accessible to company bucket trucks.

REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	10/12/12	-	JPM	-	
1	3/21/16	NAP	NAP	-	RULES: 4A, 6, 7, 8
2	8/15/16	NAP	NAP	-	

Sketch #48 Vertical sealable wire trough, typical method of providing single point of connection, multiple service entrance conductors



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 5 REMSI_S048_R1.dwg **Date:** 7/18/16 **Engr:** NAP

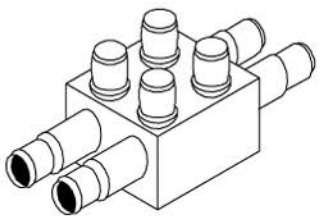
Typical Connectors to be Provided by the Customer for Serving a Single Point of Connection for Multiple Enclosed Service Entrance Conductors

SKETCH #49
SHEET 1 OF 2

NOT TO SCALE

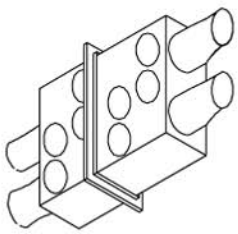
INSULATED TYPE DISTRIBUTION BLOCK

I-1



NO. OF CNDCT.	CNDCT. RANGE KC MIL
4	750–1/0

I-2

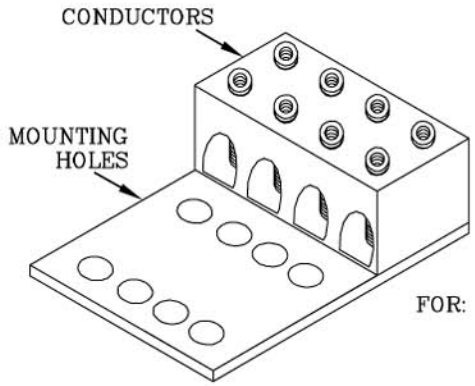


DESCRIPTION	CABLE RANGE KCMIL	INSULATION OUTER DIAMETER	
		MIN.	MAX.
4 POSITION	500–#4	350 KCMIL.	1.10 IN.

BARE TYPE DISTRIBUTION BLOCK

B-1

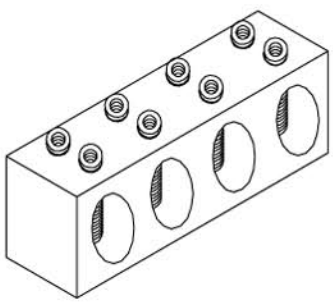
THESE UNITS MAY BE USED FOR UNDERGROUND INSTALLATIONS ONLY WHEN INSULATING BARRIERS ISOLATE THE BARE CONNECTORS FROM OTHER PHASES, NEUTRAL, AND GROUND OR WHEN THE CONNECTORS ARE BOLTED TO A RIGID INSULATOR



FOR: SKETCH 8B
SKETCH 27
SKETCH 28
SKETCH 48

NO. OF MTG. HOLES	NO. OF CNDCT.	CNDCT. RANGE KCMIL
6	4	250–6
6	4	350–6
6	4	500–2
8	4	750–1/0
10	6	750–1/0
8	4	1000–350
12	6	1000–350

B-2



NO. OF CNDCT.	CNDCT . RANGE KCMIL
4	750–1/0
4	1000–350

REFERENCE: SKETCH 8B, SKETCH 27, SKETCH 28, SKETCH 48

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5

Date: 8/12/11 **Engr:** MDB

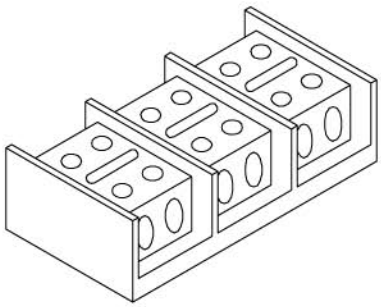
REMSI_S049P1.dwg

Typical Connectors to be Provided by the Customer
for Serving a Single Point of Connection
for Multiple Enclosed Service Entrance Conductors

SKETCH #49
SHEET 2 OF 2

NOT TO SCALE

PRE-ASSEMBLED DISTRIBUTION BLOCK WITH INSULATING BARRIERS



CONNECTOR		PPL EU		CUSTOMER		NO. OF POLES
PPL EU (LINE SIDE)	CUSTOMER (LOAD SIDE)	WIRE RANGE KCMIL	OPENING PER CIRCUIT	WIRE RANGE KCMIL	OPENING PER CIRCUIT	
		350–#4	1	2/0–#12	2	2
		350–#4	1	2/0–#12	2	3
		500–#4	1	350–#4	2	2
		500–#4	1	350–#4	2	3
		1000–250	1	350–#4	2	2
		1000–250	1	350–#4	2	3
		1000–250	1	500–#4	2	2
		1000–250	1	500–#4	2	3
		2/0–#12	2	2/0–#12	2	2
		2/0–#12	2	2/0–#12	2	3
		350–#4	2	350–#4	2	2
		350–#4	2	350–#4	2	3
		500–#4	2	500–#4	2	2
		500–#4	2	500–#4	2	3
		500–#4	2	2/0–#12	6	2
		500–#4	2	2/0–#12	6	3
		350–#4	2	2/0–#12	6	2
		350–#4	2	2/0–#12	6	3
		1000–250	1	2/0–#12	6	2
		1000–250	1	2/0–#12	6	3

NOTES: (APPLY TO INSULATED, BARE, AND PRE–ASSEMBLED DISTRIBUTION BLOCKS):

A. TYPICAL MANUFACTURERS NUMBERS ARE SHOWN. EQUIVALENT CONNECTORS FROM OTHER MANUFACTURERS MAY BE USED.

B. ELECTRIC SUPPLY HOUSES MAY NOT STOCK. ALLOW TIME TO ORDER CONNECTORS FROM MANUFACTURER.

C. ONLY ONE CONDUCTOR PER POSITION PERMITTED.

D. SEE TABLE "APPROVED DISTRIBUTION CONNECTOR BLOCK TABLE FOR SKETCH 49" FOR LISTS OF PPL EU APPROVED MANUFACTURERS.

REFERENCE: SKETCH 8B, SKETCH 27, SKETCH 28, SKETCH 48

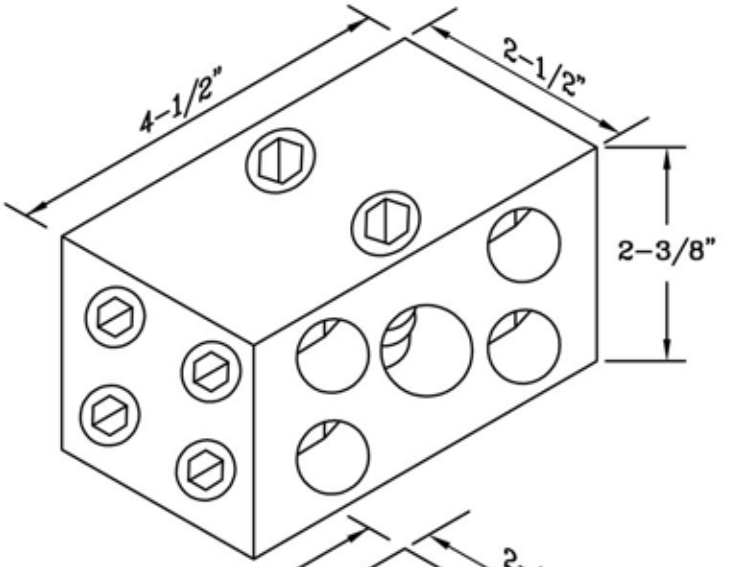
RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5

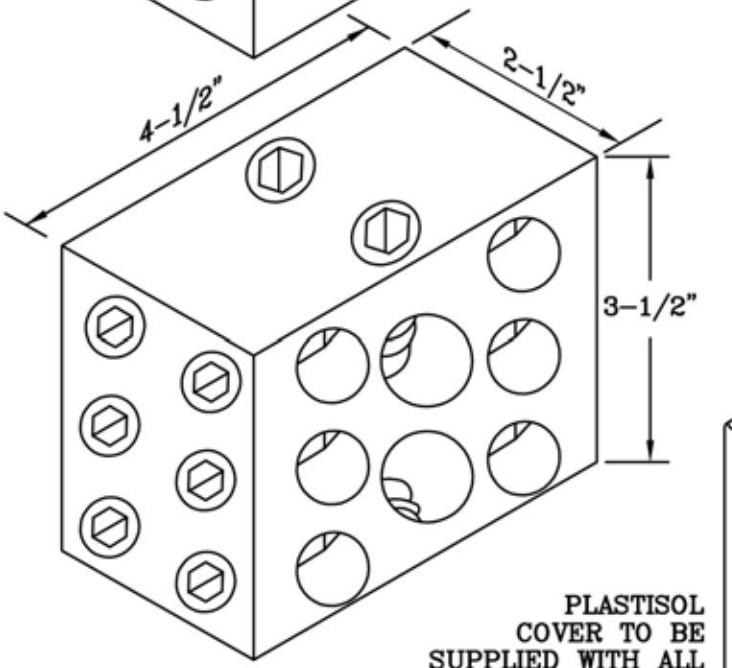
Date: 8/12/11 **Engr:** MDB

SKETCH #49A	Typical Connector to be Supplied by the Customer for Providing a Single Point of Connection for Multiple Overhead Service Entrance Conductors	SKETCH #49A
SHEET 49A		SHEET 49A



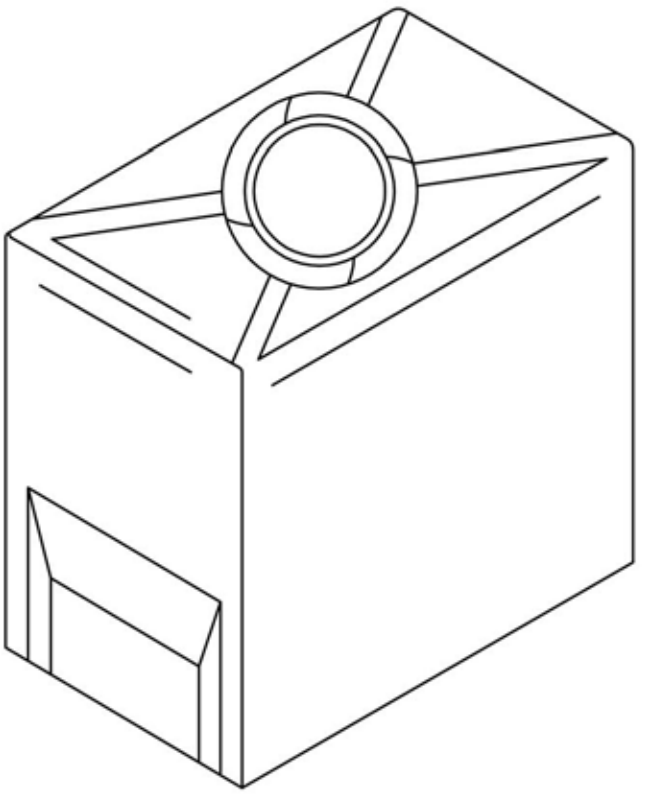
SINGLE MAIN 750-1/0
FOUR TAPS 500-2

*UTILCO UGD-41-750-500
*ILSCO UGD-41-750-500



DUAL MAIN 750-1/0
SIX TAPS 500-2

*UTILCO UGD6-750-500
*ILSCO UGD6-750-500
*ALCON 2PA26-750-500



PLASTISOL COVER TO BE SUPPLIED WITH ALL CONNECTORS.

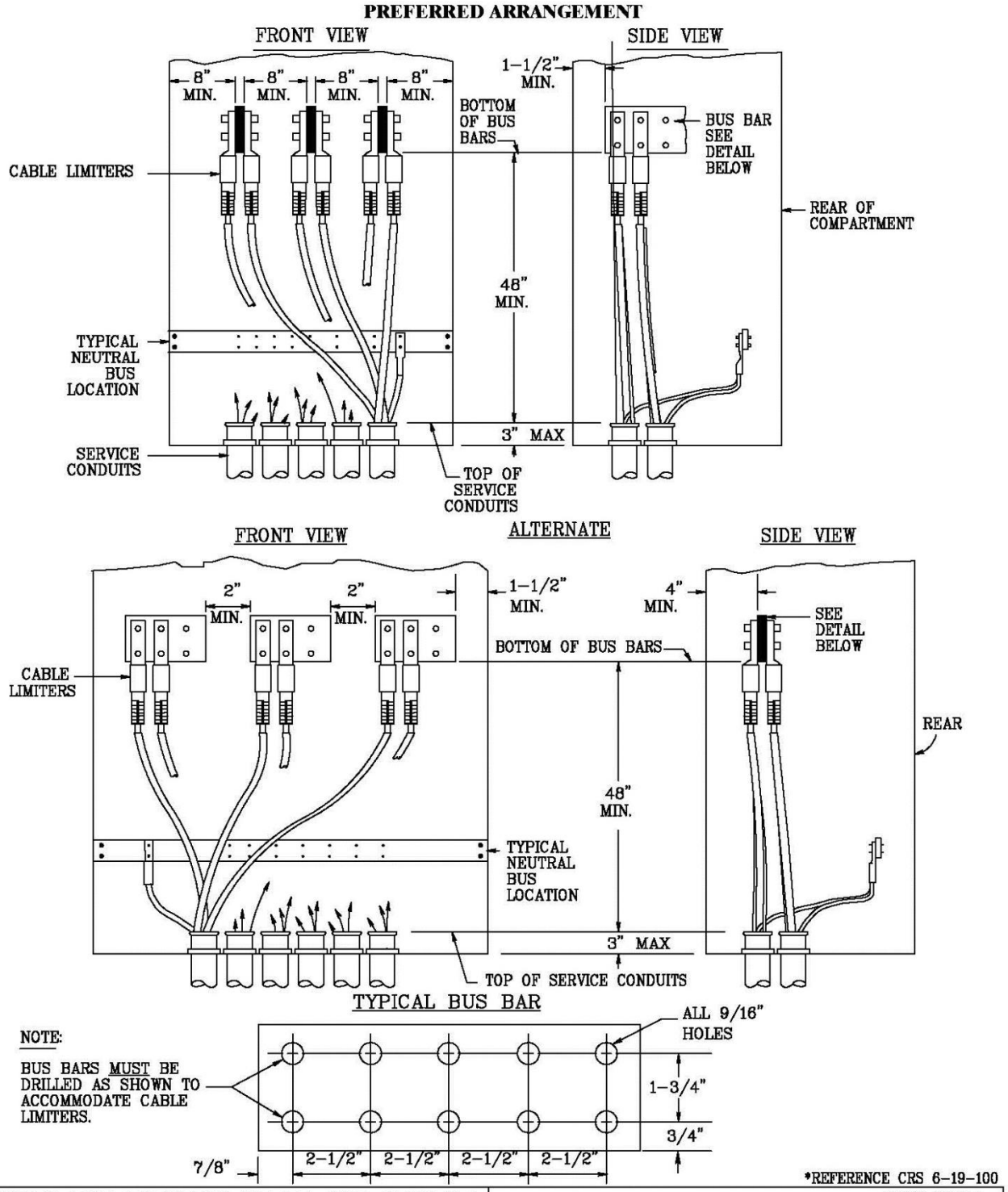
*UTILCO-CMA

NOTES:

1. TYPICAL MANUFACTURER'S NUMBERS ARE SHOWN. EQUIVALENT CONNECTORS FROM OTHER MANUFACTURERS MAY BE USED.
2. FOR SKETCH 8B.
3. ELECTRIC SUPPLY HOUSES MAY NOT STOCK. ALLOW TIME TO ORDER CONNECTORS FROM MANUFACTURER.

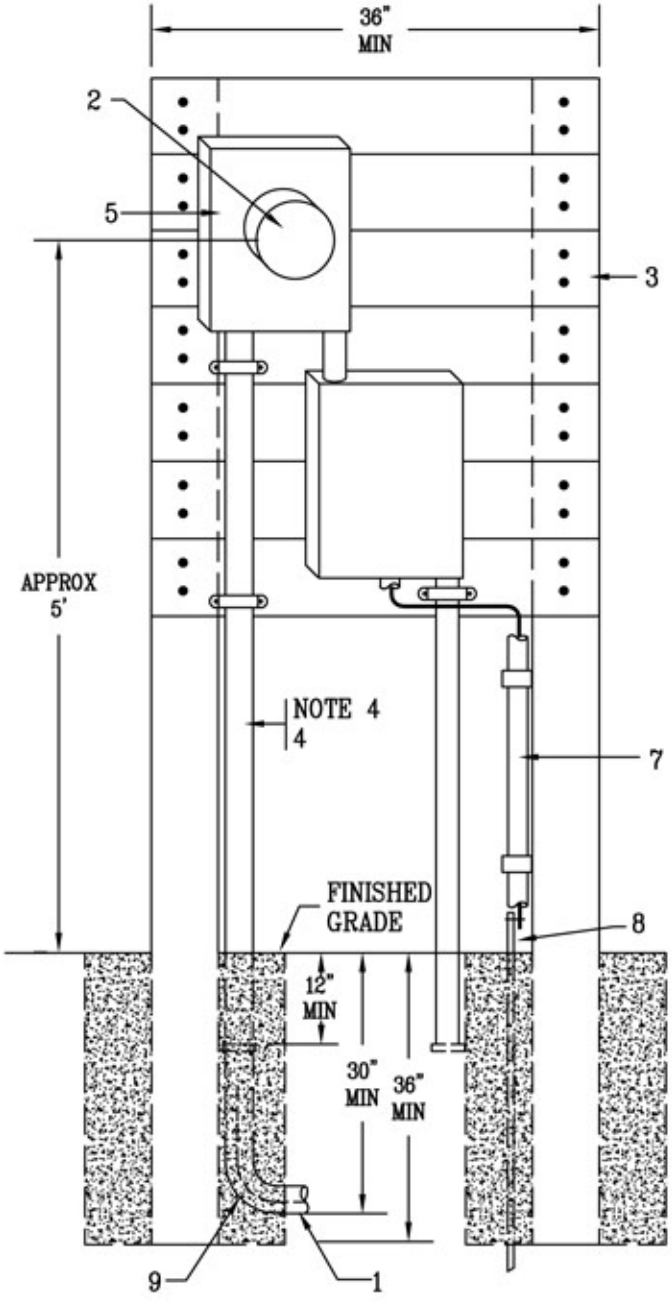
RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** REMSI_S049A_R1.dwg **Date:** 2/22/05 **Engr:** RGR

Sketch #50 Underground 3 phase, 4 wire, 480/277 volt, service entrance arrangements



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 15 **Date:** 7/18/16 **Engr:** NAP

SKETCH 53	ARRANGEMENT OF WOOD POST PEDESTAL UNDERGROUND SERVICE LATERAL FROM OH OR UG DISTRIBUTION SINGLE PHASE , 3 WIRE, 120/208 OR 120/240 VOLTS	SKETCH 53
Sheet 1		Sheet 1



PPL FURNISHES, INSTALLS, MAINTAINS:

1 – SERVICE LATERAL AND MAKES CONNECTION BETWEEN SERVICE LATERAL CABLES AND LINE SIDE TERMINALS OF THE METER BASE(S).

2 – METER.

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

3 – MOUNTING FOR SERVICE EQUIPMENT – 2 INCH NOMINAL LUMBER SECURELY FASTENED TO SUPPORTS CONSISTING OF 2 – 6 INCH BY 6 INCH BY 10 FOOT TIMBERS SET 36 INCHES MINIMUM IN CONCRETE. ALL LUMBER TO BE COPPER AZOLE 0.41 CBA–A OR 0.21 CA–B PRESSURE TREATED WOOD. HOT DIPPED GALVANIZED FASTENERS (MEETING ASTM A 153) AND CONNECTORS (ASTM A 653 CLASS G185 SHEET) ARE REQUIRED.

4 – SERVICE LATERAL CONDUIT, CONNECTORS AND CLAMPS – THE MINIMUM SIZE CONDUIT IS 3 INCH THREADED GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT WITH BUSHING, OR GRAY SCHEDULE 40 PVC CONDUIT. CONTACT PPL BEFORE INSTALLING TO DETERMINE PROPER SIZE.

5 – METER BASE – SEE TABLES 2 OR 11 FOR LIST OF APPROVED DEVICES.

6 – SERVICE DISCONNECTING EQUIPMENT – MUST MEET AMPACITY AND INSTALLATION REQUIREMENTS OF THE NATIONAL ELECTRICAL (NEC) AND ANY LOCAL MUNICIPAL CODE REQUIREMENTS.

7 – SERVICE GROUND – PROTECT GROUND WIRE WITH MOLDING OR USE ARMORED GROUND CABLE SIZE PER NEC ARTICLE 250 – GROUNDING.

8 – GROUND ROD.

9 – 36" RADIUS SWEEP, 90° ELBOW

NOTES:

1. TWO SINGLE METER BASES MAY BE INSTALLED BACK TO BACK ON THE SERVICE SUPPORT.
2. SERVICE DISCONNECTING EQUIPMENT MAY BE INSTALLED ON BACK OF SERVICE SUPPORT.
3. EXCAVATE, PROVIDE SELECT BACKFILL, AND BACKFILL TRENCH PER CRS–6–19–134.
4. SERVICE LATERAL CONDUIT MUST BE INSTALLED DIRECTLY INTO THE METER BASE. BENDS OR LB'S MAY BE INSTALLED IN THE CONDUIT BETWEEN THE METER BASE AND SERVICE DISCONNECTING EQUIPMENT.

*REFERENCE CRS 6–19–134 AC

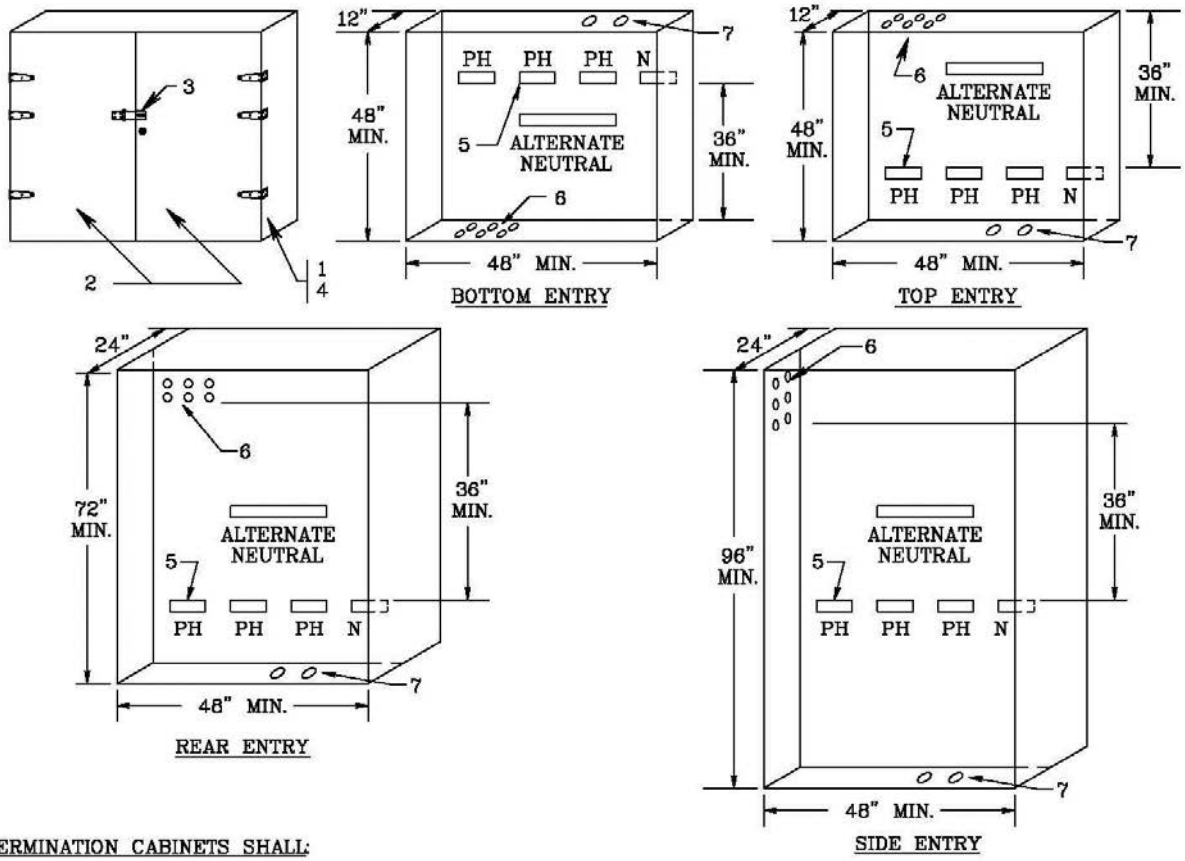
REV	DATE	APPROVED		
		Drafter	Sponsor	Review
0	7/15	RRC	MP	

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITES CORPORATION

RULES: 5, 6, 27

Sketch #54 Termination cabinet, all service entries, single phase or three phase, 120/208 volts or 120/240 volts, with 2 to 6 sets of cable



TERMINATION CABINETS SHALL:

1 – BE CONSTRUCTED OF GALVANNEALED STEEL OR GALVANIZED STEEL WITH GRAY ENAMEL FINISH OR COLD ROLLED STEEL WITH A UL RECOGNIZED GRAY POWDER COAT FINISH – MINIMUM #14 GAUGE STEEL.

2 – HAVE TWO HINGED DOORS WITH INTERNAL STIFFENERS AND WIND LOCKS. HINGES AND HINGE PINS MUST BE NON-REMOVABLE.

3 – HAVE A HASP WHICH WILL ACCOMMODATE AT LEAST 1/4 INCH DIAMETER LOCK. A HANDLE KEY LOCK IS NOT ALLOWED.

4 – BE TAMPERPROOF AND, IF INSTALLED OUTDOORS, BE WEATHER RESISTANT AND RAINTIGHT.

5 – HAVE SETSCREW TYPE TERMINALS ACCEPTING UP TO 750 KCMIL CABLE. NUMBER OF TERMINALS PER PHASE AVAILABLE TO PPL SHALL EQUAL NUMBER OF SERVICE CONDUITS (INCLUDING ANY SPARES). IF COMPRESSION TYPE CABLE-TO-FLAT CONNECTORS SUPPLIED, THE LUGS FOR PPL MUST SHOW THE BURNDY DIE INDEX (SEE SKETCH 49). TERMINAL CLEARANCES: MINIMUM PHASE-TO-PHASE IS 2 INCHES, MINIMUM PHASE TO GROUND IS 1 INCH, MINIMUM PHASE TO CABINET IS 1.5 INCHES.

6 – GROUP SERVICE CONDUITS FOR PPL SERVICE CABLES. CONDUIT DIAMETERS ARE 3 OR 4 INCHES. CONDUIT TO PROTRUDE NOT MORE THAN 2 INCHES INTO THE CABINET.

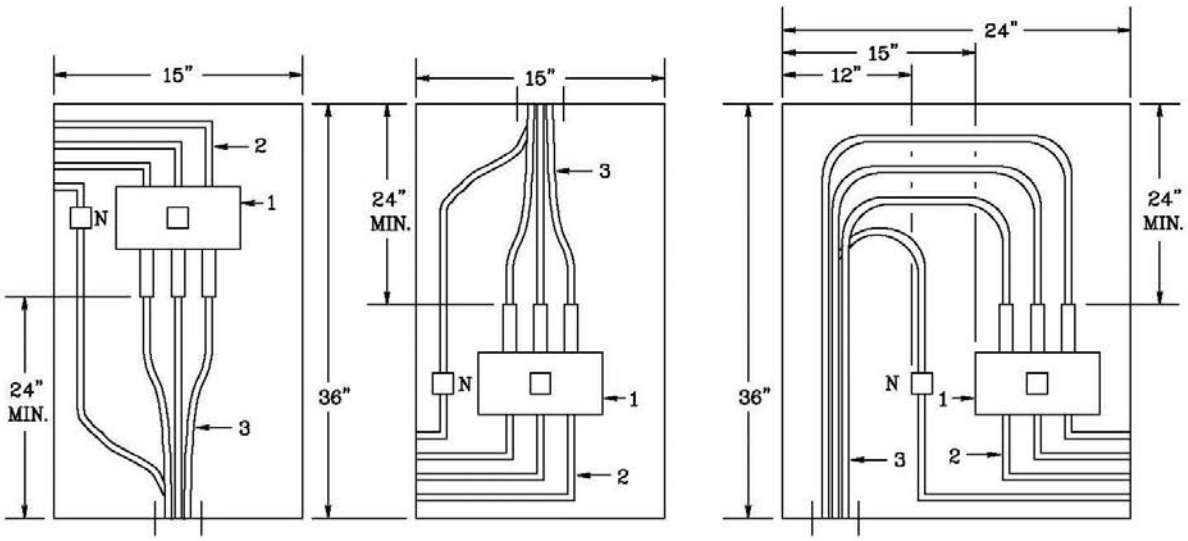
7 – HAVE ADEQUATE CONDUITS FOR CUSTOMER'S CABLES TO DISCONNECT DEVICE.

NOTE: WIRES TO PPL TERMINALS AND WIRES TO CUSTOMER'S TERMINALS SHALL NOT INTERMINGLE. PPL CABLES AND TERMINALS MUST REMAIN ACCESSIBLE TO FACILITATE REPLACEMENT OF FAILED CABLES.

REFERENCE: CRS 6-19-100

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 2, 5, 6, 12, 13, 15, 16, 21 REMSI_S054_R1.dwg **Date:** 7/18/16 **Engr:** NAP

Sketch #54a Termination cabinet, all service entries, single phase or three phase, 120/208 volts or 120/240 volts or 277/480V, 1 cable set



BOTTOM ENTRY
BOTTOM TERMINALS

TOP ENTRY
TOP TERMINALS

BOTTOM ENTRY
TOP TERMINALS

1 – CUSTOMER MAIN DISCONNECT OR TERMINAL BLOCK – SUITABLE FOR 750 KCMIL CABLE

2 – CUSTOMER BUS OR CABLES SHALL NOT INTERFERE WITH PPL CABLES & MUST MEET MINIMUM BENDING RADIUS REQUIREMENTS AS DESCRIBED IN NEC ARTICLE 300 – WIRING METHODS.

3 – PPL SERVICE CABLES

NOTES:

A. TERMINATION CABINETS SHALL:

- BE CONSTRUCTED OF GALVANNEALED STEEL OR EQUIVALENT – MINIMUM #16 GAUGE STEEL.
- HAVE A HASP WHICH WILL ACCOMMODATE AT LEAST 1/4 INCH DIAMETER LOCK.
- BE WEATHER RESISTANT, RAINTIGHT, AND TAMPERPROOF IF INSTALLED OUTDOORS.
- HAVE SETSCREW TYPE TERMINALS ACCEPTING UP TO 750 KCMIL CABLE. IF COMPRESSION TYPE CABLE-TO-FLAT CONNECTORS SUPPLIED, THE LUGS FOR PPL MUST SHOW THE BURNDY DIE INDEX. TERMINAL CLEARANCE: MINIMUM PHASE-TO-PHASE – 2 INCHES. MINIMUM PHASE-TO-GROUND – 1 INCH. MINIMUM PHASE-TO-CABINET – 1.5 INCHES.

B. WIRES TO PPL TERMINALS AND WIRES TO CUSTOMER'S TERMINALS SHALL NOT INTERFERE WITH PPL CABLES & MUST MEET MINIMUM BENDING RADIUS REQUIREMENTS AS DESCRIBED IN NEC ARTICLE 300 – WIRING METHODS.

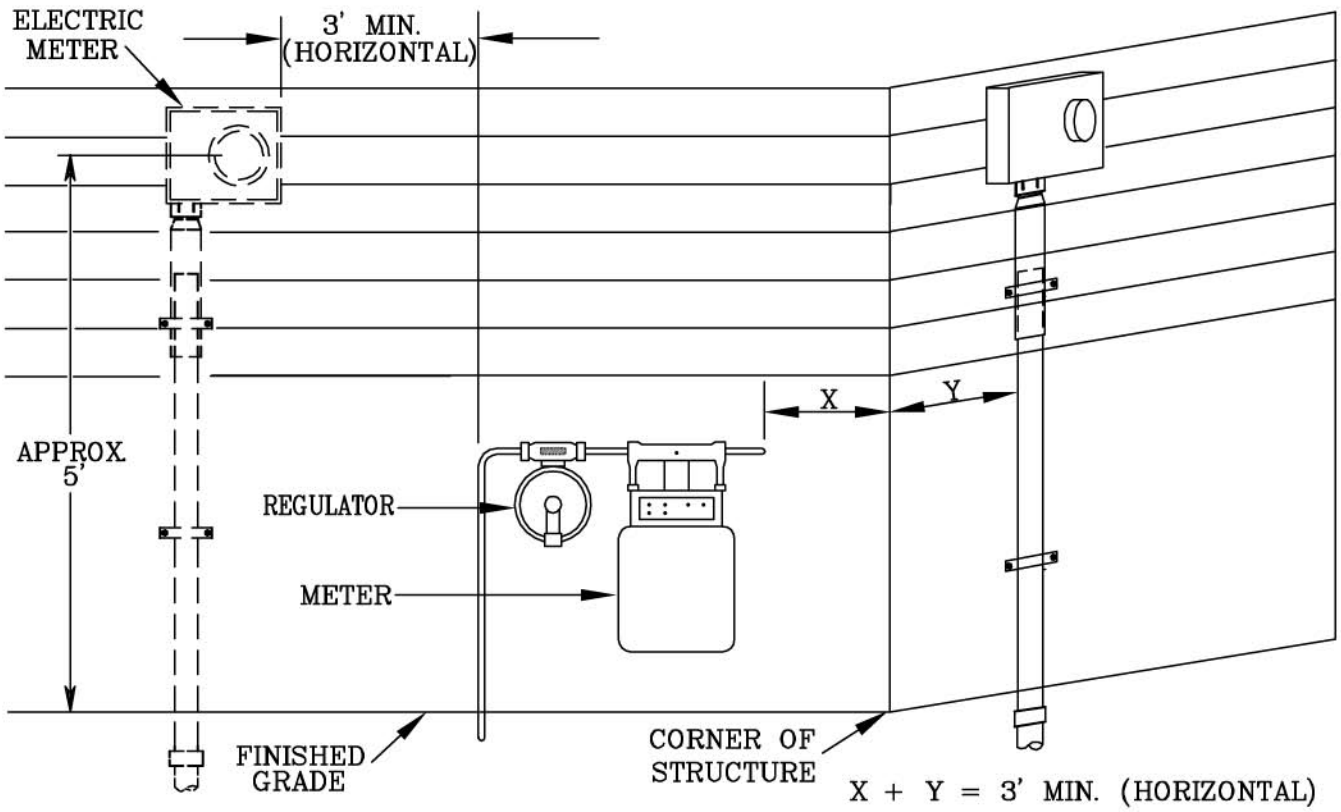
C. STRAIGHT IN ENTRY TO TERMINALS IS PREFERRED METHOD OF SERVICE.

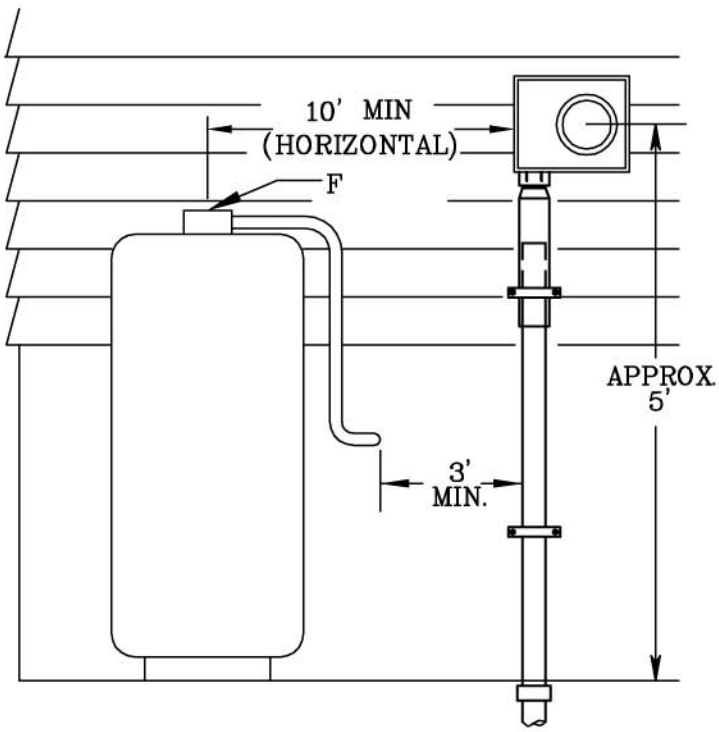
D. THESE DIMENSIONS ALSO APPLY TO DISCONNECTS SUPPLIED WITH MULTI-GANG METERING MODULES.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 2, 5, 6, 12, 13, 15, 16, 21 **Date:** 7/18/16 **Engr:** NAP REMSI_S054A.dwg

Clearances Between Gas Facilities & Electric Meters

SKETCH #55
SHEET 1 of 2





REFERENCE: SKETCH 55A

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RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 13

Date: 8/12/11 **Engr:** MDB

Clearances Between Gas Facilities & Electric Meters

SKETCH #55
SHEET 2 of 2

NOTES:

A. SEPARATION MEASURED FROM THE SIDE OF THE ELECTRIC METER BASE TO ANY ABOVE GROUND GAS UTILITY FACILITIES INCLUDING BUT NOT LIMITED TO GAS LINE, METER, REGULATOR, ETC. SHALL BE A MINIMUM 3' HORIZONTAL.

B. THE 3' HORIZONTAL MINIMUM FROM NOTE A IS REQUIRED REGARDLESS OF PLANE THE METER IS ON.
   EXAMPLE: IF THE ELECTRIC METER AND GAS METER ARE ON THE CORNER OF A BUILDING WITH THE GAS METER LOCATED ON THE FRONT WALL, 12" FROM THE CORNER, THE SIDE OF THE ELECTRIC METER BASE MUST BE LOCATED ON THE SIDE WALL 24" FROM THE CORNER IN ORDER TO OBTAIN THE MINIMUM 3' HORIZONTAL SEPARATION.

C. DIMENSIONS SHOWN ARE MINIMUMS REQUIRED BY PPL EU. LOCAL FIRE CODE, GAS UTILITY, OR INSURANCE REGULATIONS COULD REQUIRE LARGER SEPARATIONS.

D. PPL EU REQUIRES A 3' MINIMUM PHYSICAL WORKING CLEARANCE ON EITHER SIDE THE METER.

E. PPL EU REQUIRES 50" MINIMUM CLEAR SPACE IN FRONT OF THE METER BASE. SEE RULE 13 AND SKETCH 55A (SIDE VIEW).

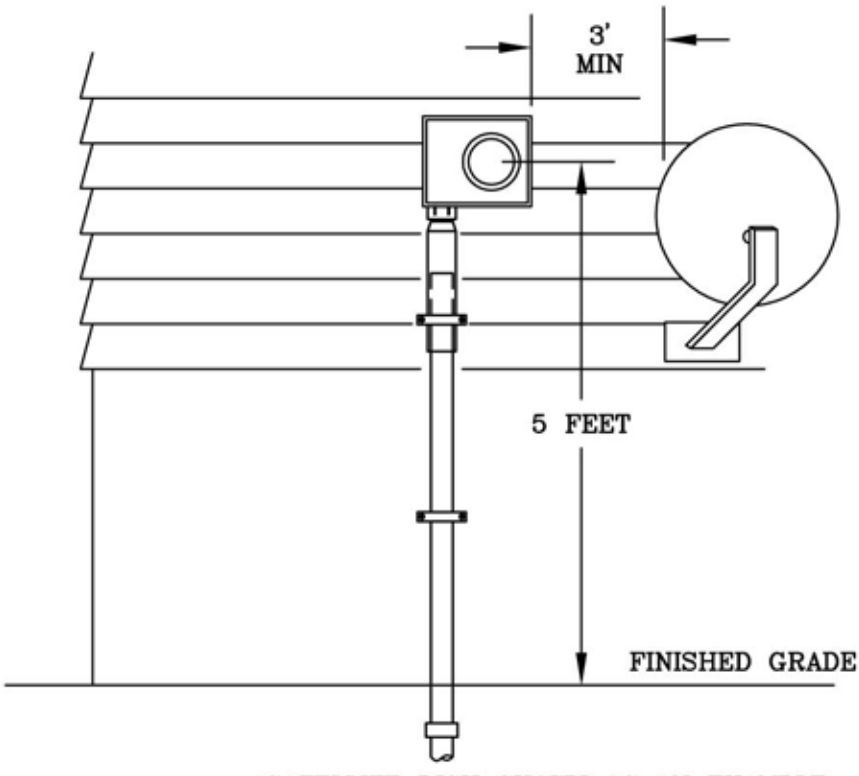
F. DISCHARGE FROM RELIEF VALVE, VENT DISCHARGE, AND FILLING CONNECTION SHALL BE A MINIMUM OF 10' HORIZONTAL FROM THE SIDE OF THE ELECTRIC METER BASE.

G. METERING – SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE OTHER METERING REQUIREMENTS AND RESPONSIBILITIES.

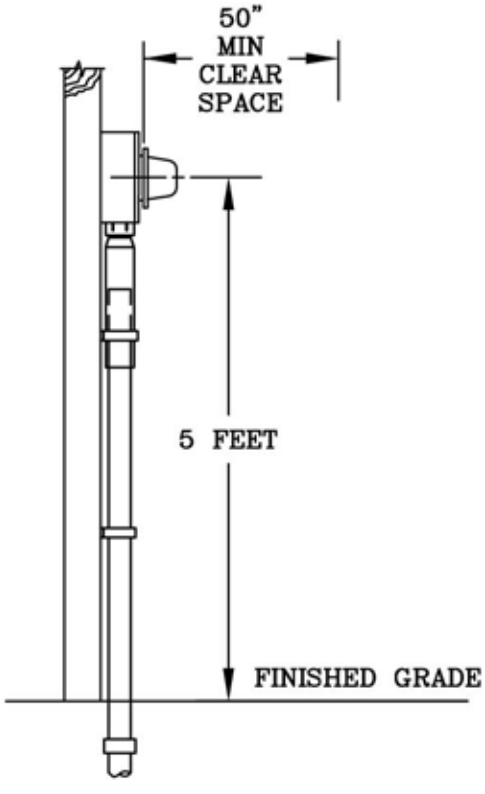
Clearances Between Objects & Electric Meters

SKETCH #55A	SKETCH #55A
SHEET 1of 1	SHEET 1 of 1

FRONT VIEW



SIDE VIEW



*SATELLITE DISH SHOWN AS AN EXAMPLE

NOTES:

A.. PPL EU REQUIRES A MINIMUM OF 3 FEET CLEAR SPACE IN ANY DIRECTION FROM THE METER BASE AND MAINTAIN 50 INCHES OF CLEAR SPACE IN FRONT OF METER BASE.

B.. NO ATTACHMENTS TO SERVICE ENTRANCE/CONDUIT/MAST.

C. NO GROUNDING TO METER BASE.

D. SEE SKETCH 7A.

E. THIS SKETCH IS APPLICABLE FOR SATELLITE DISHES, FENCING, HEDGES, TREES, AND ANY OTHER ABSTRUCTION.

F. SEE SKETCH 55 FOR CLEARANCES BETWEEN GAS FACILITIES.

*REFERENCE: SKETCH 7A, SKETCH 55

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RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** **Date:** 12/5/08 **Engr:** MDB

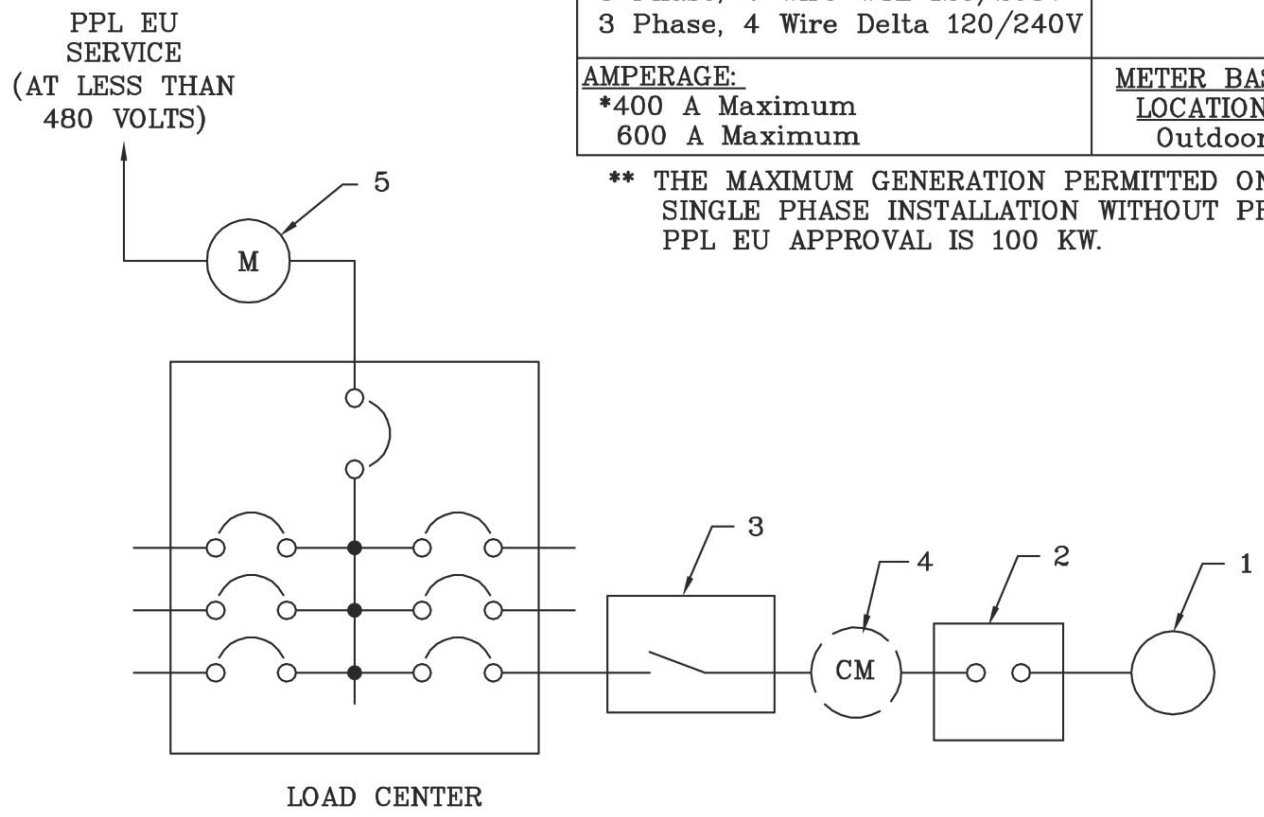
Distributed Generation Series Organization Map

Metering Type	Voltage		Load Center Bus Bar Rating	Sketch #
Self-Contained	Less than 480 V		Up to and Including 20%	56
			Over 20%	56A
480V Self-Contained	480 V		Up to and Including 20%	57
			Over 20%	57A
CT/Secondary	Less than 600 V		Up to and Including 20%	58
			Over 20%	58A
12 kV	12 kV	Pole Mount	Up to and Including 20%	59
			Over 20%	59A
		Switchgear	All Options	59B

Sketch #56 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for self-contained metering (excluding 480V) installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V*,** 1 Phase, 3 Wire 120/240V** 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V	Overhead Underground
AMPERAGE:	**METER BASE LOCATION:**
*400 A Maximum 600 A Maximum	Outdoor

** THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100 KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

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Sketch #56 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for self-contained metering (excluding 480V) installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. GENERATOR DISCONNECT SWITCH REQUIRED IF NOT INCLUDED IN THE INVERTER. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
4. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

PPL EU FURNISHES, INSTALLS, MAINTAINS:

5. METERING-SELF CONTAINED (EXCLUDES 480V)-FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.

NOTES:

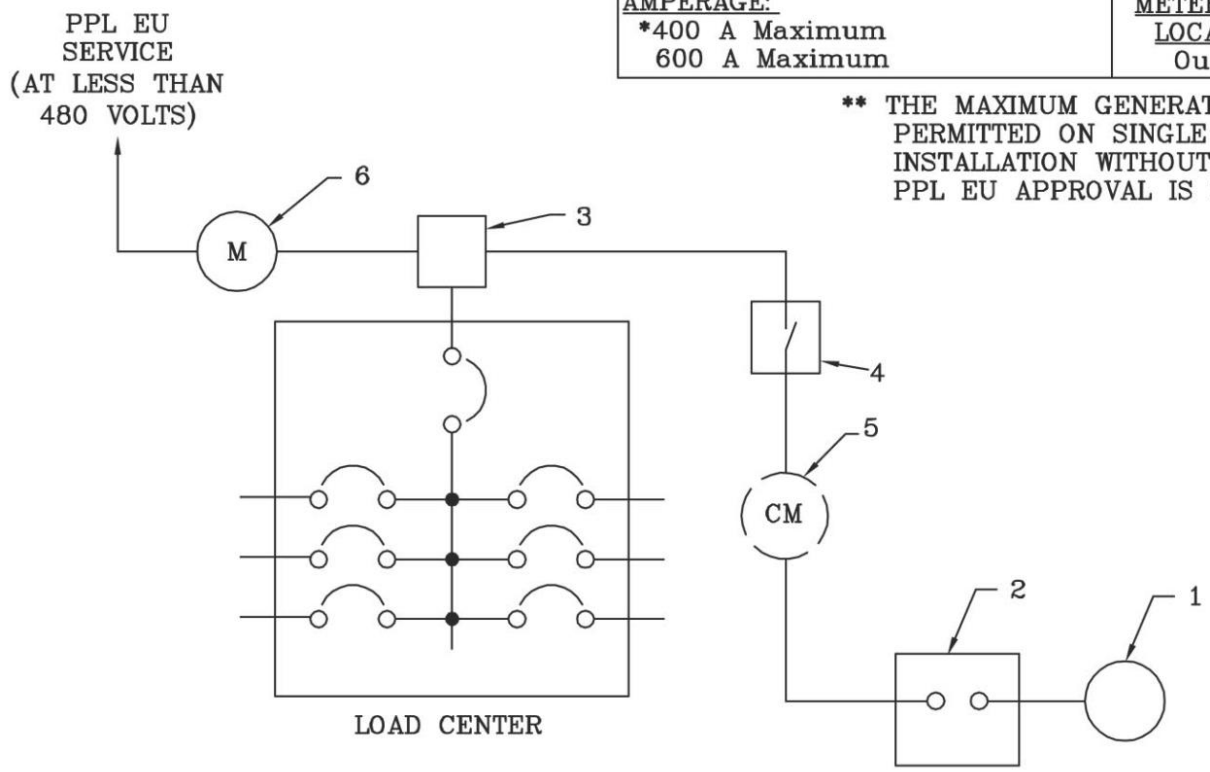
A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
H. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

Sketch #56a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for self-contained metering (excluding 480V) installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V*,** 1 Phase, 3 Wire 120/240V** 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V	Overhead Underground
AMPERAGE: *400 A Maximum 600 A Maximum	**METER BASE LOCATION:** Outdoor

** THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100 KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

Sketch #56a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for self-contained metering (excluding 480V) installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. SERVICE ENTRANCE RATED JUNCTION BOX SEE RULE 2.
4. SERVICE ENTRANCE RATED FUSED DISCONNECT SWITCH FOR GENERATOR. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
5. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

PPL EU FURNISHES, INSTALLS, MAINTAINS:

6. METERING-SELF CONTAINED (EXCLUDES 480V)-FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.

NOTES:

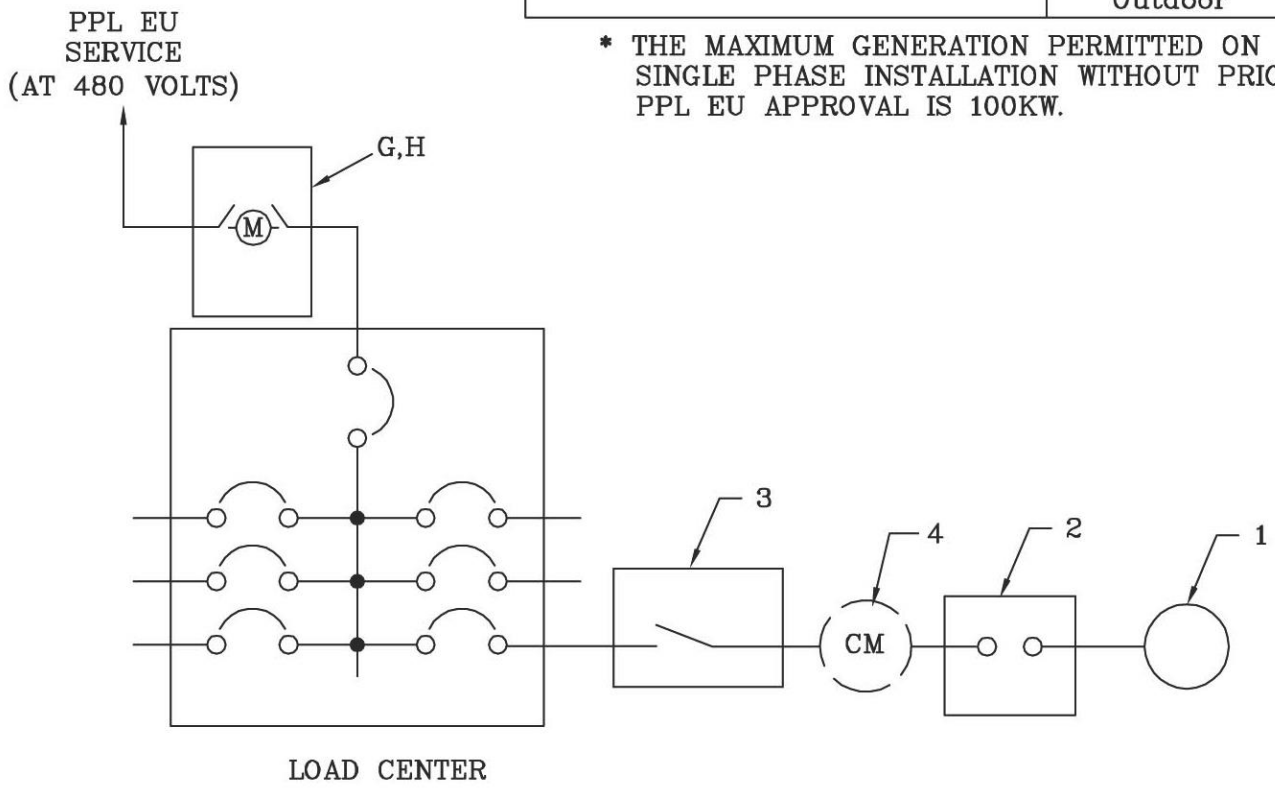
A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER- BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER- OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
H. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

Sketch #57 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for 480V, self-contained metering installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 277/480V* 1 Phase, 3 Wire 240/480V* 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 400 A Maximum	METER BASE LOCATION: Outdoor

* THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

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Sketch #57 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for 480V, self-contained metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. GENERATOR DISCONNECT SWITCH REQUIRED IF NOT INCLUDED IN THE INVERTER. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
4. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. METERING – 480V SELF-CONTAINED – SEE SELF-CONTAINED 480V METERING SERIES ORGANIZATION MAP TO DETERMINE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE, FOR METERING REQUIREMENTS, AND RESPONSIBILITIES. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.
H. INSTALLATIONS REQUIRING 480V SELF-CONTAINED METERING FOLLOWING SKETCH #71 OR SKETCH #72 REQUIRES PPL EU REVIEW AND APPROVAL.
I. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
J. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

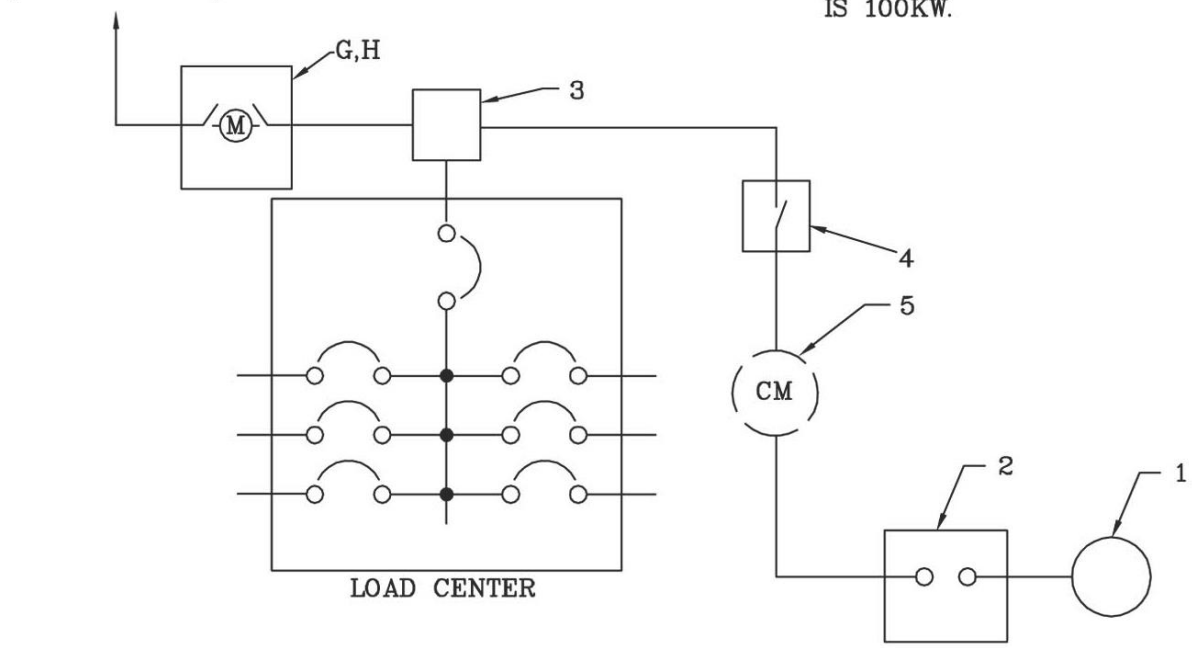
REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S057P1.dwg

Sketch #57a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for 480V, self-contained metering installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 277/480V* 1 Phase, 3 Wire 240/480V* 3 Phase, 4 Wire WYE 277/480V	Overhead Underground
AMPERAGE: 400 A Maximum	METER BASE LOCATION: Outdoor

* THE MAXIMUM GENERATION PERMITED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

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Sketch #57a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for 480V, self-contained metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. SERVICE ENTRANCE RATED JUNCTION BOX. SEE RULE 2.
4. SERVICE ENTRANCE RATED FUSED DISCONNECT SWITCH FOR GENERATOR. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
5. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. METERING – 480V SELF-CONTAINED – SEE SELF-CONTAINED 480V METERING SERIES ORGANIZATION MAP TO DETERMINE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE, FOR METERING REQUIREMENTS, AND RESPONSIBILITIES. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.
H. INSTALLATIONS REQUIRING 480V SELF-CONTAINED METERING FOLLOWING SKETCH #71 OR SKETCH #72 REQUIRES PPL EU REVIEW AND APPROVAL.
I. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
J. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

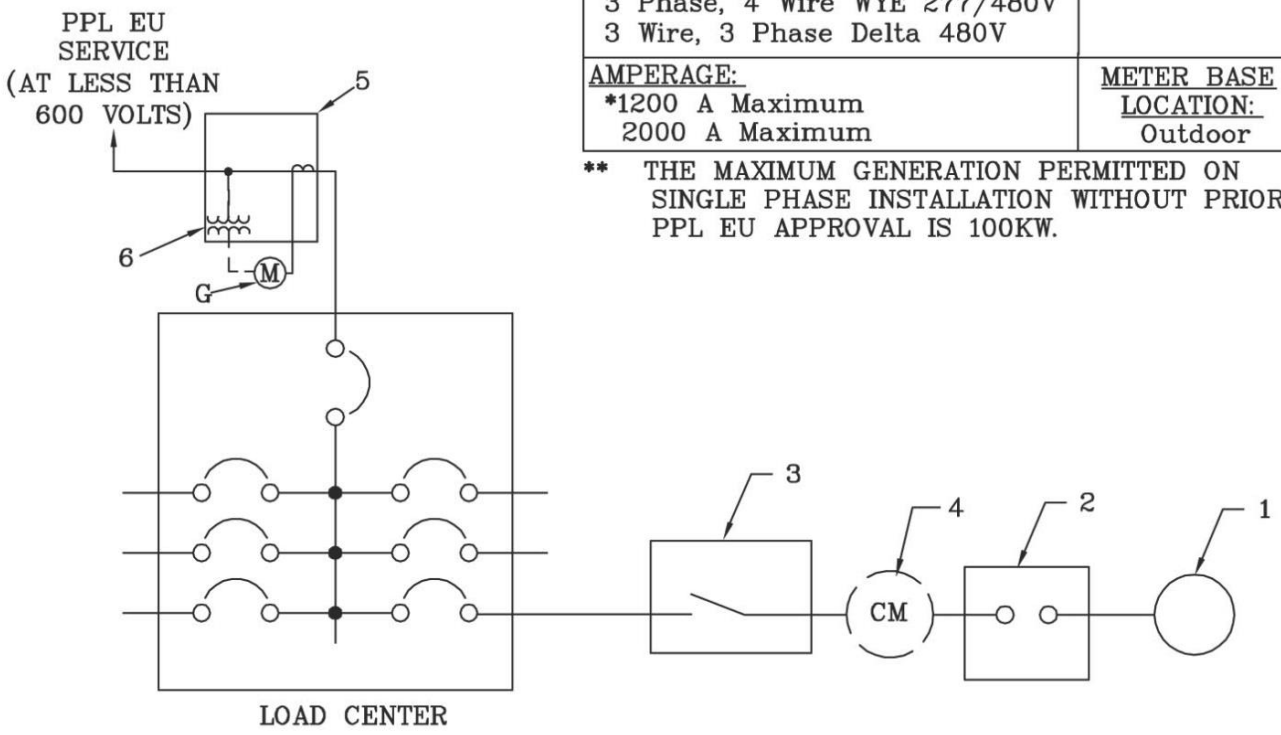
REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

REMSI_S057AP1.dwg

Sketch #58 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for CT cabinet/secondary metering installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V*,**	Overhead
1 Phase, 3 Wire 120/240V*,**	Underground
3 Phase, 4 Wire WYE 120/208V	
3 Phase, 4 Wire Delta 120/240V	
3 Phase, 4 Wire WYE 277/480V	
3 Wire, 3 Phase Delta 480V	
AMPERAGE:	**METER BASE LOCATION:**
*1200 A Maximum	Outdoor
2000 A Maximum	

** THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	PPL ELECTRIC UTILITIES CORPORATION
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S058P1.dwg

Sketch #58 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for CT cabinet/secondary metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. GENERATOR DISCONNECT SWITCH REQUIRED IF NOT INCLUDED IN THE INVERTER. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
4. CUSTOMER METERING FOR GENERATION IS OPTIONAL.
5. CT CABINET. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.

PPL EU FURNISHES, MAINTAINS. CUSTOMER INSTALLS:

6. VOLTAGE TRANSFORMERS, IF REQUIRED.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. METERING EQUIPMENT. SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.
H. INSTALLATIONS REQUIRING 480V SELF-CONTAINED METERING FOLLOWING SKETCH #71 OR SKETCH #72 REQUIRES PPL EU REVIEW AND APPROVAL.
I. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
J. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

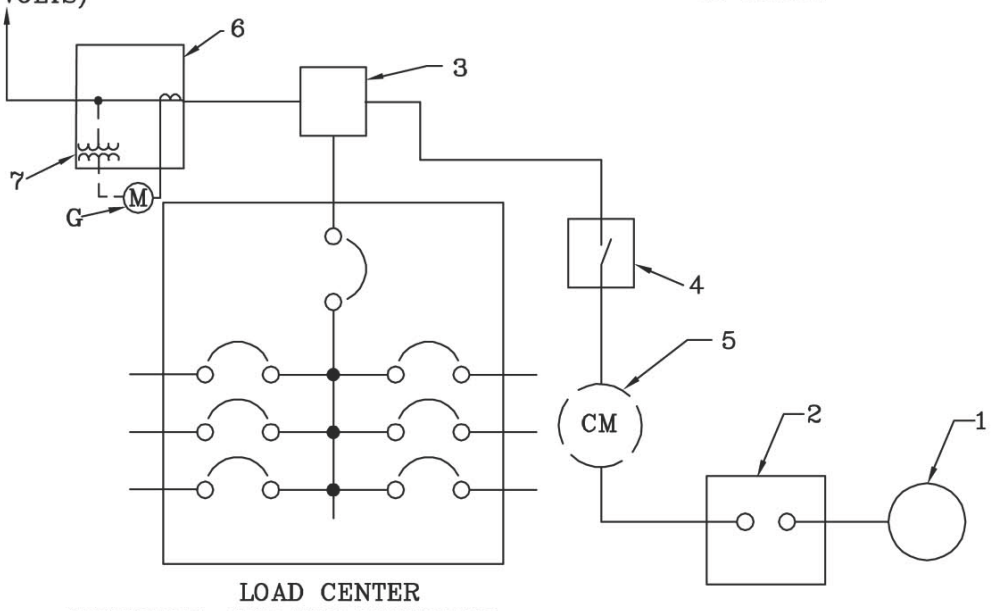
REMSI_S058P1.dwg

Sketch #58a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for CT cabinet/secondary metering installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V*,**	Overhead
1 Phase, 3 Wire 120/240V*,**	Underground
3 Phase, 4 Wire WYE 120/208V	
3 Phase, 4 Wire Delta 120/240V	
3 Phase, 4 Wire Wye 277/480V	
3 Wire, 3 Phase Delta 480V	
AMPERAGE:	**METER BASE LOCATION:**
*1200 A Maximum	Outdoor
2000 A Maximum	

PPL EU SERVICE (AT LESS THAN 600 VOLTS)

** THE MAXIMUM GENERATION PERMITED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS
		DRAFTER	SPONSOR	REVIEW	PPL ELECTRIC UTILITIES CORPORATION
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

REMSI_S058AP1.dwg

Sketch #58a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for CT cabinet/secondary metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. SERVICE ENTRANCE RATED JUNCTION BOX. SEE RULE 2.
4. SERVICE ENTRANCE RATED FUSED DISCONNECT SWITCH FOR GENERATOR. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
5. CUSTOMER METERING FOR GENERATION IS OPTIONAL.
6. CT CABINET. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.

PPL EU FURNISHES, MAINTAINS. CUSTOMER INSTALLS:

7. VOLTAGE TRANSFORMERS, IF REQUIRED.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. METERING EQUIPMENT. SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.
H. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
I. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

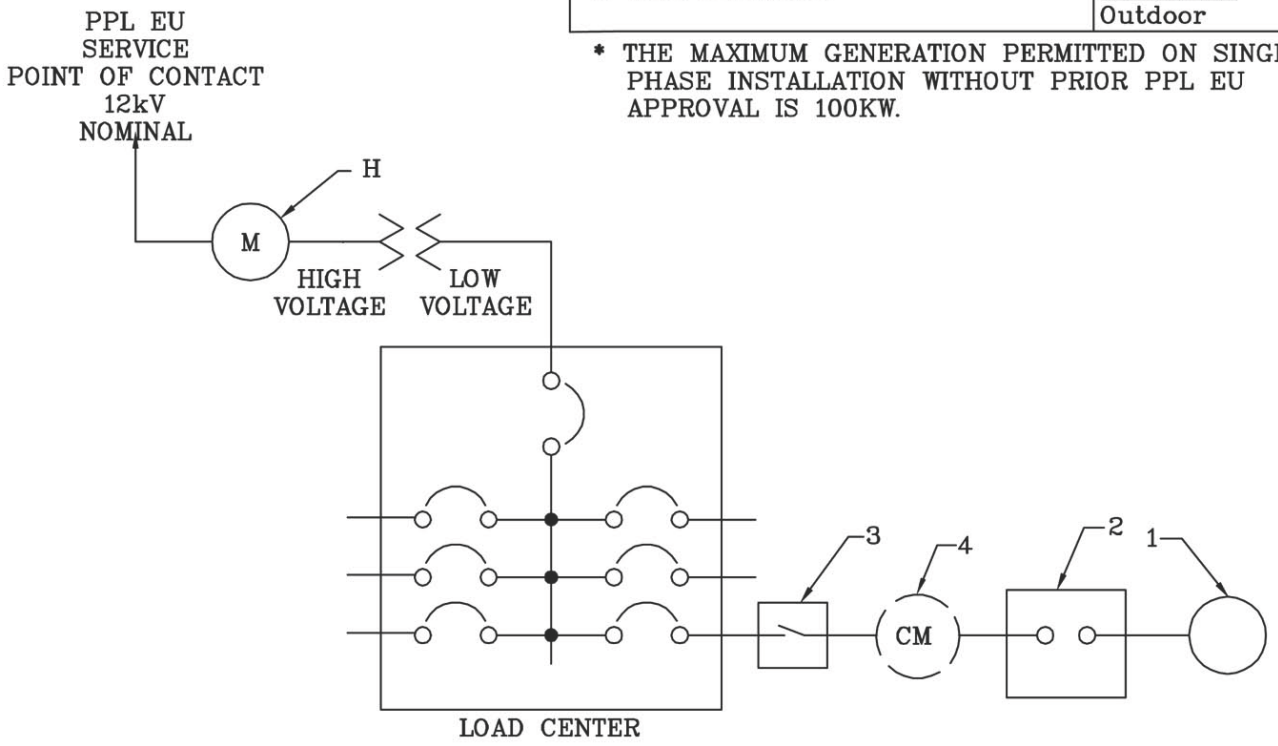
REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

REMSI_S058AP1.dwg

Sketch #59 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for 12KV metering installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 7,200V* 3 Phase, 4 Wire WYE 7,200/12,470V	Overhead
CUSTOMER LOAD: 11 MVA Maximum	METER BASE LOCATION: Outdoor

* THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS
		DRAFTER	SPONSOR	REVIEW	PPL ELECTRIC UTILITIES CORPORATION
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S059P1.dwg

Sketch #59 Inverter-based renewable generation for generator capacity up to and including 20% of the load center bus bar rating for 12KV metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. DISCONNECT SWITCH REQUIRED IF NOT INCLUDED IN THE INVERTER. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
4. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. SEE REMSI SKETCHES #30, SKETCH #31. SKETCH #33, & SKETCH #34.
H. METERING EQUIPMENT. SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES.
I. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
J. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

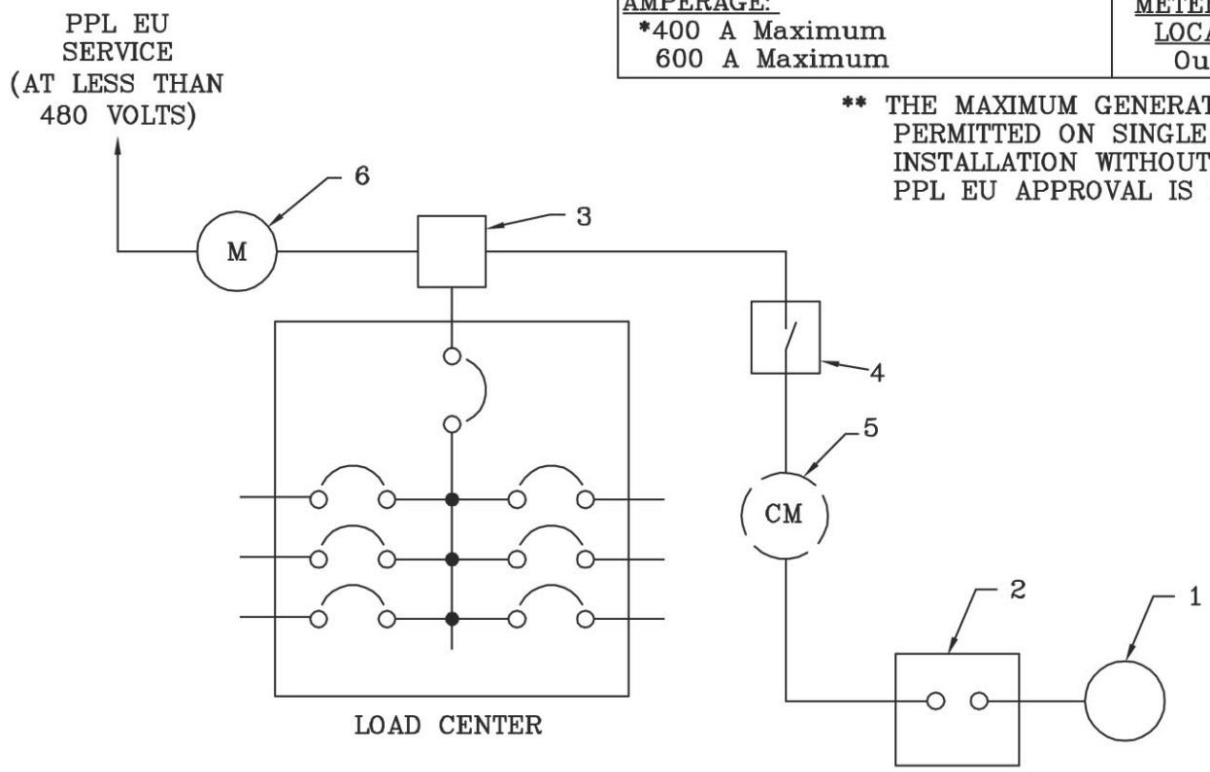
REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S059P1.dwg

Sketch #56a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for self-contained metering (excluding 480V) installations

VOLTAGE:	SERVICE TYPE:
1 Phase, 3 Wire Network 120/208V*,** 1 Phase, 3 Wire 120/240V** 3 Phase, 4 Wire WYE 120/208V 3 Phase, 4 Wire Delta 120/240V	Overhead Underground
AMPERAGE: *400 A Maximum 600 A Maximum	**METER BASE LOCATION:** Outdoor

** THE MAXIMUM GENERATION PERMITTED ON SINGLE PHASE INSTALLATION WITHOUT PRIOR PPL EU APPROVAL IS 100 KW.



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

Sketch #59a Inverter-based renewable generation for generator capacity over 20% of the load center bus bar rating for 12kv metering installations (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. SERVICE ENTRANCE RATED JUNCTION BOX. SEE RULE 2.
4. SERVICE ENTRANCE RATED FUSED DISCONNECT SWITCH FOR GENERATOR. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
5. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

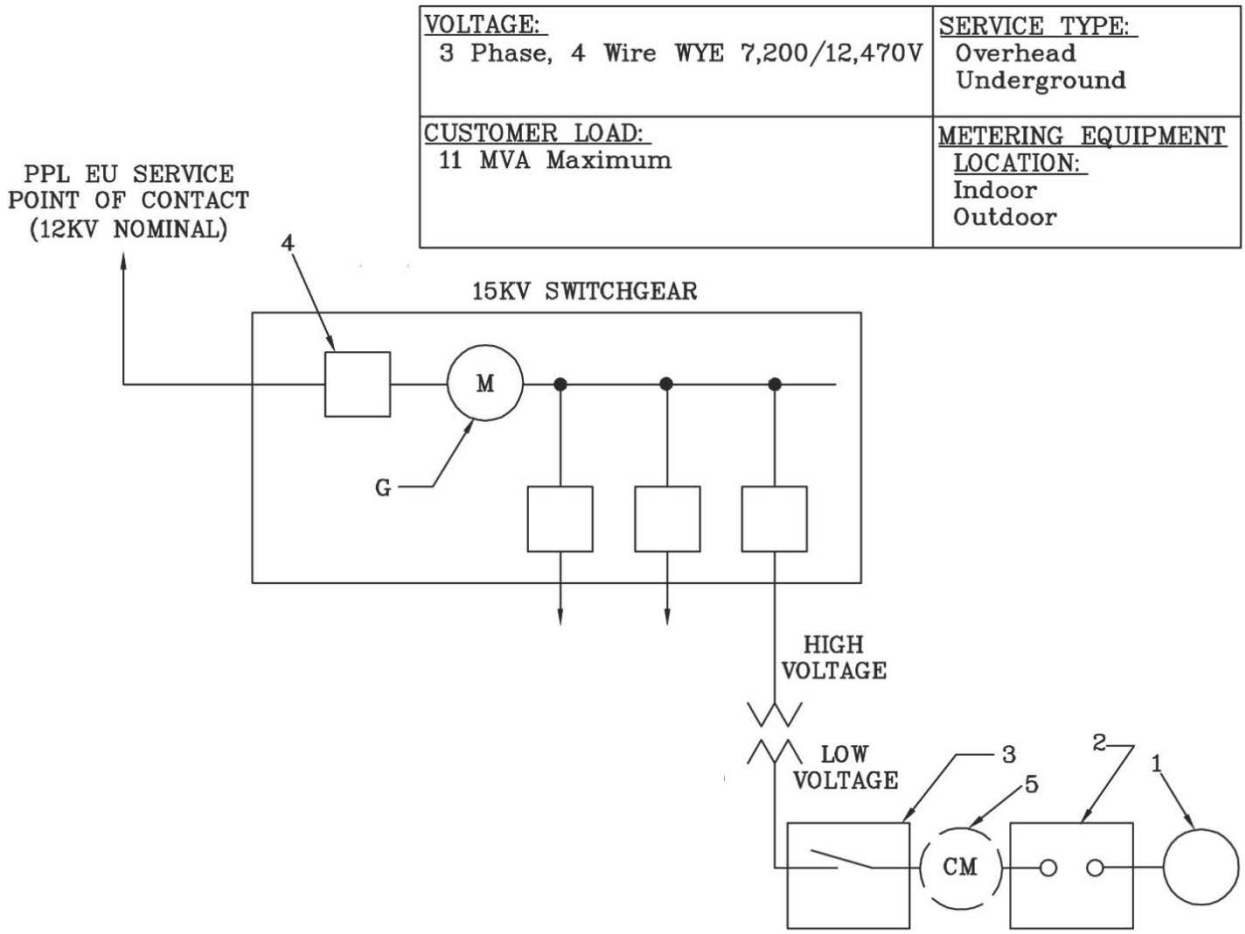
NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. SEE REMSI SKETCHES #30, SKETCH #31. SKETCH #33, & SKETCH #34.
H. METERING EQUIPMENT. SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.
I. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
J. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 2, 12, 28

REMSI_S059AP1.dwg

Sketch #59b Inverter-based renewable generation for 12kv switchgear installation



REV	DATE	APPROVED			RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S059BP1.dwg

Sketch #59b Inverter-based renewable generation for 12kv switchgear installation (cont.)

CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. DISTRIBUTED GENERATION SOURCE
2. INVERTER SHALL BE LABELED AS IEEE 1547/UL 1741 LISTED.
3. GENERATOR DISCONNECT SWITCH REQUIRED IF NOT INCLUDED IN THE INVERTER. GENERATOR DISCONNECT MUST BE WITHIN LINE OF SIGHT OF THE METER.
4. FAULT INTERRUPTING DEVICE CAN BE CIRCUIT BREAKER OR FUSE.
5. CUSTOMER METERING FOR GENERATION IS OPTIONAL.

NOTES:

A. SEE PPL EU CUSTOMER-OWNED GENERATION WEBSITE FOR MORE INFORMATION.
B. APPLICATION FOR CUSTOMER-OWNED, INVERTER-BASED RENEWABLE GENERATION MUST BE COMPLETED. SEE CUSTOMER-OWNED GENERATION APPLICATIONS.
C. PPL EU REQUIRES AN INDEPENDENT ELECTRICAL INSPECTION. THE INSPECTOR IS REQUIRED TO VERIFY THE IEEE/UL LISTING OF THE INVERTER.
D. INSTALLATION MUST ADHERE TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE ARTICLE 690 AND ARTICLE 705.
E. ALL LABELING MUST BE IN ACCORDANCE WITH NEC ARTICLE 690.
F. IN ADDITION TO NOTE D, PPL EU WILL INSTALL PERMANENT LABELING ON THE METER BASE (PPL EU CATALOG #1012171) AND PAD MOUNT TRANSFORMER (#1012171) OR POLE MOUNT TRANSFORMER (#1013816) UPON RECEIPT OF INSPECTION.
G. METERING EQUIPMENT. SEE APPROPRIATE SKETCH FOR SERVICE TYPE AND SIZE TO DETERMINE METERING RESPONSIBILITIES. FOREIGN ENERGY SOURCES SHALL NOT BE CONNECTED DIRECTLY TO METERING EQUIPMENT. SEE RULE 12.
H. IF A NEUTRAL CONNECTION EXISTS AT THE INVERTER, THE INVERTER NEUTRAL SHALL BE CONNECTED TO THE SERVICE NEUTRAL.
I. CUSTOMER SHALL CONTACT PPL EU PRIOR TO ANY NEW INSTALLATIONS DEPICTED IN THIS SKETCH.

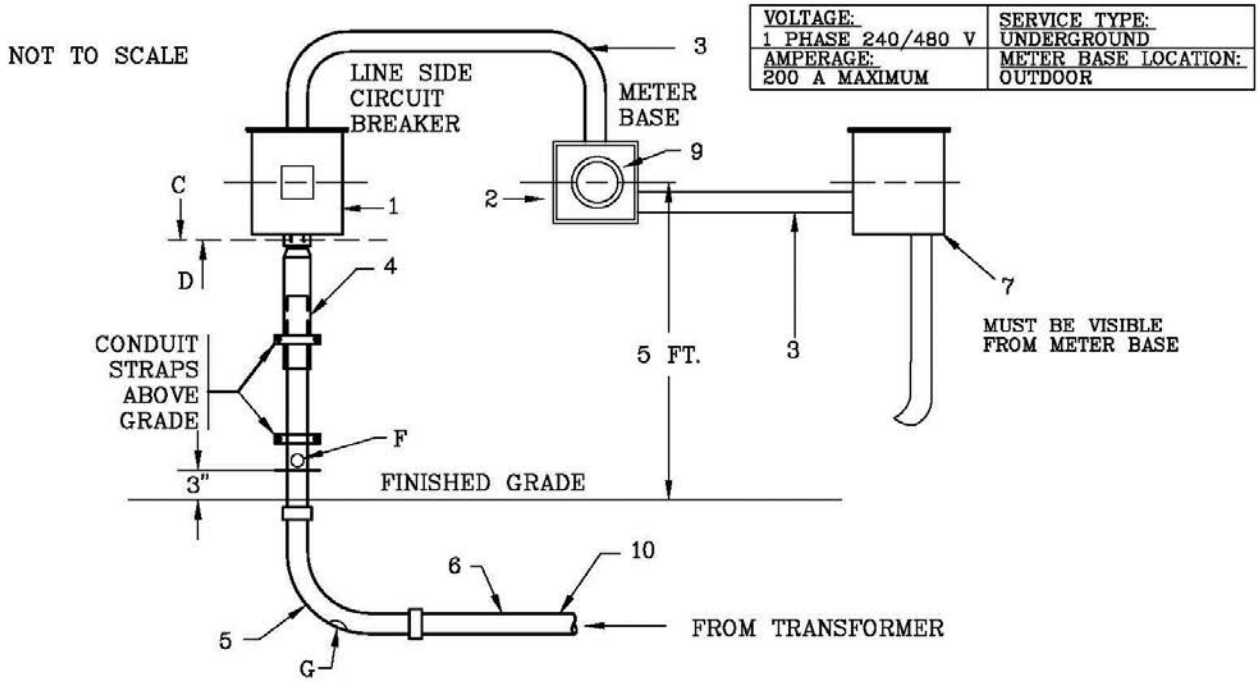
REV	DATE	APPROVED			**RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS** PPL ELECTRIC UTILITIES CORPORATION
		DRAFTER	SPONSOR	REVIEW	
0	3/18/11	-	MDB	-	
1	8/15/16	NAP	NAP	-	RULES: 12, 28

REMSI_S059BP1.dwg

Self Contained 480V Metering Series Organization Map

Phase	Current (A)	Service Conductor Entrance	Description	Sketch #
1	200	Underground	Typical Arrangement	60
	400		Typical Arrangement	61
1 or 3	200 or 400	Overhead (Metering On Pole)	Typical Arrangement	70
		Underground	Switchgear	71
		Overhead or Underground	Wire Trough	72
		Overhead	Typical Arrangement	73
3	200	Underground	Typical Arrangement	80
			Combination Line Side Breaker/Meter Base	83
		Overhead	Combination Line Side Breaker/Meter Base	82
	400	Underground	Typical Arrangement	81

Sketch #60 Typical arrangement of outdoor metering equipment on building, underground service lateral from OH or UG distribution, single phase, 240/480 volts self-contained, 200 ampere



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. LINE SIDE CIRCUIT BREAKER WITH A/C RATING GREATER THAN THE AVAILABLE SHORT CIRCUIT CURRENT. MUST HAVE PROVISIONS TO BE LOCKED AND SEALED IN THE OPEN AND CLOSED POSITIONS. MUST BE RATED AS SERVICE ENTRANCE EQUIPMENT AND BE CAPABLE OF TERMINATING 4/0 TO 500 KCMIL CONDUCTORS. A CIRCUIT BREAKER IS THE ONLY DEVICE ALLOWED AHEAD OF THE METER.

2. METER BASE APPROVED BY PPL EU MUST HAVE 5TH TERMINAL SEE TABLE 1 – 1 PHASE, RATED FOR 600 VOLTS.

3. CONDUCTORS IN GRAY SCHEDULE 40 PVC OR RIGID OR INTERMEDIATE STEEL CONDUIT (SEE RULE 5).

4. SLIP RISER AND CONDUIT. SEE SKETCH 7A

5. 90° ELBOW, 36–INCH RADIUS GRAY SCHEDULE 40 PVC OR GALVANIZED STEEL BONDED. CONSULT PPL EU TECHNICIAN FOR MATERIAL.

6. SERVICE LATERAL CONDUIT – GRAY SCHEDULE 40 PVC CONDUIT UL APPROVED OR SUPERCORFLO SIZE TO MATCH METER RISER CONDUIT.

7. CUSTOMER'S SERVICE EQUIPMENT SHALL INCLUDE A CIRCUIT BREAKER OR DISCONNECT (FUSED OR UNFUSED) THAT IS VISIBLE FROM THE METER AND NO MORE THAN 10 FEET FROM THE METER.

8. LINE SIDE BREAKER AND LOAD SIDE DISCONNECT SHALL BE LABELED AS SUCH BY CONTRACTOR OR BUILDING OWNER. BREAKER, DISCONNECT AND METER BASE SHALL ALSO BE LABELED WITH "480V" AND WITH THE SPACE OR UNIT# SERVED BY THE EQUIPMENT.

*REFERENCE CRS 6-19-133 & CRS 6-19-134, SKETCH 7A, SKETCH 55, SKETCH 55A

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 5, 6, 11A, 13, 14 **Date:** 7/18/16 **Engr:** NAP

REMSI_S060P1.DWG

Sketch #60 Typical arrangement of outdoor metering equipment on building, underground service lateral from OH or UG distribution, single phase, 240/480 volts self-contained, 200 ampere (cont.)

PPL EU FURNISHES, INSTALLS, MAINTAINS:

9. METER – CL200(200A)

10. SERVICE LATERAL CONDUCTORS INSTALLED INSIDE OF CUSTOMER SUPPLIED CONDUIT TERMINATING IN LINE SIDE CIRCUIT BREAKER.

NOTES:

A. CUSTOMER EXCAVATES, PROVIDES SELECT BACKFILL, BACKFILLS, TAMPS IN LAYERS OVER DISTURBED EARTH NEAR BUILDING FOUNDATION TO HELP PREVENT DAMAGE TO SERVICE ENTRANCE EQUIPMENT DUE TO GROUND SETTLING AND RESTORE SURFACE OF TRENCH FROM BASE OF POLE TO BUILDING.

B. PPL EU WILL SPECIFY CONDUIT SIZE FROM TRANSFORMER TO TERMINATION COMPARTMENT AND PROVIDE AIC.

C. CUSTOMER RESPONSIBILITY TO MAINTAIN TO THIS POINT.

D. PPL EU RESPONSIBILIITY TO MAINTAIN TO THIS POINT.

E. ALL EQUIPMENT MUST BE SECURELY MOUNTED TO 2" NOMINAL LUMBER OR MASONRY CONSTRUCTION.

F. DRILL 2–1/4" HOLES IN BACK OF CONDUIT 3" ABOVE GRADE PRIOR TO PULLING CABLE.

G. DRILL 2–1/4" HOLES IN BOTTOM SIDE OF ELBOW PRIOR TO PULLING CABLE.

H. 50" MINIMUM CLEARSPACE IN FRONT OF METER BASE. SEE RULE 13, SKETCH 55 AND SKETCH 55A (SIDE VIEW).

I. ALL 240/480 VOLT AND 277/480 VOLT SERVICES SHALL BE INSTALLED PER THE NATIONAL ELECTRIC CODE AND ANY OTHER APPLICABLE CODE.

J. THE LINE SIDE BREAKER IS TO FACILITATE METER MAINTENANCE, AND IS NOT CONSIDERED THE SERVICE DISCONNECTING MEANS AS DEFINED BY THE NEC.

K. THE GROUNDED (NEUTRAL) SERVICE CONDUCTOR SHALL BE BONDED TO THE EACH OF THE FOLLOWING ENCLOSURES: THE LINE SIDE BREAKER. THE METER BASE, AND THE LOAD SIDE DISCONNECT. ONLY THE ENCLOSURE OF THE SERVICE DISCONNECTING MEANS SHALL BE CONNECTED TO A GROUNDING ELECTRODE (GROUND ROD).

* REFERENCE CRS 6–19–133, CRS 6–19–134, SKETCH 7A, SKETCH 55, SKETCH 55A

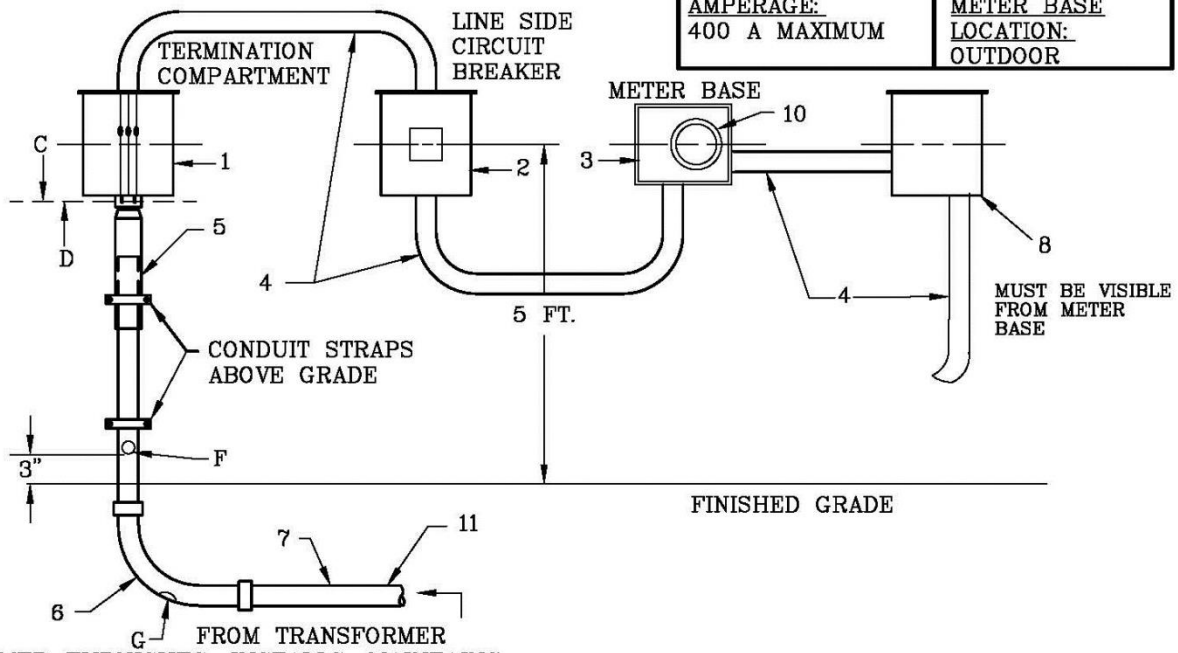
RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS **PPL ELECTRIC UTILITIES CORPORATION**	**Rules:** 5, 6, 11A, 13, 14 **Date:** 7/18/16 **Engr:** NAP

REMSI_S060P2.DWG

Sketch #61 Typical arrangement of outdoor metering equipment on building, underground service lateral from OH or UG distribution, single phase, 240/480 volts self-contained, 400 ampere

NOT TO SCALE

VOLTAGE:	SERVICE TYPE:
1 PHASE, 240/480V	UNDERGROUND
AMPERAGE:	METER BASE LOCATION:
400 A MAXIMUM	OUTDOOR



CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

1. TERMINATION COMPARTMENT SIZED IN ACCORDANCE WITH SKETCH 54A. WIRES SHALL BE CONNECTED TO CUSTOMER PROVIDED TERMINAL BLOCK.
2. LINE SIDE CIRCUIT BREAKER WITH AIC RATING GREATER THAN THE AVAILABLE SHORT CIRCUIT CURRENT. MUST HAVE PROVISIONS TO BE LOCKED AND SEALED IN THE OPEN AND CLOSED POSITIONS. MUST BE RATED AS SERVICE ENTRANCE EQUIPMENT. AND BE CAPABLE OF TERMINATING 4/0 TO 500 KCMIL CONDUCTORS. A CIRCUIT BREAKER IS THE ONLY DEVICE ALLOWED AHEAD OF THE METER.
3. SIDE WIRED METER BASE APPROVED BY PPL EU MUST HAVE 5TH TERMINAL SEE TABLE 2 – 1 PHASE, RATED FOR 600 VOLTS.
4. CONDUCTORS IN GRAY SCHEDULE 40 PVC OR RIGID OR INTERMEDIATE STEEL CONDUIT (SEE RULE 5).
5. SLIP RISER AND CONDUIT. SEE SKETCH 7A.
6. 90° ELBOW, 36–INCH RADIUS GRAY SCHEDULE 40 PVC OR GALVANIZED STEEL BONDED CONSULT PPL EU TECHNICIAN FOR MATERIAL
7. SERVICE LATERAL CONDUIT – GRAY SCHEDULE 40 PVC CONDUIT (UL APPROVED) OR SUPERCORFLO SIZE TO MATCH METER RISER CONDUIT.
8. CUSTOMER'S SERVICE EQUIPMENT SHALL INCLUDE A CIRCUIT BREAKER OR DISCONNECT (FUSED OR UNFUSED) THAT IS VISIBLE FROM THE METER AND NO MORE THAN 10 FEET FROM THE METER.
9. LINE SIDE BREAKER AND LOAD SIDE DISCONNECT SHALL BE LABELED AS SUCH AS SUCH BY CONTRACTOR OR BUILDING OWNER. BREAKER, DISCONNECT AND METER BASE SHALL ALSO BE LABELED WITH "480V" AND WITH THE SPACE OR UNIT# SERVED BY THE EQUIPMENT.

*REFERENCE CRS 6–19–133 & CRS 6–19–134 & SKETCH 7A, SKETCH 54A, SKETCH 55, SKETCH 55A

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Sketch #61 Typical arrangement of outdoor metering equipment on building, underground service lateral from OH or UG distribution, single phase, 240/480 volts self-contained, 400 ampere (cont.)

PPL EU FURNISHES, INSTALLS, MAINTAINS:

10. METER – CL320(400A)

11. SERVICE LATERAL CONDUCTORS INSTALLED INSIDE OF CUSTOMER SUPPLIED CONDUIT TERMINATING ON CUSTOMER SIDE OF TERMINATION COMPARTMENT.

NOTES:

A. CUSTOMER EXCAVATES, PROVIDES SELECT BACKFILL, BACKFILLS, TAMPS IN LAYERS OVER DISTURBED EARTH NEAR BUILDING FOUNDATION TO HELP PREVENT DAMAGE TO SERVICE ENTRANCE EQUIPMENT DUE TO GROUND SETTLING AND RESTORE SURFACE OF TRENCH FROM BASE OF POLE TO BUILDING.

B. PPL EU WILL SPECIFY CONDUIT SIZE FROM TRANSFORMER TO TERMINATION COMPARTMENT AND PROVIDE AIC.

C. CUSTOMER RESPONSIBILITY TO MAINTAIN TO THIS POINT.

D. PPL EU RESPONSIBILITY TO MAINTAIN TO THIS POINT.

E. ALL EQUIPMENT MUST BE SECURELY MOUNTED TO 2" NOMINAL LUMBER OR MASONRY CONSTRUCTION.

F. DRILL 2–1/4" HOLES IN BACK OF CONDUIT 3" ABOVE GRADE PRIOR TO PULLING CABLE.

G. DRILL 2–1/4" HOLES IN BOTTOM SIDE OF ELBOW PRIOR TO PULLING CABLE.

H. 50" MINIMUM CLEARSPACE IN FRONT OF METER BASE. SEE RULE 13, SKETCH 55 AND SKETCH 55A (SIDE VIEW).

I. ALL 240/480 VOLT AND 277/480 VOLT SERVICES SHALL BE INSTALLED PER THE NATIONAL ELECTRIC CODE AND ANY OTHER APPLICABLE CODE.

J. THE LINE SIDE BREAKER IS TO FACILITATE METER MAINTENANCE, AND IS NOT CONSIDERED THE SERVICE DISCONNECTING MEANS AS DEFINED BY THE NEC.

K. THE GROUNDED (NEUTRAL) SERVICE CONDUCTOR SHALL BE BONDED TO EACH OF THE FOLLOWING ENCLOSURES: THE LINE SIDE BREAKER, THE METER BASE, AND THE LOAD SIDE DISCONNECT. ONLY THE ENCLOSURE OF THE SERVICE DISCONNECTING MEANS SHALL BE CONNECTED TO A GROUNDING ELECTRODE (GROUND ROD).

*REFERENCE CRS 6–19–133 & CRS 6–19–134 & SKETCH 7A, SKETCH 54A, SKETCH 55, SHETCH 55A

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