SKETCH #1 SHEET 1

SKETCH #1

SHEET 1

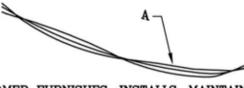


 NEW SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS. MAXIMUM TENSION - 700 LBS.

2. METER.

### PPL EU FURNISHES, MAINTAINS; CUSTOMER INSTALLS:

3. SERVICE BRACKET.

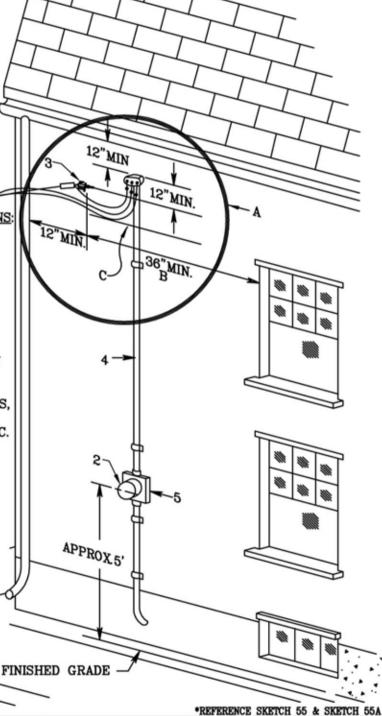


## CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- SERVICE ENTRANCE CONDUCTORS, SEE RULE 5.
- METER BASE, SEE TABLE 1 FOR LIST OF APPROVED DEVICES.

#### NOTES:

- A. SEE RULE 4 AND 4A FOR CLEARANCES.
- B. 36 INCHES MINIMUM CLEARANCE IN ANY DIRECTION FROM THE OUTSIDE PERIMETER OF BUILDING OPENINGS, SUCH AS WINDOWS, DOORS, PORCHES, DECKS, BALCONIES, FIRE ESCAPES, OR SIMILAR. EXCEPTION SEE NOTE C.
- C. LESS THAN 36 INCHES PERMITTED WHEN SERVICE DROPS OR DRIP LOOPS ARE LOCATED OUT OF REACH ABOVE THE TOP LEVEL OF A WINDOW OR THE WINDOW IS DESIGNED NOT TO BE OPENED.
- D. METERBASE MUST BE SECURELY MOUNTED TO 2" NOMINAL LUMBER OR MASONRY CONSTRUCTION.
- E. 50" MINIMUM CLEAR SPACE IN FRONT OF METERBASE. SEE RULE 13, SKETCH 55 AND SKETCH 55A (SIDE VIEW).



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

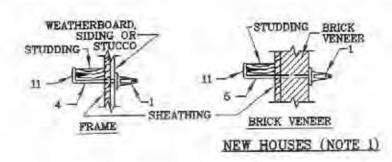
PPL ELECTRIC UTILITIES CORPORATION Rules: 4, 4A, 5, 13

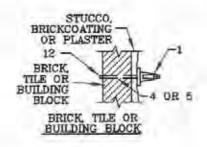
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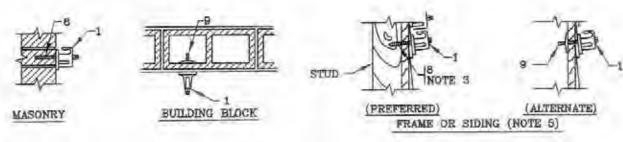
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Secondary Service Service Drop Attachments

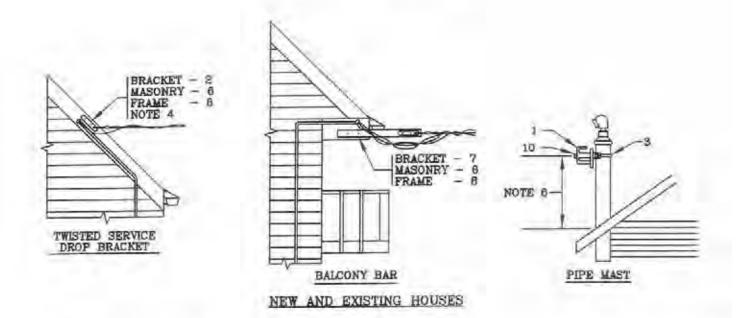
SKETCH #1A SHEET 1AP1 SKETCH #1A SHEET 1AP1







## EXISTING HOUSES (NOTE 2)



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 4, 5

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Date: 11/1/06 Engr: MDB

SKETCH #1A SHEET 1AP2

ITEM	DESCRIPTION
1	BRACKET, SERVICE DROP, THREE POINT
2	BRACKET, SERVICE DROP, TWISTED
3	BRACKET, SERVICE DROP, PIPE ATTACHMENT
4	BOLT, ANCHOR, HOUSE, BRACKET, 3/8" x 12"
5	BOLT, ANCHOR, HOULSE BRACKET, 3/8" x 16"
8	ANCHOR, EXPANSION, 3/8" x 5"
7	BRACE, CROSSARM - DRILL EXTRA 3/8" HOLE
В	SCREW, LAG. GIMLET POINT, 3/8" x 5"
9	BOLT, TOGGLE, 3/8" x 5 "
10	BOLT, MACHINE, 3/8" x 2"
11	NAIL, WIRE, 8d
12	NAIL, MASONRY

### NOTES:

- PPL EU SUPPLIES BOLT, DESIGNATES ATTACHMENT LOCATION, INSTALLS BRACKET AND CUTS OFF EXCESS BOLT LENGTH. BUILDER INSTALLS ANCHOR BOLT WITH BOLT EXTENDING AT LEAST 2 INCHES BEYOND OUTSIDE FACE OF FINISHED WALL.
- 2. PPL EU SUPPLIES BRACKET AND FASTENERS; CUSTOMER ATTACHES OR RE-ATTACHES BRACKET.
- 3. DRILL 1/4 INCH HOLE INTO STUD.
- 4. TWISTED SERVICE CABLE BRACKET USED TO PROVIDE CLEARANCE BETWEEN SERVICE CABLE AND DOWN SPOUT OR ROOF EDGE.
- 5. PREFERRED ATTACHMENT METHOD IS TO INSTALL LAG SCREW INTO STUD. IF NO STUD IS LOCATED, THE ALTERNATE METHOD CAN BE USED PROVIDED BRACKET IS LOCATED LESS THAN 4 FEET FROM ANY CORNER OF STRUCTURE.
- 8. SEE SKETCH 3 FOR ATTACHMENT HEIGHTS ABOVE ROOF ON PIPE MAST

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION Rules: 4, 5

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## REMSI Sketches 1-25 Sketch #3 6-50

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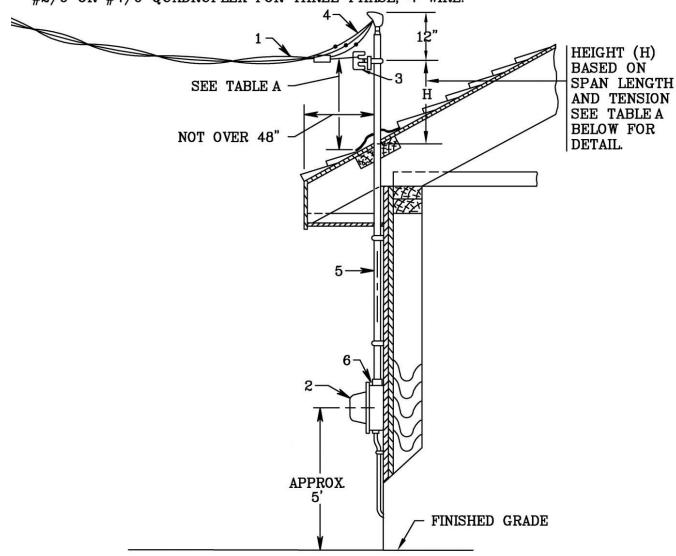
Revision: 01

Effective Date: 09/19/2016

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## Sketch #3 Secondary service drop attachment to a mast attached to low building to provide required clearances

THIS TYPE OF CONNECTION IS LIMITED TO SERVICES WITH SELF-CONTAINED METER AND #4, #1/0, OR #4/0 TRIPLEX FOR SINGLE PHASE, 3 WIRE OR #2/0 OR #4/0 QUADRUPLEX FOR THREE PHASE, 4 WIRE.



#### \* REFERENCE SKETCH 55 &55A

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## REMSI Sketches 1-25 Sketch #3 6-50

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Revision: 01

Effective Date: 09/19/2016

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# Sketch #3 Secondary service drop attachment to a mast attached to low building to provide required clearances (cont.)

## PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 1. NEW SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS. MAXIMUM TENSION 850 LBS.
- 2. METER

## PPL EU FURNISHES, CUSTOMER INSTALLS:

3. SERVICE BRACKET - PPL EU CATALOG #107283, 107280, 106150

### CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 4. SERVICE ENTRANCE CONDUCTORS; SEE RULE 5.
- 5. THREADED GALVANIZED-RIGID METAL CONDUIT (RMC) OR INTERMEDIATE METAL CONDUIT (IMC) FIRMLY ATTACHED TO BUILDING. ANCHOR PIPE RIGIDLY AT ROOF TO PREVENT ROOF DAMAGE DUE TO VIBRATION. DO NOT INSTALL CONDUIT COUPLING ABOVE ROOF LINE.
- 6. METER BASE: SEE TABLES 1 & 3 APPROVED METER SERVICE DEVICES.

## NOTES:

- A. SEE RULE 4 AND 4A FOR CLEARANCE.
- B. 50" MINIMUM CLEAR SPACE IN FRONT OF METER BASE. SEE RULE 13, SKETCH 55, AND SKETCH 55A (SIDE VIEW).

#### Table A

SERVICE MULTIPLEX CABLE ASSEMBLY SIZED ACCORDING TO	SPAN LENGTH	MINIMUM CONDUIT SIZE	ATTACH	BOVE ROOF MENT (H)
DIVERSIFIED LOAD	LLINOTTI	OONDON OIZE	MINIMUM	MAXIMUM
	100' OR LESS	2"		24"
#4 AL TRIPLEX	100 OK LESS	2.5"	18"	36"
#4 AL TRIPLEX	100' TO 150'	2.5"	10	22"
	100 10 150	3"		36"
	100' OR LESS	2.5"		30"
#1/0 AL TRIPLEX	100' TO 125'	2.5"	18"	22"
	125' OR LESS	3"		36"
#4/0 AL TRIPLEX	100' OR LESS	2.5"	18"	22"
#4/U AL INIFLEX	100 OK LESS	3"	10	36"
#2/0 AL QUADRUPLEX	100' OR LESS	2.5"	18"	22"
#2/0 AL QUADRUPLEX	100 OR LESS	3"	10	36"
#4/0 AL QUADRUPLEX	100' OR LESS	2.5"	18"	18"
#4/0 AL QUADRUPLEX	100 OR LESS	3"	10	30"

#### \* REFERENCE SKETCH 55 &55A

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## REMSI Sketches 1-25 Sketch #4 6-50

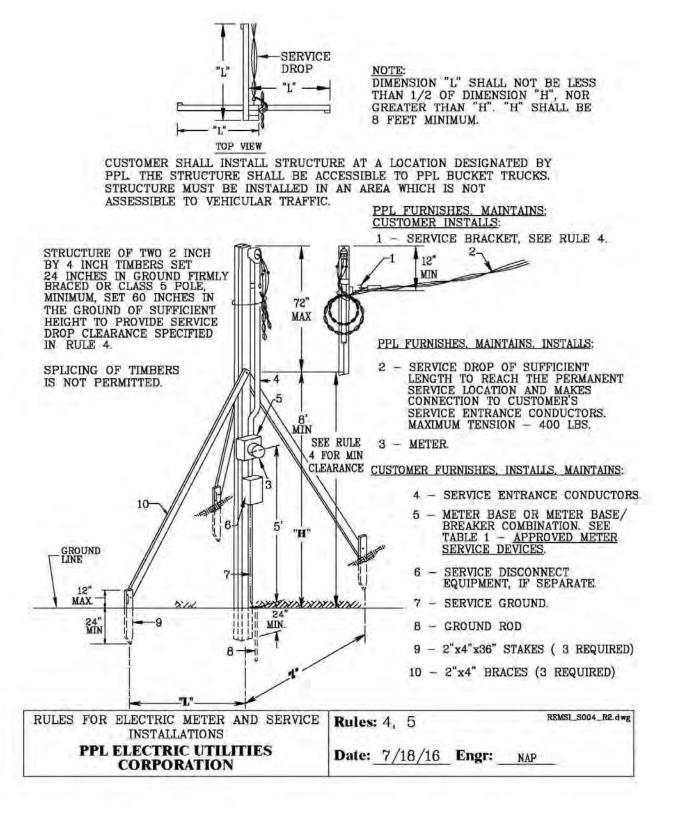
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## Sketch #4 Secondary service drop attachment on temporary structure for construction



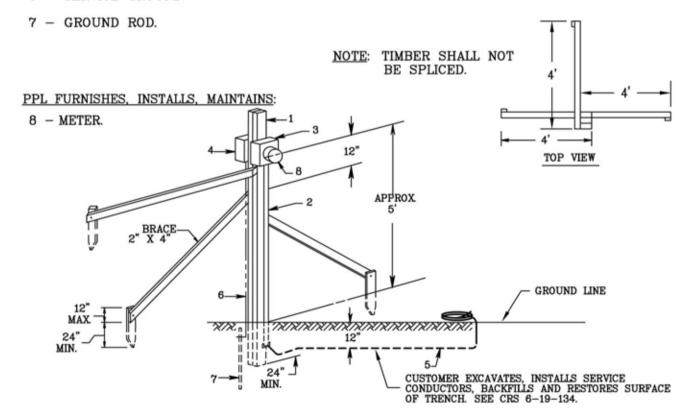
SKETCH #4A SHEET 4A

## Underground Secondary Service to Underground Attachment on Temporary Structure for Construction

SKETCH #4A SHEET 4A

CUSTOMER FURNISHES. INSTALLS. MAINTAINS:

- 1 STRUCTURE OF TWO 2 INCH BY 4 INCH OR ONE 4 INCH BY 4 INCH TIMBER SET 24 INCHES IN GROUND OF SUFFICIENT HEIGHT TO ALLOW METER BASE TO BE PLACED APPROXIMATELY 5 FEET ABOVE GROUND. STRUCTURE SHOULD BE PLACED AT THE LOCATION DESIGNATED BY PPL. BRACE STRUCTURE IN THREE DIRECTIONS AS SHOWN. THOROUGHLY COMPACT EARTH AROUND TIMBERS.
- 2 3 INCH MINIMUM THREADED GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT AND BUSHING OR SCHEDULE 40 GRAY PVC CONDUIT EXTENDING 12 INCHES BELOW GRADE.
- 3 METER BASE OR METER BASE/BREAKER COMBINATION. SEE TABLE 2 <u>APPROVED</u> METER SERVICE DEVICES.
- 4 SERVICE DISCONNECT EQUIPMENT IF SEPARATE (MAY BE MOUNTED ON FRONT OR REAR OF STRUCTURE).
- 5 3 SERVICE CONDUCTORS IN 3 INCH MINIMUM SUPER CORFLO FLEXIBLE PIPE OR SCHEDULE 40 GRAY PVC INSTALLED AT LEAST 12 INCHES BELOW GRADE AND IN SUFFICIENT LENGTH TO EXTEND 10 FEET BEYOND PPL SOURCE. NOTE: PPL WILL MAKE CONNECTION TO SOURCE.
- 6 SERVICE GROUND.



CE | Rules: 4

\*REFERENCE CRS 6-19-134 REMSI S004A RLdwg

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Date:** 11/04/04 **Engr:** RGR



## REMSI Sketches 1-25 Sketch #5 6-50

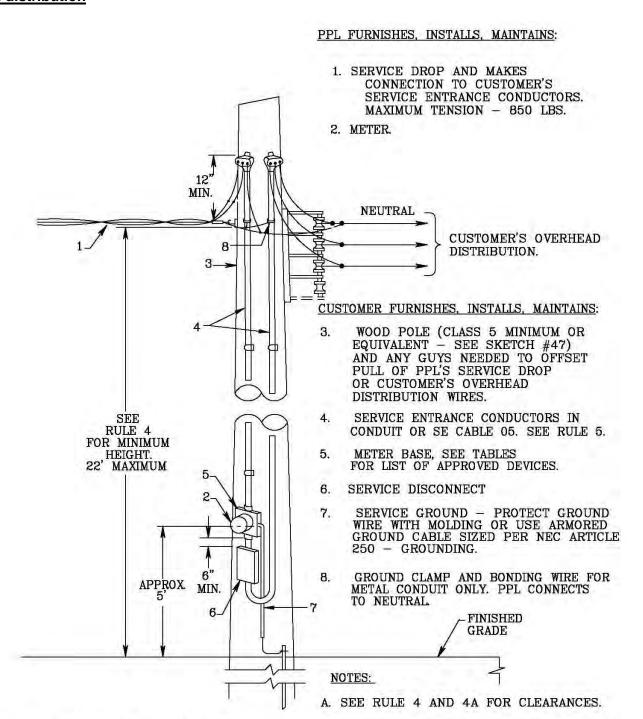
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## Sketch #5 Overhead secondary service drop attachment to customer-owned service and meter pole for overhead distribution



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 4, 4A, 5

Page 17/18/16 Engr: NAP



## REMSI Sketches 1-25 Sketch #6 6-50

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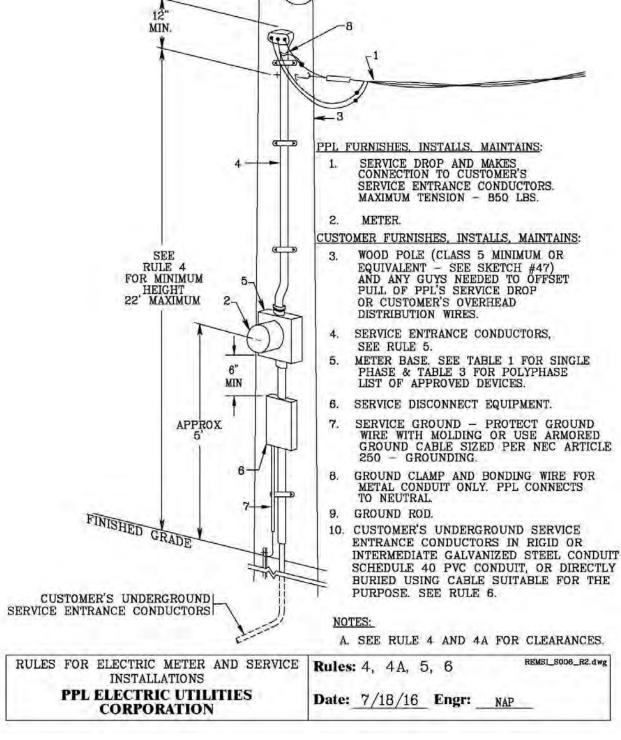
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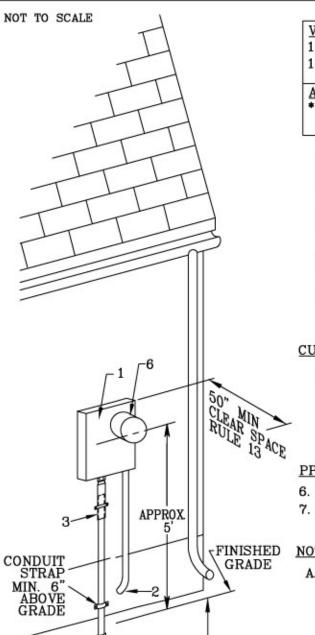
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## Sketch #6 Overhead secondary service drop attachment to customer-owned service and meter pole to underground service entrance

Single phase or Three Phase, 240 volt maximum, self-contained meter, 600 ampere maximum



TYPICAL ARRANGEMENT OF METER ON BUILDING SKETCH 7 SKETCH 7 Sheet 1 Sheet 1



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

### CUSTOMER FURNISHES, INSTALLS, MAINTAINS

- UNDERGROUND METER BASE APPROVED BY PPL EU SEE TABLE 2 - 1 PHASE.
- 2. SERVICE ENTRANCE CABLE OR CONDUCTORS IN CONDUIT. SEE RULE 5.
- 3. SLIP RISER AND CONDUIT DOWN TO 90° ELBOW SEE SKETCH #7A FOR MORE DETAILS.
- 4. 90° ELBOW, 36-INCH RADIUS (GRAY SCHEDULE 40 PVC OR GALVANIZED STEEL) (CONSULT PPL EU TECHNICIAN FOR MATERIAL).

### CUSTOMER FURNISHES AND INSTALLS, PPL EU MAINTAINS.

SERVICE LATERAL CONDUIT TO 90° ELBOW - GRAY SCHEDULE 40 PVC CONDUIT (UL APPROVED) OR SUPERCORFLO (SIZE TO MATCH METER RISER CONDUIT).

#### PPL EU FURNISHES, INSTALLS, MAINTAINS:

- METER
- 7. SERVICE LATERAL CONDUCTORS TERMINATING ON LINE SIDE TERMINALS IN METER BASE.

#### NOTE:

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

SERVED FROM OVERHEAD OR PAD-MOUNT TRANSFORMER

\*REF: CRS 6-19-133 & CRS 6-19-134 & SKETCH #7A

39"

MIN

RULES: 5, 6, 10, 11B, 13, & 14

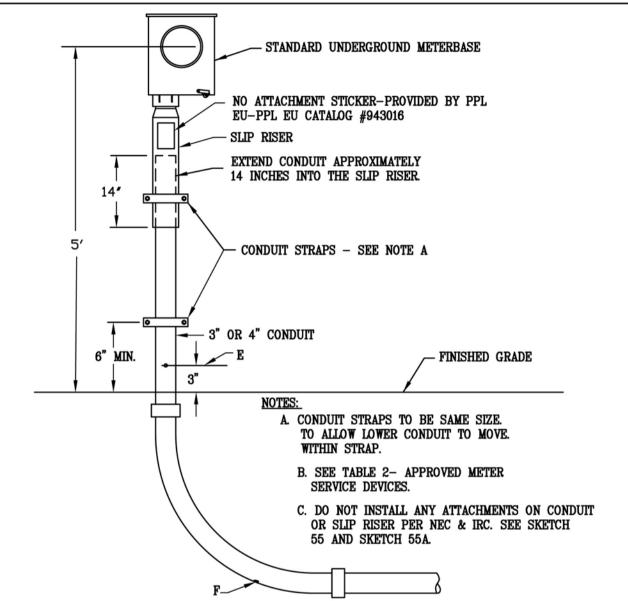
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SLIP RISER FOR INSTALLATION ON SINGLE PHASE UNDERGROUND SERVICES

SHEET 1 of 1

SKETCH 7A



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

- E. DRILL TWO (2) 1/4" HOLES IN BACK OF CONDUIT 3" ABOVE GROUND PRIOR TO PULLING CABLE.
- F. DRILL TWO (2) 1/4" HOLES IN BOTTOMSIDE OF ELBOW PRIOR TO PULLING CABLE.
- G. SEE APPROVED SLIP RISER TABLE.

SKETCH 7A

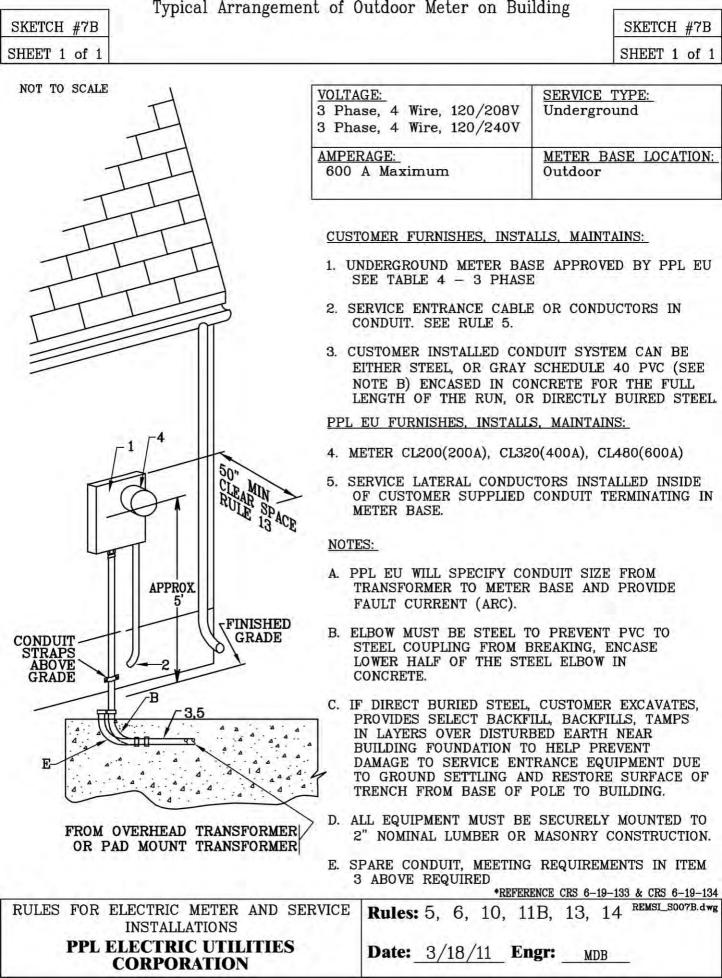
SHEET 1 of 1

RULES FOR ELECTRIC METER AND SERVICE | Rules: 5, 6, 10, 11B, 13, 14 | REMSI\_S007A.dwg

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**INSTALLATIONS** 

**Date:** 3/13/14 **Engr:** JCC



SKETCH #8C SHEET 1 of 1

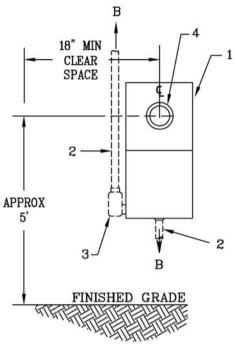
## Typical Meter Panel Installation for Use with Instrument Transformer Metering

SKETCH #8C SHEET 1 of 1

NOT TO SCALE

## METER PANEL INSTALLATION

INDOOR INSTALLATION REQUIRES PRIOR APPROVAL FROM METERING SUPPORT



### FURNISHED BY PPL EU AND INSTALLED BY CUSTOMER:

 METER PANEL - LOCATION DESIGNATED BY PPL EU - MUST BE SECURELY MOUNTED TO 2" NOMINAL LUMBER OR MASONRY FINISH. DO NOT ATTACH PANEL TO THE SWITCH GEAR.

#### CUSTOMER FURNISHES, INSTALLS, AND MAINTAINS:

2. FOR INSTALLATION 50 FEET AND LESS, 1-1/4 INCH MINIMUM THREADED GALVANIZED OR INTERMEDIATE RIGID STEEL OR GRAY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL

FOR INSTALLATION OVER 50 FEET, APPROVAL BY METERING SUPPORT IS REQUIRED, 1½ INCH MINIMUM THREADED GALVANIZED OR INTERMEDIATE RIGID STEEL OR GRAY SCHEDULE 40 PVC CONDUIT (WITH NO MORE THEN THREE 90 DEGREE BENDS) AND FITTINGS BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL.

CONDUIT BODY/CONDULET.

## PPL EU FURNISHES AND INSTALLS:

- 4. METER
- 5. WIRING BETWEEN INSTRUMENT TRANSFORMERS AND THE METER PANEL SEE RULE 15.

#### NOTES:

- A. PROVIDE WALL SPACE 40 INCHES BY 40 INCHES FOR METER PANEL. ALLOW CLEAR SPACE, 18 INCHES MINIMUM, TO LEFT OF METER. SEE RULE 13 FOR OTHER CLEARANCES.
- B. CONDUIT ENTRANCE POINT. FROM INSTRUMENT TRANSFORMERS. AS APPROPRIATE.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 13, 15, 18

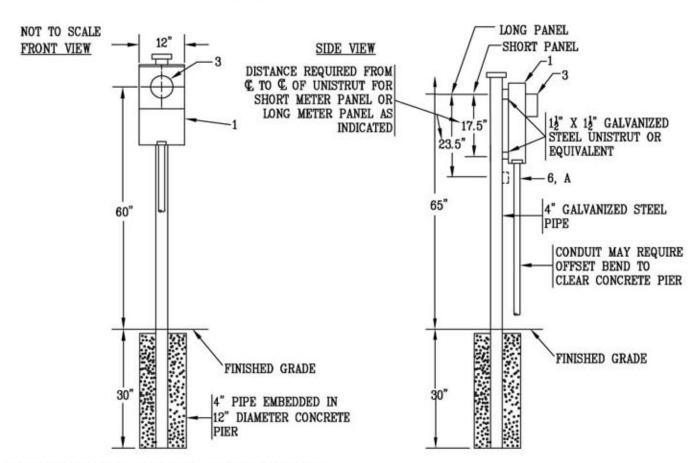
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SKETCH #8D SHEET 1 OF 4

## Typical Meter Panel Mounting Arrangement For Use With Instrument Transformer Metering

SKETCH #8D SHEET 1 OF 4

#### SINGLE METER PANEL ARRANGEMENT



## PPL EU FURNISHES, MAINTAINS, CUSTOMER INSTALLS:

1. METER PANEL - 12 INCH CLEARANCE REQUIRED ON BOTH SIDES

## PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 2. CELL PACK, EXTERNAL ANTENNA (IF REQUIRED), AND MOUNTING
- METER
- RELAYS

#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 5. STRUCTURE (UNISTRUT, POLES, CONCRETE, ETC.)
- 6. CONDUIT SEE NOTE A FOR MORE DETAILS

#### NOTES:

- A. FOR METERING CONDUIT RUN 50 FEET OR LESS 1 1/4" MINIMUM GALVANIZED RIGID OR INTERMEDIATE STEEL OR GRAY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN METER PANEL AND INSTRUMENT TRANSFORMERS.
- B. FOR METERING CONDUIT RUN OVER 50 FEET APPROVAL FROM METERING SUPPORT REQUIRED. SEE RULE 15H FOR MORE DETAIL.
- C. SEE BARRIER SKETCH #20 AS REQUIRED BY PPL EU.

• REFERENCE: SKETCH #8C, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 13, 15, 18

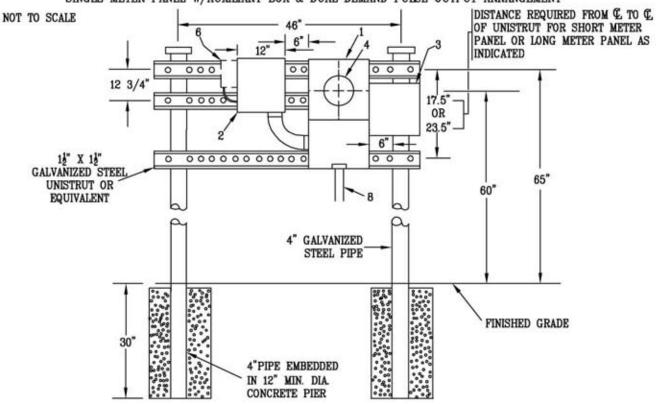
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SKETCH #8D SHEET 2 OF 4

## Typical Meter Panel Mounting Arrangement For Use With Instrument Transformer Metering

SKETCH #8D SHEET 2 OF 4

SINGLE METER PANEL W/AUXILIARY BOX & DUAL DEMAND PULSE OUTPUT ARRANGEMENT



### PPL EU FURNISHES, MAINTAINS, CUSTOMER INSTALLS:

- 1. METER PANEL
- 2. AUXILIARY BOX

#### PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 3. CELL PACK, EXTERNAL ANTENNA (IF REQUIRED), & MOUNTING
- 4. METER
- RELAYS
- DEMAND PULSE BOX (OPTIONAL)

## CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 7. STRUCTURE (UNISTRUT, POLES, CONCRETE, ETC.)
- 8. CONDUIT

## NOTES:

- A. FOR METERING CONDUIT RUN 50 FEET OR LESS  $-1\frac{1}{4}$ " MINIMUM GALVANIZED RIGID OR INTERMEDIATE STEEL OR GRAY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN METER PANEL AND INSTRUMENT TRANSFORMERS.
- B. FOR METERING CONDUIT RUNS OVER 50 FEET APPROVAL FROM METERING SUPPORT REQUIRED. SEE RULE 15H FOR MORE DETAIL.
- C. SEE BARRIER SKETCH #20 AS REQUIRED BY PPL EU.

• REFERENCE: SKETCH #8C, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 13, 15, 18

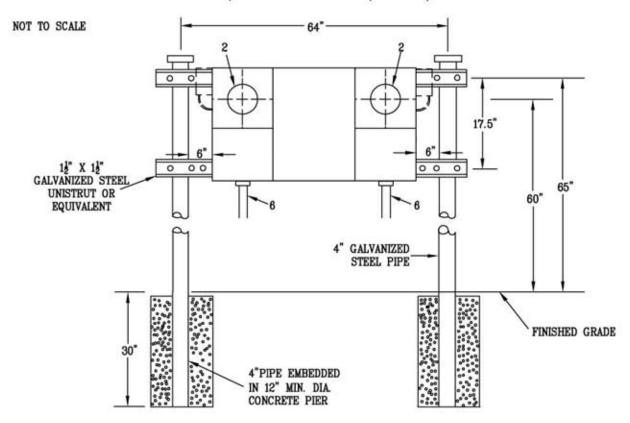
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SKETCH #8D SHEET 3 OF 4

## Typical Meter Panel Mounting Arrangement For Use With Instrument Transformer Metering

SKETCH #8D SHEET 3 OF 4

## DUAL METER PANEL/AUXILIARY BOX COMBO (2 METERS) ARRANGEMENT



## PPL EU FURNISHES, MAINTAINS, CUSTOMER INSTALLS:

DUAL METER PANEL/AUXILIARY BOX COMBO

## PPL EU FURNISHES, INSTALLS, MAINTAINS:

- METER
- RELAYS
- DEMAND PULSE BOX (OPTIONAL)

## CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 5. STRUCTURE (UNISTRUT, POLES, CONCRETE, ETC.)
- 6. CONDUIT

#### NOTES:

- A. FOR METERING CONDUIT RUN 50 FEET OR LESS  $-1\frac{1}{4}$ " MINIMUM GALVANIZED RIGID OR INTERMEDIATE STEEL OR GRAY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN METER PANEL AND INSTRUMENT TRANSFORMERS.
- B. FOR METERING CONDUIT RUNS OVER 50 FEET APPROVAL FROM METERING SUPPORT REQUIRED. SEE RULE 15H FOR MORE DETAIL.
- C. SEE BARRIER SKETCH #20 AS REQUIRED BY PPL EU.

• REFERENCE: SKETCH #8C, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

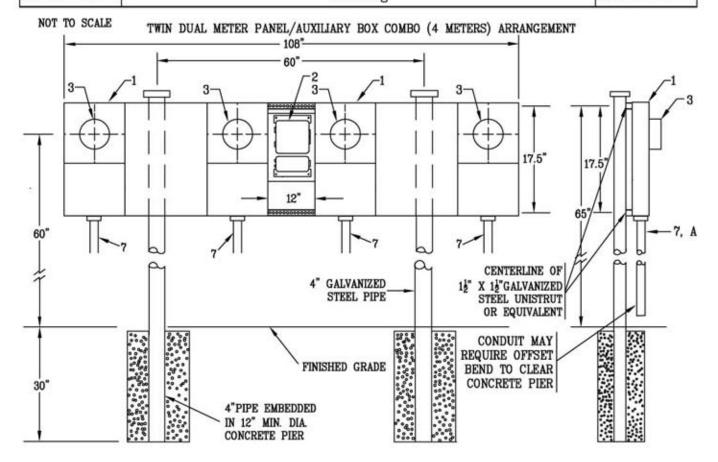
Rules: 13, 15, 18

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SKETCH #8D SHEET 4 OF 4

## Typical Meter Panel Mounting Arrangement For Use With Instrument Transformer Metering

SKETCH #8D SHEET 4 OF 4



## PPL EU FURNISHES, MAINTAINS, CUSTOMER INSTALLS:

DUAL METER PANEL/AUXILIARY BOX COMBO

## PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 2. CELL PACK, EXTERNAL ANTENNA (IF REQUIRED)
- 3. METER
- 4. ANY RELAYS REQUIRED
- 5. DEMAND PULSE BOX (OPTIONAL)

## CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 6. STRUCTURE (UNISTRUT, POLES, CONCRETE, ETC.)
- 7. CONDUIT

### NOTES:

- A. FOR METERING CONDUIT RUN 50 FEET OR LESS 1½" MINIMUM GALVANIZED RIGID OR INTERMEDIATE STEEL OR GRAY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN METER PANEL AND INSTRUMENT TRANSFORMERS.
- B. FOR METERING CONDUIT RUNS OVER 50 FEET APPROVAL FROM METERING SUPPORT REQUIRED. SEE RULE 15H FOR MORE DETAIL.

C. SEE BARRIER SKETCH #20 AS REQUIREED BY PPL EU.

• REFERENCE: SKETCH #8C, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE
INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 13, 15, 18

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## REMSI Sketches 1-25 Sketch #14 6-50

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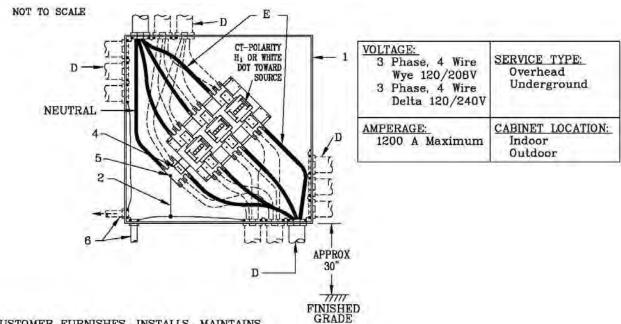
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DEPEROPHER STANDARD

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## Sketch #14 Typical arrangement of instrument transformers and mounting for installation in instrument transformer cabinet

3 phase, 4 wire, 208Y/120 volts or 3 phase, 4 wire, Delta 240/120 volts, 1200 ampere maximum



CUSTOMER FURNISHES, INSTALLS, MAINTAINS

- 1. SEALABLE METAL CABINET MINIMUM SIZE 48 INCHES BY 48 INCHES BY 12 INCHES (SEE TABLES 3 AND 4 APPROVED INSTRUMENT TRANSFORMER CABINET) AND INSTALLS INSTRUMENT TRANSFORMERS AND MOUNTING FURNISHED BY PPL EU. MOUNT ON 45° ANGLE TO ELIMINATE SHARP BENDS IN CABLES. GROUP CONDUITS IN CORNER OF CABINET.
- 2. BONDING JUMPER PER NEC ARTICLE 250 GROUNDING. BONDING JUMPER SIZE 1/0 COPPER.
- 3. GROUNDING BUSHING SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET AND TO THE NEUTRAL BUS.

## PPL EU FURNISHES INSTALLS, MAINTAINS:

- 4. TERMINAL FOR METERING NEUTRALS
- 5. STUD FOR BONDING JUMPER

CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS:

- 6. CONDUIT TO METER PANEL SEE SKETCH #8C AND RULE 15 PPL EU FURNISHES, MAINTAINS, CUSTOMER INSTALLS:
- 7. CURRENT TRANSFORMERS (CTS) CT MOUNTING BRIDGE.

## NOTES:

- A. MAXIMUM AMPACITY OF EACH CT MOUNTING CONNECTOR IS 400 AMPERES. EACH CONNECTOR CAN ACCOMMODATE ONE COPPER OR ALUMINUM CONDUCTOR WIRE RANGE FROM 300 TO 750 KCMIL.
- B. MAXIMUM TIGHTENING TORQUE ON THE CT MOUNTING WIRE CONNECTION 450 INCH-POUNDS.
- C. REAR ENTRY OF CT CABINETS IS NOT PERMITTED FOR PPL EU CABLES.
- D. CONDUITS SHALL HAVE 36 INCH MINIMUM BENDING RADIUS
- E. THIS CONDUCTOR OF 3 PHASE, 4 WIRE, DELTA CONNECTED SERVICE SHALL HAVE THE HIGHER VOLTAGE TO GROUND AND BE IDENTIFIED SEE RULE 5 (G).

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS	Rules: 5, 13, 15 REMSLS014.dwg
PPL ELECTRIC UTILITIES CORPORATION	Date: 7/18/16 Engr: NAP



## **REMSI Sketches 1-25** Sketch #14a 6-50

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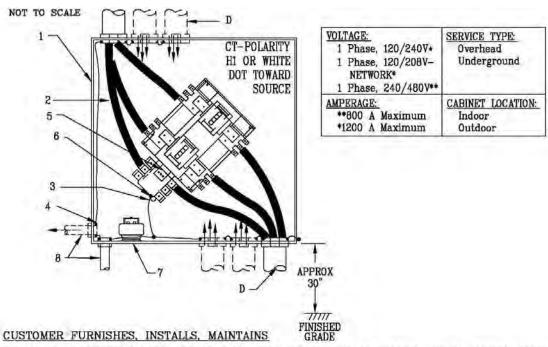
Revision: 01

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## Sketch #14a Typical arrangement of instrument transformers and mounting for installation in instrument transformer cabinet

Single phase 120/240 volt or 240/208 volt, Network – 800 to 1200 ampere, Single phase 240/480 volt 600 to 800 ampere



- 1. SEALABLE METAL CABINET MINIMUM SIZE 48 INCHES BY 48 INCHES BY 12 INCHES (SEE TABLES 3 AND 4 - APPROVED INSTRUMENT TRANSFORMER CABINET) AND INSTALLS INSTRUMENT TRANSFORMERS AND MOUNTING FURNISHED BY PPL EU. MOUNT ON 45° ANGLE TO ELIMINATE SHARP BENDS IN CABLES. GROUP CONDUITS IN CORNER OF CABINET.
- 2. NEUTRAL
- BONDING JUMPER PER NEC ARTICLE 250 GROUNDING. BONDING JUMPER SIZE 1/0 COPPER.
- 4. GROUNDING BUSHING SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET AND TO THE NEUTRAL BUS.

#### PPL EU FURNISHES INSTALLS, MAINTAINS:

- 5. TERMINAL FOR METERING NEUTRALS
- 6. STUD FOR BONDING JUMPER
- 7. VOLTAGE TRANSFORMERS FOR 240/480V SERVICE

#### CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS;

- 8. CONDUIT TO METER PANEL SEE SKETCH #8C AND RULE 15 NOTES:
- A. MAXIMUM AMPACITY OF EACH CT MOUNTING CONNECTOR IS 400 AMPERES. EACH CONNECTOR CAN ACCOMODATE ONE COPPER OR ALUMINUM CONDUCTOR WIRE RANGE FROM 300 TO 750 KCMIL
- B. MAXIMUM TIGHTENING TORQUE ON THE CT MOUNTING WIRE CONNECTION 450 INCH-POUNDS.
- C. REAR ENTRY OF CT CABINETS IS NOT PERMITTED FOR PPL EU CABLES.
- D. CONDUITS SHALL HAVE 36 INCH MINIMUM BENDING RADIUS

\*REFERENCE SKETCH #8C REMSI\_S014A.dwg RULES FOR ELECTRIC METER AND SERVICE Rules: 5, 13, 15 INSTALLATIONS PPL ELECTRIC UTILITIES Date: 7/18/16 Engr: NAP CORPORATION



## REMSI Sketches 1-25 Sketch #14b 6-50

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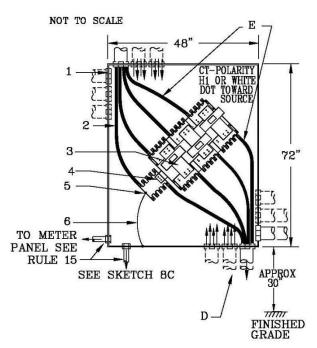
Revision: 01

Effective Date: 09/19/2016

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## Sketch #14b Typical arrangement of instrument transformers and mounting for installation in instrument transformer cabinet

3 phase, 4 wire, 208Y/120 volts or 3 phase, 4 wire, Delta 240/120 volts, 2000 Ampere Maximum



VOLTAGE: 3 Phase, 4 Wire Wye 120/208V 3 Phase, 4 Wire Delta 120/240V	SERVICE TYPE: Overhead Underground
AMPERAGE: 2000 A Maximum	CABINET LOCATION: Indoor Outdoor

#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 1. SEALABLE METAL CABINET MINIMUM SIZE 48 INCHES BY 72 INCHES BY 12 INCHES (SEE TABLES 5 AND 6 APPROVED INSTRUMENT TRANSFORMER CABINET) AND INSTALLS INSTRUMENT TRANSFORMERS AND MOUNTING FURNISHED BY PPL EU. MOUNT ON 45° ANGLE TO ELIMINATE SHARP BENDS IN CABLES. GROUP CONDUITS IN CORNER OF CABINET.
- 2. NEUTRAL
- 3. FILLER BARS PROVIDED BY PPL EU AND INSTALLED BY CUSTOMER.

#### PPL EU FURNISHES INSTALLS, MAINTAINS:

- 4. TERMINAL FOR METERING NEUTRALS
- 5. STUD FOR BONDING JUMPER

## CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS:

6. BONDING JUMPER PER NEC ARTICLE 250-GROUNDING. ALL METALLIC CONDUITS CONDUITS MUST BE BONDED TOGETHER AND TO THE CABINET. BONDING JUMPER SIZE 1/0 COPPER.

#### NOTES:

- A. MAXIMUM AMPACITY OF EACH CT MOUNTING CONNECTOR IS 400 AMPERES. EACH CONNECTOF CAN ACCOMODATE ONE COPPER OR ALUMINUM CONDUCTOR UP TO 750 KCMIL.
- B. MAXIMUM TIGHTENING TORQUE ON THE CT MOUNTING 450 INCH-POUNDS.
- C. REAR ENTRY OF CT CABINETS IS NOT PERMITTED FOR PPL EU CABLES.
- D. CONDUITS SHALL HAVE 36 INCH MINIMUM BENDING RADIUS.
- E. THIS CONDUCTOR OF 3 PHASE, 4 WIRE, DELTA CONNECTED SERVICE SHALL HAVE THE HIGHER VOLTAGE TO GROUND AND BE IDENTIFIED SEE RULE 5 (G).

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES
CORPORATION

RULES: 5, 13, 15

Rules: 5, 13, 15

Page 17/18/16 Engr: NAP



## REMSI Sketches 1-25 Sketch #14c 6-50

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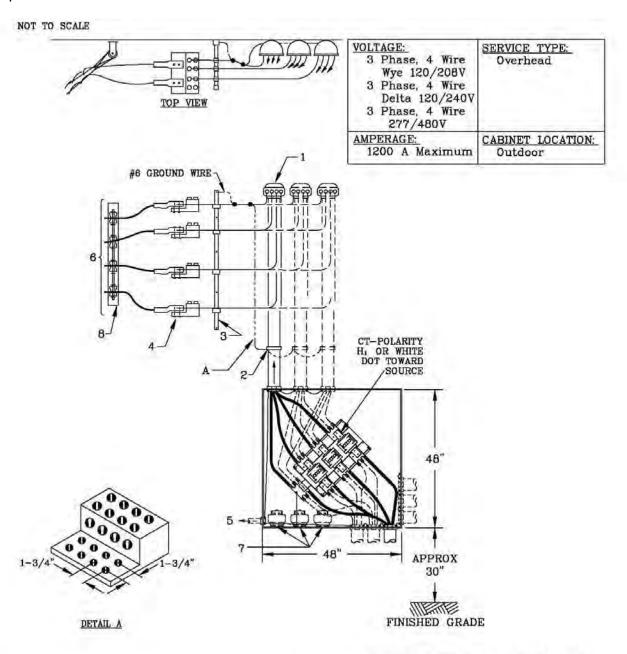
Revision: 01

Effective Date: 09/19/2016

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## Sketch #14c Typical arrangement of overhead instrument transformers and mounting for installation in instrument transformer cabinet

3 phase, 4 wire, 208Y/120 volts or 3 phase, 4 wire, Delta 240/120 volts or 3 phase, 4 wire, 480/277 volts 1200 Ampere Maximum



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

PRESENCE SKETCH #8C, SKETCH #44, SKETCH #49

Rules: 5, 13, 15

Date: 7/18/16 Engr: NAP

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## REMSI Sketches 1-25 Sketch #14c 6-50

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Effective Date: 09/19/2016

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## Sketch #14c Typical arrangement of overhead instrument transformers and mounting for installation in instrument transformer cabinet (cont.)

#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS

- 1. SERVICE ENTRANCE SEE RULE 5.
- 2. GROUND CLAMPS.
- 3. CABLE SUPPORT RACK.
- 4. LUG CONNECTORS. SEE DETAIL A OR SKETCH #49 FOR ALTERNATIVE CONNECTORS.
- 5. CONDUIT TO METER PANEL, SEE SKETCH #8C AND RULE 15.

#### PPL EU FURNISHES, INSTALLS, MAINTAINS

- 6. SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS. MAXIMUM TENSION PER CONDUCTOR.
- 7. VOLTAGE TRANSFORMER FOR 480/277V SERVICE ONLY.

#### PPL EU FURNISHES; CUSTOMER INSTALLS, MAINTAINS

8. SERVICE RACK OR BRACKET

#### NOTES:

- A. PPL EU MAKES GROUNDING CONNECTION FOR METAL CONDUIT.
- B. SEE SKETCH #44 FOR INSTRUMENT TRANSFORMER CABINET NOTES.
- C. SEE SKETCH #49 FOR 'DETAIL A'.

\*REFERENCE: SKETCH #8C, SKETCH #44, SKETCH #49

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

Date: 7/18/16 Engr: NAP

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## **REMSI Sketches 1-25** Sketch #14d 6-50

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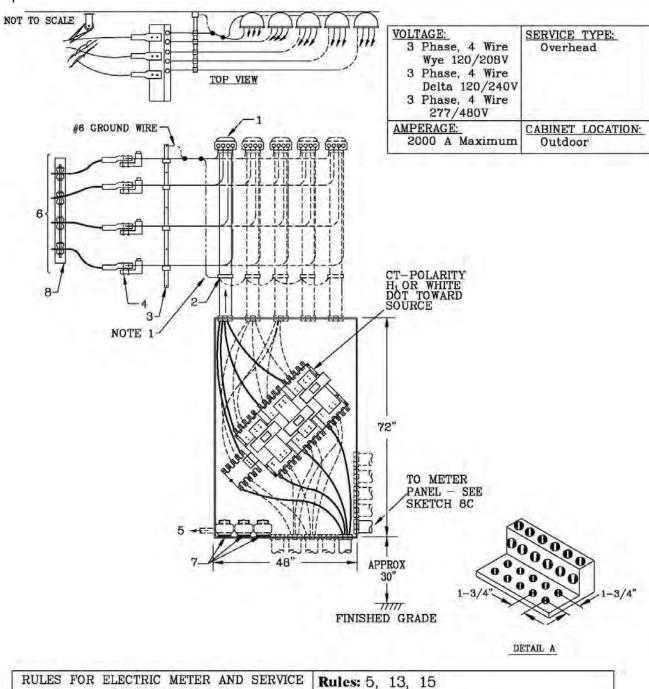
Revision: 01

Effective Date: 09/19/2016

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## Sketch #14d Typical arrangement of overhead instrument transformers and mounting for installation in instrument transformer cabinet

3 phase, 4 wire, 208Y/120 volts or 3 phase, 4 wire, Delta 240/120 volts or 3 phase, 4 wire, 480/277 volts 2000 Ampere Maximum



INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 13, 15

Date: 7/18/16 Engr:

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## REMSI Sketches 1-25 Sketch #14d 6-50

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## Sketch #14d Typical arrangement of overhead instrument transformers and mounting for installation in instrument transformer cabinet (cont.)

#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS

- 1. SERVICE ENTRANCE, SEE RULE 5.
- 2. GROUND CLAMPS.
- 3. CABLE SUPPORT RACK.
- 4. LUG CONNECTORS. SEE DETAIL A OR SKETCH #49 FOR ALTERNATIVE CONNECTORS.
- 5. CONDUIT TO METER PANEL, SEE SKETCH #8C AND RULE 15.

#### PPL EU FURNISHES, INSTALLS, MAINTAINS

- 6. SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS. MAXIMUM TENSION PER CONDUCTOR.
- 7. VOLTAGE TRANSFORMER FOR 480/277V SERVICE ONLY.

### PPL EU FURNISHES; CUSTOMER INSTALLS, MAINTAINS

8. SERVICE RACK OR BRACKET

#### NOTES:

- A. PPL EU MAKES GROUNDING CONNECTION FOR METAL CONDUIT.
- B. SEE SKETCH #44 FOR INSTRUMENT TRANSFORMER CABINET NOTES.
- C. SEE SKETCH #49 FOR 'DETAIL A'.

\*REFERENCE: SKETCH #8C, SKETCH #44, SKETCH #49

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 13, 15

Date: 7/18/16 Engr: NAP

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## **REMSI Sketches 1-25** Sketch #15 6-50

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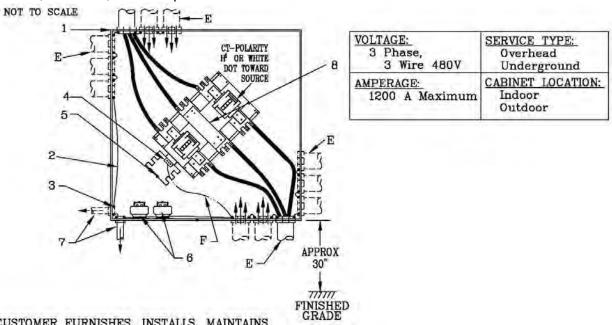
Revision: 01

Effective Date: 09/19/2016

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## Sketch #15 Typical arrangement of instrument transformer and mounting for installation in instrument transformer cabinet underground

3 phase, 3 wire, 480 volts, 1200 Ampere Maximum



#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS

- 1. SEALABLE METAL CABINET MINIMUM SIZE 48 INCHES BY 48 INCHES BY 12 INCHES (SEE TABLES 3 AND 4 - APPROVED INSTRUMENT TRANSFORMER CABINET) AND INSTALLS INSTRUMENT TRANSFORMERS AND MOUNTING FURNISHED BY PPL EU. MOUNT ON 45° ANGLE TO ELIMINATE SHARP BENDS IN CABLES. GROUP CONDUITS IN CORNER OF CABINET.
- 2. BONDING JUMPER PER NEC ARTICLE 250. BONDING JUMPER SIZE 1/0 COPPER.
- 3. GROUNDING BUSHING SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET AND TO THE NEUTRAL BUS.

#### PPL EU FURNISHES INSTALLS, MAINTAINS:

- 4. TERMINAL FOR METERING NEUTRALS.
- 5. STUD FOR BONDING JUMPER.
- VOLTAGE TRANSFORMERS FOR 480V SERVICE.
- 7. CONDUIT TO METER PANEL SEE SKETCH #8C AND RULE 15.

#### CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS;

8. FILLER BAR.

#### NOTES:

- A. MAXIMUM AMPACITY OF EACH CT MOUNTING CONNECTOR IS 400 AMPERES. EACH CONNECTOR CAN ACCOMODATE ONE COPPER OR ALUMINUM CONDUCTOR WIRE RANGE FROM 300 TO 750 KCMIL.
- B. MAXIMUM TIGHTENING TORQUE ON THE CT MOUNTING WIRE CONNECTION 450 INCH-POUNDS.
- C. REAR ENTRY OF CT CABINETS IS NOT PERMITTED FOR PPL EU CABLES.
- D. CUSTOMER MUST EXTEND GROUND & BOND IT TO THE INSTRUMENT TRANSFORMER CABINET IF PLASTIC CONDUIT IS INSTALLED BETWEEN CABINET & SERVICE EQUIPMENT.
- E. CONDUITS SHALL HAVE 36 INCH MINIMUM BENDING RADIUS.
- F. GROUND WIRE NOT TO BE USED AS NEUTRAL SEE RULE 5.

\*REFERENCE SKETCH #8C REMSI\_S015.dwg RULES FOR ELECTRIC METER AND SERVICE Rules: 5, 13, 15 INSTALLATIONS PPL ELECTRIC UTILITIES Date: 7/18/16 Engr: CORPORATION



## REMSI Sketches 1-25 Sketch #15a 6-50

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Revision: 01

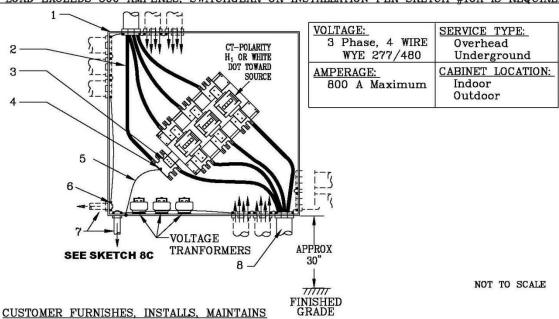
Effective Date: 09/19/2016

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## Sketch #15a Typical arrangement of instrument transformers and mounting for installation in instrument transformer cabinet underground service

3 phase, 4 wire, Wye 277/480 volts, 800 Ampere Maximum

#### IF LOAD EXCEEDS 800 AMPERES, SWITCHGEAR OR INSTALLATION PER SKETCH #16A IS REQUIRED.



- 1. SEALABLE METAL CABINET MINIMUM SIZE 48 INCHES BY 48 INCHES BY 12 INCHES (SEE TABLES 3 AND 4 APPROVED INSTRUMENT TRANSFORMER CABINET) AND INSTALLS INSTRUMENT TRANSFORMERS AND MOUNTING FURNISHED BY PPL EU. MOUNT ON 45° ANGLE TO ELIMINATE SHARP BENDS IN CABLES. GROUP CONDUITS IN CORNER OF CABINET.
- 2. NEUTRAL
- 3. TERMINAL FOR METERING NEUTRALS
- 4. STUD FOR BONDING JUMPER

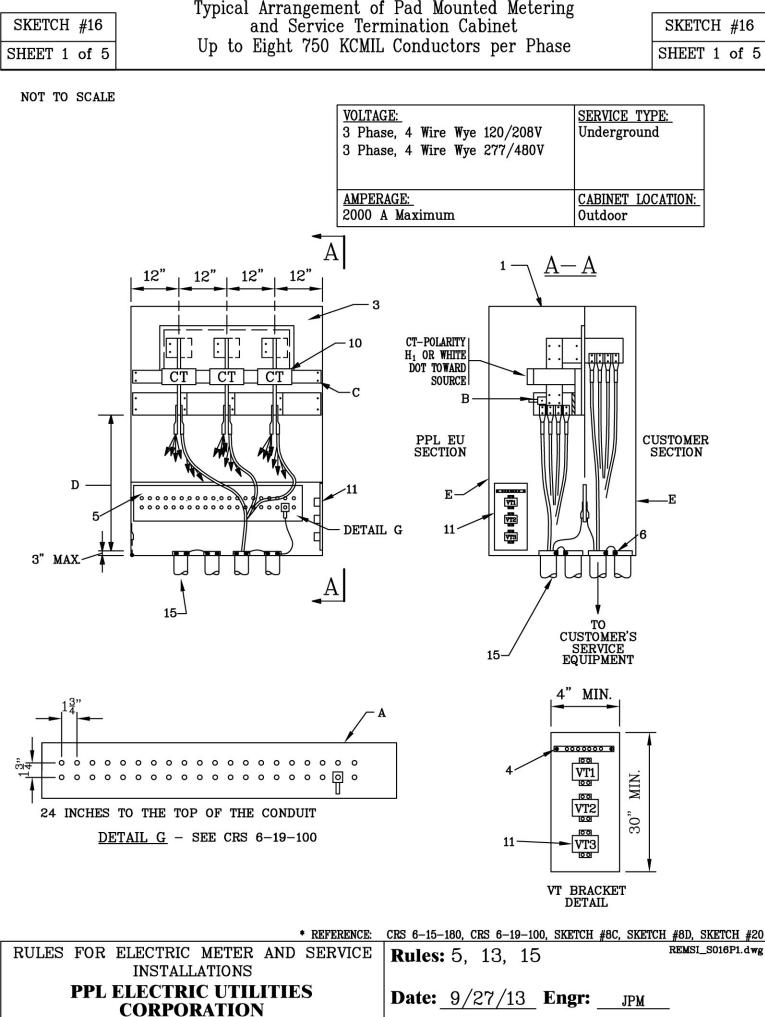
### CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS:

- BONDING JUMPER PER NEC ARTICLE 250 GROUNDING. BONDING JUMPER SIZE 1/0 COPPER.
- 6. GROUNDING BUSHING SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET AND TO THE NEUTRAL BUS.
- 7. TO METER PANEL SEE RULE 15
- 8. CONDUITS SHALL HAVE 36 INCH MINIMUM BENDING RADIUS NOTES:
  - A. MAXIMUM AMPACITY OF EACH CT MOUNTING CONNECTOR IS 400 AMPERES. EACH CONNECTOR CAN ACCOMODATE ONE COPPER OR ALUMINUM CONDUCTOR FROM 300 TO 750 KCMIL.
  - B. MAXIMUM TIGHTENING TORQUE ON THE CT MOUNTING WIRE CONNECTION IS 450 INCH-POUNDS.
  - C. REAR ENTRY OF CT CABINETS IS NOT PERMITTED FOR PPL EU CABLES.

\*REF: SKETCH #8C

RULES: 5, 13, 15

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Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet

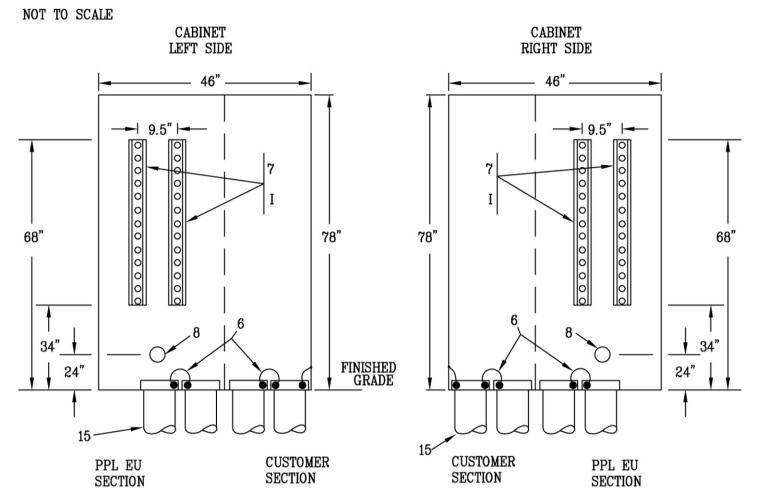
SHEET 2 of 5

Up to Eight 750 KCMIL Conductors per Phase

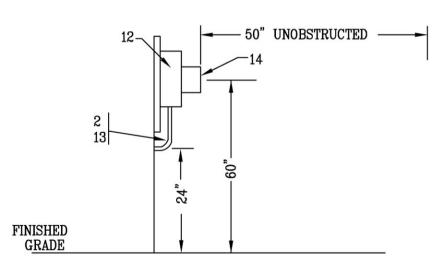
SKETCH #16
SHEET 2 of 5

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## SIDE VIEW OF METER



\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

**Date:** 9/27/13 **Engr:** JPM

		$\neg$ Typic:	al Arran	igem	ent of	Pad	Mount	ted Mo	etering					
SKE	TCH #16	-71	and S	ervic	e Teri	minat	ion Ca	binet	2001111-0		SKET	CH	#16	
SHEE	ET 3 of 5	5 Up te	o Eight								SHEET	r 3	of	5
		<u> </u>						1						_
CUS	TOMER F	URNISHES, INSTA	ALLS, MA	AINTA	<u>INS</u> :									
1.	CABINET M FOR THAT	METAL CABINET MIN MUST BE NEMA-3R 'EQUIPMENT DESIGN NTED METERING AND	(WEATHER NATED AS	PROOF BEING	F). INCLI PROVII	UDES A	ALL CONI Y PPL E	DUITS, I U. SEE	BUSWORK, REMSI TAI	HARDWARE BLE 1-APP	E, ETC. I		PT	
2.	1-1/4 INC	H MINIMUM THREAD INGS BETWEEN INSTI	ED GALVA	NIZED	OR INT	ERMED	IATE RID	OGID ST			O PVC (	CONE	)UIT	
3.	CUSTOMER	IS RESPONSIBLE FO	OR BUS A	RRANG	EMENT,	INTER	NALS, AI	ND CAB	INET.					
4.	BRACKET.	OUNDING TERMINAL MUST ACCOMMODAT EUTRAL BUS WITH	E 2-#6 A	ND 5-	-#10 ST	'RANDE								
5.	NEUTRAL I	BUS TO BE BOLTED	TO CABIN	ET FO	R BOND	ING P	URPOSES	S.						
6.		G BUSHINGS SHALL TOGETHER, TO THE (						TS. THE	E CONDUIT	S SHALL B	Е			
7.	INCHES FITHE TOP BE MOUNT THE UNIS	H PIECES OF UNISTF ROM CENTERLINE TO OF THE UNISTRUT S TED ON THE OUTSID TRUT SHALL BE MODE CABINET. SEE NOTE	O CENTERI SHALL BE DE OF PPL UNTED ON	INE A 68 IN EU'S EITH	APART. I NCHES, I SECTIO ER SIDE	THE BOFFROM TO SERVICE OR B	TTOM OF THE BOT THE CAB	F THE TOM OF BINET.	UNISTRUT THE CAB	SHALL BE INET. THE	34 INCH UNISTRI	IES,	•	
8.	24 INCHES	BELOW THE TWO PISS CENTERLINE FROM THE METER PANEL	I THE BOT	гтом (	OF THE	CABIN	ET TO A	TTACH	T A 1-1/4 THE METE	INCH HOI RING COND	.E )UIT ANI	)		
PPL	EU FURNIS!	HES, MAINTAINS; CU	JSTOMER I	NSTAL	LS:									
10.	CURRENT T	TRANSFORMERS.												
11.	VOLTAGE TI	RANSFORMERS FOR	277/480V	SERV	ICES.									
12.	METER PAN	1EL												
DDI	בוו הווטאומ	HES, INSTALLS, MAIN	NTA INIQ.											
13.	A SECULIAR DESCRIPTION AND ADDRESS OF THE	TWEEN INSTRUMENT		OMERS	AND M	י קידיים	DANIFI, S	יווא יוים	₽ 15					
	METER	IMPEN INDITOMENT	INAMOPOL	(MEIW)	AND M	.Eleiv i	CANEL D.	EE ROL	Ľ 19.					
14.	METEL													
CUST	OMER FURN	NISHES, INSTALLS, P	PL EU MA	INTAIN	<u> </u>									
15.	DETERMINE	PECIFIES THE NUMBI D BY THE SIZE OF D RIGID OR INTERME	THE TRAN	SFORM	MER. SE	RVÍCE	<b>ENTRAN</b> (	CE UP	TO 8 CON	DUITS.				
RUI	ES FOR	ELECTRIC METE	restriction for the second countries	10/04/10/04/04	And a factor of the control of the c	Ĭ	-180, CRS es: 5,			H #8C, SKETC	CH #8D, S REMSI			
		INSTALLATION	NS			I\u.	L3. U,	10,	10					
	PPL I	ELECTRIC UT CORPORATION		S		Date	e: <u>9/</u> 2	27/13	B_ Engr	:JPM				

SKETCH #16 SHEET 4 of 5

## Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet Up to Eight 750 KCMIL Conductors per Phase

SKETCH #16

SHEET 4 of 5

#### NOTES:

A. PPL EU CONNECTS STARTING FROM THE RIGHT SIDE OF THE NEUTRAL BAR WHEN ACCESSING FROM PPL EU'S SECTION. THE CUSTOMER CONNECTS STARTING FROM THE RIGHT SIDE OF THE NEUTRAL BAR WHEN ACCESSING FROM THE CUSTOMERS SECTION.

- 1/4 X 20 TAPPED HOLE AND HEX HEAD SCREW FOR METERING VOLTAGE CONNECTION. B.
- C. ADJUSTABLE CT SUPPORT.
- MINIMUM CLEARANCE FROM THE BOTTOM OF THE BAR TO TOP OF CONDUITS. SEE RULE 15(F) AND D. SKETCH #50 FOR CABLE LIMITER DETAILS.
- E. PPL EU AND CUSTOMER DOORS MUST BE TRIPLE HINGED. THE HINGES AND HINGE PINS MUST BE NON-REMOVABLE. THE PPL EU AND CUSTOMER DOORS MUST ALSO BE SEALABLE. SEE NOTE F AND NOTE G.
- A THREE POINT LATCHING MECHANISM THAT SECURES BOTH DOORS IS REQUIRED. THE LATCHING BARS MUST PASS THROUGH A GUIDE THAT ASSURES CORRECT LATCHING. THE LATCHING MECHANISM CANNOT PROTRUDE MORE THAN 1" INSIDE THE CABINET. ALL CONNECTION BOLTS MUST BE PERMANENTLY SECURED TO PREVENT ACCIDENTAL CONTACT OF ANY METAL PART SHOULD THE LATCHING ASSEMBLY FAIL
- THE LATCHING MECHANISM HANDLE MUST BE DESIGNED TO PROVIDE A LOCKING PROVISION IN THE CLOSED POSITION. A 1/2" HOLE IS REQUIRED FOR THE LOCKING PROVISION. KEY LOCKING OF THE HANDLE IS NOT ALLOWED.
- REFER TO THE APPROVED METERING AND EQUIPMENT TABLES (TABLE 1) FOR PREAPPROVED PAD MOUNTED H. METERING AND SERVICE TERMINATION CABINET. CABINETS NOT ALREADY ON THE PREAPPROVED LIST MUST HAVE DETAILED CONSTRUCTION DRAWINGS SUBMITTED TO PPL EU FOR APPROVAL BY THE AREA DESIGN SUPERVISOR PRIOR TO CONSTRUCTION.
- IN THE EVENT THE UNISTRUT HAS NOT BEEN MOUNTED BY THE CABINET MANUFACTURER THE METER PANEL I. IS NOT PERMITTED TO BE INSTALLED ON THE CABINET. THE METER PANEL SHALL THEN BE INSTALLED ON A A SEPARATE MOUNTING ARRANGEMENT WITHIN VISUAL DISTANCE OF THE CABINET. SEE SKETCH #8D. CONTACT METERING SUPPORT FOR LOCATION OF METER PANEL. METER PANEL INFORMATION SEE SKETCH #8C. METERING CONDUIT WILL NEED TO BE INSTALLED IN THE FOUNDATION TO RUN BETWEEN THE INSTRUMENT CABINET AND THE METER PANEL. THE METERING CONDUIT SHALL BE BONDED TO THE OTHER CONDUIT AND THE CABINET.
- CLEAR SPACE-SEE SKETCH #8C AND RULE 13 FOR MORE INFORMATION. J.
- K. SEE BARRIER SKETCH #20 AS REQUIRED BY PPL EU.

\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE

INSTALLATIONS

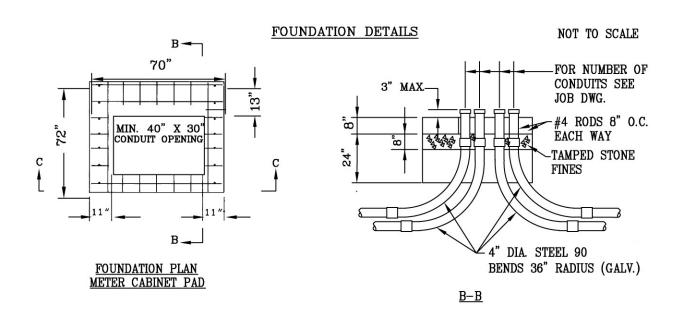
PPL ELECTRIC UTILITIES CORPORATION

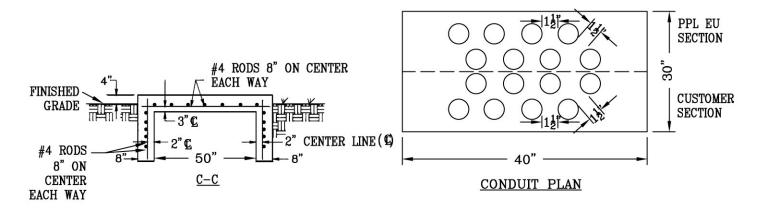
**Rules:** 5, 13, 15

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**Date:** 9/27/13 **Engr:** 

SKETCH #16 SHEET 5 of 5 Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet Up to Eight 750 KCMIL Conductors per Phase SKETCH #16 SHEET 5 of 5





\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20
SERVICE: REMSI\_S016P5.dwg

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

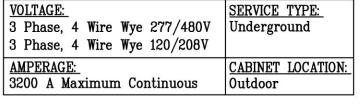
**Date:** 9/27/13 **Engr:** JPM

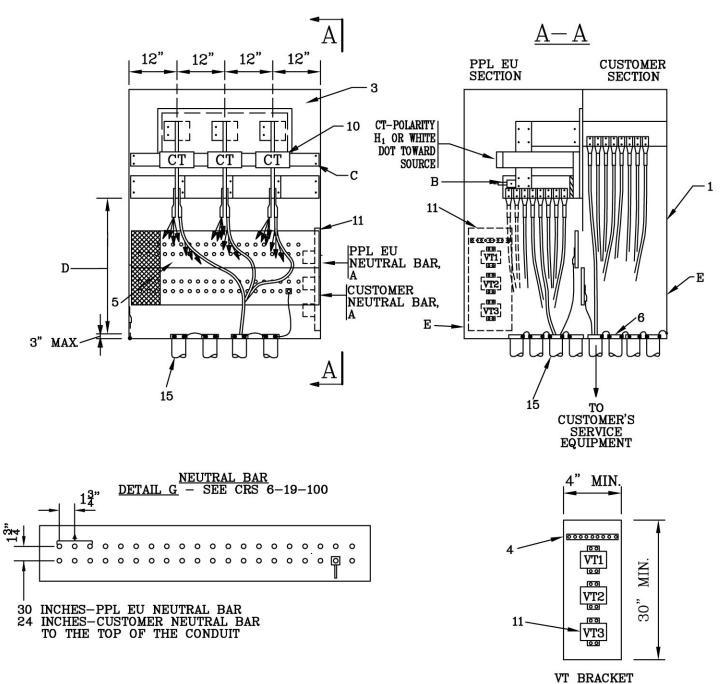
SKETCH #16A SHEET 1 of 5

Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet Up to Twelve 750 KCMIL Conductors per Phase

SKETCH #16A SHEET 1 of 5

NOT TO SCALE





\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

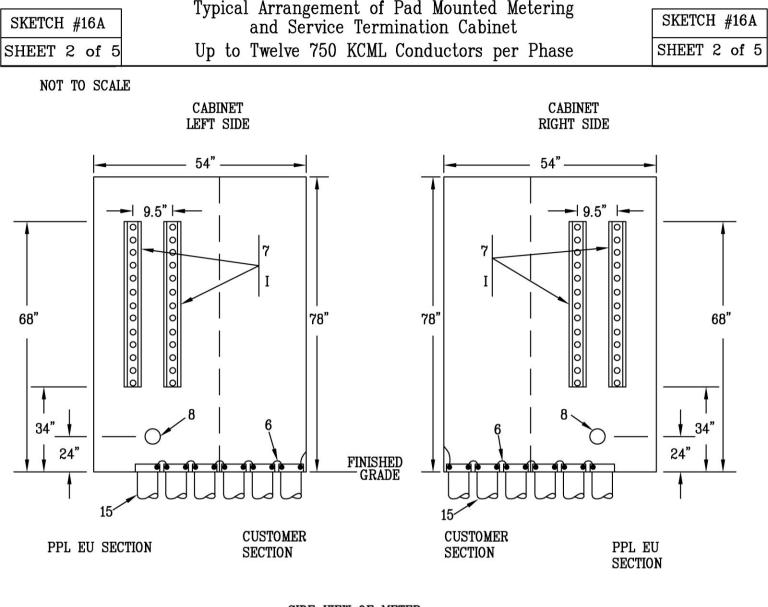
RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

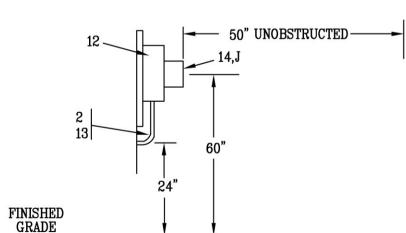
**Rules:** 5, 13, 15

DETAIL

REMSI\_S016A.dwg







\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

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RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

**Date:** 9/27/13 **Engr:** JPM

SKETCH #16A SHEET 3 of 5

## Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet Up to Twelve 750 KCMIL Conductors per Phase

SKETCH #16A SHEET 3 of 5

#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 1. SEALABLE METAL CABINET MINIMUM 48 INCHES WIDE BY 78 INCHES HIGH BY 62 INCHES DEEP. OUTDOOR CABINET MUST BE NEMA-3R (WEATHERPROOF). INCLUDES ALL CONDUITS, BUSWORK, HARDWARE, ETC. EXCEPT FOR THAT EQUIPMENT DESIGNATED AS BEING PROVIDED BY PPL EU. SEE REMSI TABLE 1-APPROVED PAD MOUNTED METERING AND SERVICE TERMINATION CABINET FOR PREAPPROVED LIST.
- 2. 1-1/4 INCH MINIMUM THREADED GALVANIZED OR INTERMEDIATE RIDGID STEEL OR SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL
- 3. CUSTOMER IS RESPONSIBLE FOR BUS ARRANGEMENT, INTERNALS, AND CABINET.
- 4. METER GROUNDING TERMINAL BLOCK MOUNTED ON AN INSULATED STANDOFF AT THE TOP OF THE VT BRACKET. MUST ACCOMMODATE 2-#6 AND 5-#10 STRANDED COPPER CONDUCTORS AND BE BONDED TO THE NEUTRAL BUS WITH A #6 COPPER CONDUCTOR.
- 5. NEUTRAL BUS TO BE BOLTED TO CABINET FOR BONDING PURPOSES.
- 6. GROUNDING BUSHINGS SHALL BE ATTACHED TO ALL METAL CONDUITS. THE CONDUITS SHALL BE BONDED TOGETHER, TO THE CABINET, AND THE NEUTRAL BAR.
- 7. 2-34 INCH PIECES OF UNISTRUT ARE TO BE MOUNTED, BY THE CABINET MANUFACTURER, VERTICALLY 9-1/2 INCHES FROM CENTERLINE TO CENTERLINE APART. THE BOTTOM OF THE UNISTRUT SHALL BE 34 INCHES, THE TOP OF THE UNISTRUT SHALL BE 68 INCHES, FROM THE BOTTOM OF THE CABINET. THE UNISTRUT WILL BE MOUNTED ON THE OUTSIDE OF PPL EU'S SECTION OF THE CABINET. THE UNISTRUT SHALL BE MOUNTED ON EITHER SIDE OR BOTH SIDES OF THE PPL EU SECTION OF THE CABINET. SEE NOTE I FOR MORE INFORMATION.
- 8. CENTERED BELOW THE TWO PIECES OF UNISTRUT THE CUSTOMER WILL CUT A 1-1/4 INCH HOLE 24 INCHES CENTERLINE FROM THE BOTTOM OF THE CABINET TO ATTACH THE METERING CONDUIT AND FITTINGS. THE METER PANEL WILL BE MOUNTED ON THE UNISTRUT.

#### PPL EU FURNISHES, MAINTAINS; CUSTOMER INSTALLS:

- 10. CURRENT TRANSFORMERS.
- 11. VOLTAGE TRANSFORMERS FOR 277/480V SERVICES.
- METER PANEL

#### PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 13. WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL SEE RULE 15.
- 14. METER

#### CUSTOMER FURNISHES, INSTALLS, PPL EU MAINTAINS:

15. PPL EU SPECIFIES THE NUMBER OF CONDUITS, (MIN 4") IN PPL EU'S SECTION NUMBER OF CONDUITS IS DETERMINED BY THE SIZE OF THE TRANSFORMER. SERVICE ENTRANCE UP TO 16 PARALLEL CONDUITS. GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT SWEEPS SHALL HAVE A 36 INCH MINIMUM BENDING RADIUS.

\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE

INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

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**Date:** 9/27/13 **Engr:** JPM

SKETO	CH #16A	Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet	SKETCH ;	#16A
SHEET	4 of 5		SHEET 4	of 5
NOTES	<b>—</b> .			
A.	CUSTOMER	-MOST THREE HOLES ON PPL EU'S BUS BAR AND THE RIGHT—MOST THREE HOLES O R'S BUS BAR ARE TO BE BONDED BY THE MANUFACTURER AND ARE NOT PERMITTED NECTING THE NEUTRAL CONDUCTORS.		ED
B.	1/4 X 20	TAPPED HOLE AND HEX HEAD SCREW FOR METERING VOLTAGE CONNECTION.		
C.	ADJUSTAB:	LE CT SUPPORT.		
D.		CLEARANCE FROM THE BOTTOM OF THE BAR TO TOP OF CONDUITS. SEE RULE 15(F) 450 FOR CABLE LIMITER DETAILS.	AND	
E.		ND CUSTOMER DOORS MUST BE TRIPLE HINGED. THE HINGES AND HINGE PINS MUST OVABLE. THE PPL EU AND CUSTOMER DOORS MUST ALSO BE SEALABLE. SEE NOTE I		G.
F.	PASS THE	POINT LATCHING MECHANISM THAT SECURES BOTH DOORS IS REQUIRED. THE LATCH ROUGH A GUIDE THAT ASSURES CORRECT LATCHING. THE LATCHING MECHANISM CAI AN 1" INSIDE THE CABINET. ALL CONNECTION BOLTS MUST BE PERMANENTLY SECUR TAL CONTACT OF ANY METAL PART SHOULD THE LATCHING ASSEMBLY FAIL.	NNOT PROTR	UDE
G.		HING MECHANISM HANDLE MUST BE DESIGNED TO PROVIDE A LOCKING PROVISION IN A 1/2" HOLE IS REQUIRED FOR THE LOCKING PROVISION. KEY LOCKING OF THE DWED.		ED
H.	METERING HAVE DET	THE APPROVED METERING AND EQUIPMENT TABLES (TABLE 1) FOR PREAPPROVED FAND SERVICE TERMINATION CABINET. CABINETS NOT ALREADY ON THE PREAPPROVED FAILED CONSTRUCTION DRAWINGS SUBMITTED TO PPL EU FOR APPROVAL BY THE AREOR PRIOR TO CONSTRUCTION.	ÆD LIST MU	
I.	IS NOT I A SEPAR CONTACT #8C. MI INSTRUM	VENT THE UNISTRUT HAS NOT BEEN MOUNTED BY THE CABINET MANUFACTURER THE PERMITTED TO BE INSTALLED ON THE CABINET. THE METER PANEL SHALL THEN BE LATE MOUNTING ARRANGEMENT WITHIN VISUAL DISTANCE OF THE CABINET. SEE SKE METERING SUPPORT FOR LOCATION OF METER PANEL. METER PANEL INFORMATION ETERING CONDUIT WILL NEED TO BE INSTALLED IN THE FOUNDATION TO RUN BETWEEN CABINET AND THE METER PANEL. THE METERING CONDUIT SHALL BE BONDED AND THE CABINET.	INSTALLED TCH #8D. SEE SKETC EN THE	ON H
J.	CLEAR SP	PACE-SEE SKETCH #8C AND RULE 13 FOR MORE INFORMATION.		
K.	SEE BAR	RIER SKETCH #20 AS REQUIRED BY PPL EU.		

RULES FOR ELECTRIC METER AND SERVICE **Rules:** 5, 13, 15 INSTALLATIONS

PPL ELECTRIC UTILITIES **CORPORATION** 

Date: 9/27/13 Engr: \_\_

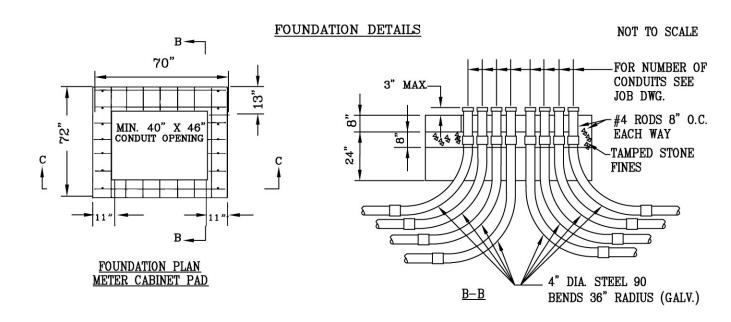
\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

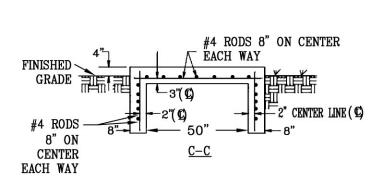
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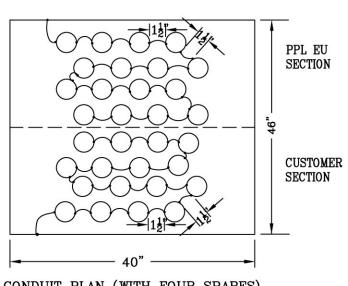
SKETCH #16A SHEET 5 OF 5

## Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet Up to Twelve 750 KCMIL Conductors per Phase

SKETCH #16A SHEET 5 OF 5







CONDUIT PLAN (WITH FOUR SPARES)

\* REFERENCE: CRS 6-15-180, CRS 6-19-100, SKETCH #8C, SKETCH #8D, SKETCH #20

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 13, 15

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**Date:** 9/27/13 **Engr:** 

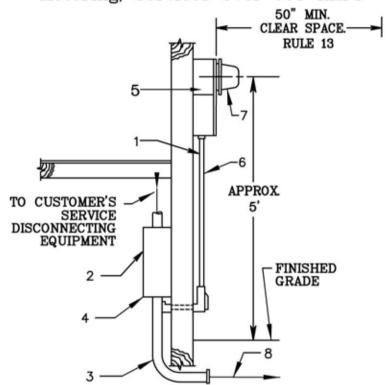
SKETCH #17

SHEET 17

Typical Arrangement of Outdoor Meter Panel on Building Underground Service Lateral from Overhead or Underground Distribution Single Phase, 3 Wire, 120/208 Volts or 120/240 Volts

SKETCH #17 SHEET 17

Arrangement of Equipment for Instrument Transformer Metering, Services Over 600 AMPS



#### CUSTOMER FURNISHES, INSTALLS, MAINTAINS:

- 1. 1-1/4 INCH MINIMUM, THREADED, GALVANIZED, RIGID OR INTERMEDIATE STEEL OR GREY SCHEDULE 40 PVC CONDUIT AND FITTINGS BETWEEN INSTRUMENT TRANSFORMER CABINET AND METER PANEL.
- 2. SEALABLE METAL INSTRUMENT TRANSFORMER CABINET, MINIMUM SIZE 48 INCHES BY 48 INCHES BY 12 INCHES. SEE RULE 15 AND SEE TABLE 1.APPROVED INSTRUMENT TRANSFORMER CABINET. SEE TABLE 2 IF OUTDOORS.
- 3. 36 INCH MINIMUM RADIUS, GALVANIZED, STEEL ELBOW THROUGH BASEMENT WALL.

#### PPL EU FURNISHES, MAINTAINS: CUSTOMER INSTALLS:

- 4. INSTRUMENT TRANSFORMERS AND MOUNTING.
- 5. METER PANEL INSTALLED AT LOCATION DESIGNATED BY PPL EU.

#### PPL EU FURNISHES, INSTALLS, MAINTAINS:

- 6. WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER PANEL
- 7. METER.
- SERVICE LATERAL CABLES TERMINATING ON THE LINE SIDE OF THE INSTRUMENT TRANSFORMERS.

  NOTES:
  - A. INDOOR LOCATION NEEDS APPROVAL OF SUPERVISOR METER SERVICES.
  - B. 50" MINIMUM CLEAR SPACE IN FRONT OF METERBASE. SEE RULE 13. SKETCH 55 AND SKETCH 55A.

\*REFERENCE CRS 6-19-133 & CRS 6-19-134, SKETCH 8C, SKETCH 55 & SKETCH 55A

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 6, 10, 11B, 12, 13, 15

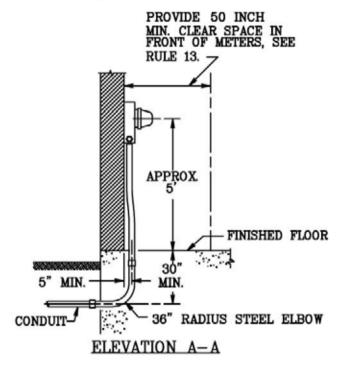
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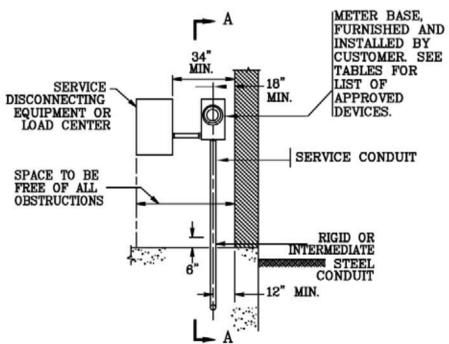
Date: 8/17/07 Engr: MDB

SKETCH #18 SHEET 18P1 Typical Arrangement of Indoor Metering Equipment to Accomodate Either Self-Contained or Secondary Instrument Transformer Metering Underground Service from an Underground Service Lateral Single Phase, 3 Wire, 120/208 V or 120/240 V and 3 Phase, 4 Wire, 208Y/120 V

SKETCH #18 SHEET 18P1

ARRANGEMENT OF EQUIPMENT FOR SELF-CONTAINED METER





RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 6, 10, 11A, 12, 13, 15 REMSL\_S018\_Pl.dwg

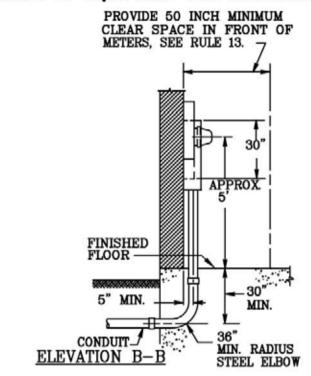
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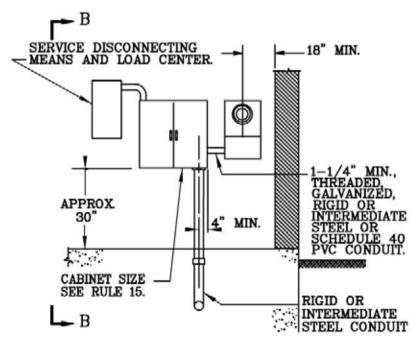
SKETCH #18 SHEET 18P2 Typical Arrangement of Indoor Metering Equipment to Accomodate Either Self-Contained or Secondary Instrument Transformer Metering Underground Service from an Underground Service Lateral Single Phase, 3 Wire, 120/208 V or 120/240 V and 3 Phase, 4 Wire, 208Y/120 V

SKETCH #18

SHEET 18P2

#### ARRANGEMENT OF EQUIPMENT FOR INSTRUMENT TRANSFORMER



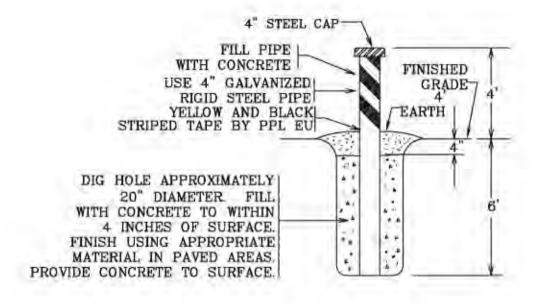


RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 6, 10, 11A, 12, 13, 15 REMSL S018\_P2.dwg

Date: 8/18/06 Engr: MDB



# NOTES:

SKETCH #20

1 of 1

- A. IT IS THE CUSTOMER'S RESPONSIBILITY TO INSTALL PROTECTIVE BARRIERS. THEY ARE REQUIRED WHEN THE EQUIPMENT IS LOCATED IN AN AREA EXPOSED TO VEHICULAR TRAFFIC-FOR EXAMPLE, PARKING LOTS, LOADING DOCKS, AND DRIVEWAYS.
- B. BARRIERS SHALL NOT BE LOCATED DIRECTLY OVER CONDUITS AND SHALL BE INSTALLED BEFORE THE SERVICE IS ENERGIZED.
- C. BARRIERS SHALL NOT BE LOCATED WITH IN MINIMUM CLEARANCE AREAS.

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules:

Date: 8/12/11 Engr: MDB

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SKETCH #21 SHEET 1 of 2 Typical Arrangement of Instrument Transformers in Switchgear Cubicle 3 Phase, 4 Wire, 208Y/120 V or 3 Phase, 4 Wire, Delta 240/120 V

SKETCH #21 SHEET 1 of 2

2 18" MIN. 2-1/2" OF BUSSES MIN. PLAN A-A

- 400 TO 4000 AMPERE CURRENT TRANSFORMER.
- 2. GROUNDED NEUTRAL BUS.
- SUPPORT ADJUSTABLE FROM 2-1/2 INCHES MIN. TO 8 INCHES MAX.
- TERMINAL BLOCK BY CUSTOMER FOR METERING GROUND INSULATED FROM CUBICLE BLOCK TO ACCOMMODATE 2-#6 & 5-#10 STRANDED COPPER CONDUCTORS.
- GROUND WIRE BY CUSTOMER 600V COVERED COPPER, #6 AWG MIN. CONNECTED BETWEEN NEUTRAL BUS & TERMINAL BLOCK.

\*REFERENCE CRS 6-19-100

5

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

> PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 15

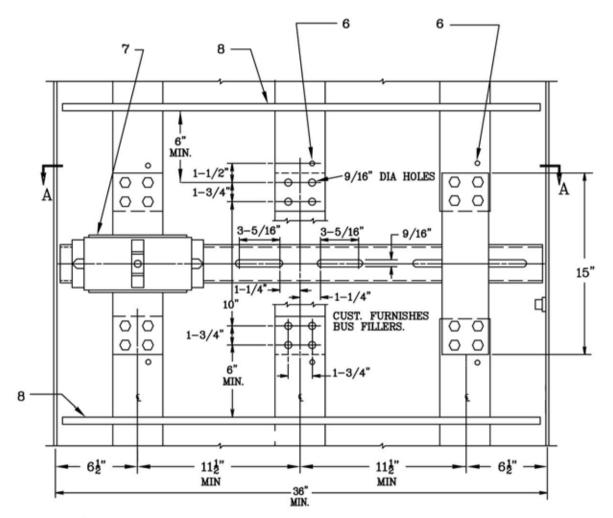
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**Date:** 6/24/09 **Engr:** 

Typical Arrangement of Instrument Transformers in Switchgear Cubicle

Switchgear Cubicle 3 Phase, 4 Wire, 208Y/120 V or 3 Phase, 4 Wire, Delta 240/120 V

SKETCH #21 SHEET 2 of 2



- PROVIDE 1/4 INCH BY 20 TAPPED HOLE & SCREW FOR METER WIRING ONNECTION ON EACH BUS
- CURRENT TRANSFORMERS FURNISHED AND MAINTAINED BY PPL EU AND INSTALLED BY CUSTOMER.
- 8. FULLY INSULATED BARRIER.

SKETCH #21

SHEET 2 of 2

- 9. MINIMUM CLEAR VERTICAL DISTANCE BETWEEN THE BOTTOMOF THE BUS BAR TO THE BOTTOM OF THE CABINET 48".
- MAXIMUM CONDUIT HEIGHT IS 3".
- 11. FRONT VIEW THROUGH ACCESS OPENING WHEN FLAT OF BUS FACES OPENING. 3 C.T.'S REQUIRED 1 CT SHOWN. (BUS CAN BE ROTATED 90°)
- FOR 3 PHASE, 4 WIRE DELTA CONNECTED SERVICE, IDENTIFY PHASE CONDUCTOR WITH THE HIGHER VOLTAGE TO GROUND. SEE RULE 5 (h).
- 13. FOR TERMINATION COMPARTMENT DETAILS, SEE APPROVED SWITCHGEAR METERING AND TERMINATION COMPARTMENTS TABLE 1

\*REFERENCE CRS 6-19-100

REMSI\_S021P2.dwg

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

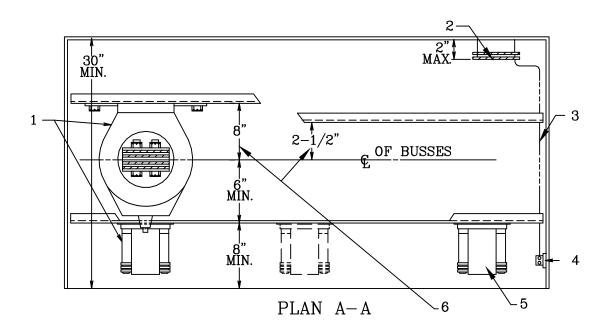
**Rules:** 5, 15

Date: 6/24/09 Engr: MDB

# Typical Arrangement of Instrument Transformer in Switchgear Cubicle Delta 480V or Wye 277/480V

SKETCH #23 SHEET 1 of 2 SKETCH #23 SHEET 1 of 2

NOT TO SCALE



- 1. CURRENT AND VOLTAGE TRANSFORMERS FURNISHED AND MAINTAINED BY PPL EU AND INSTALLED BY CUSTOMER.
- 2. GROUNDED NEUTRAL BUS FOR, WYE 277/480V, OMIT NEUTRAL BUS FOR, DELTA 480V AND INSTALL GROUNDING WIRE IN SERVICE PER RULE 5(H).
- 3. GROUND WIRE BY CUSTOMER 600V COVERED COPPER, #6 AWG MIN. CONNECTED BETWEEN NEUTRAL BUS & TERMINAL BUS & TERMINAL BLOCK
- 4. TERMINAL BLOCK BY CUSTOMER FOR METERING GROUND INSULATED FROM CUBICLE BLOCK TO ACCOMMODATE 2-#6 & 5-#10 STRANDED COPPER CONDUCTORS.
- 5. VOLTAGE TRANSFORMER.
- 6. SUPPORT ADJUSTABLE FROM 2-1/2 INCHES MIN. TO 8 INCHES MAX.

\*REFERENCE CRS 6-19-100; SKETCH #50

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

**Rules:** 5, 15

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 Typical Arrangement of Instrument Transformer in Switchgear Cubicle Delta 480V or Wye 277/480V

SHEET 2 of 2

SKETCH #23

8  $\bigcirc$  $\circ$ Ά 1 - 3/40  $\bigcirc$ 00 15" 10 3 - 5/163-5/16" 9/16" 1-1/4" --1-1/4" 10" FOR 480 V  $\bigcirc$  $\bigcirc$  $\bigcirc$  $\circ$ 1-3/4" OMIT CURRENT 0  $\bigcirc$  $\bigcirc$ TRANSFORMER ON CENER BUS -3/4" 10' MIN. 2-1/16 2-1/16" 0 ାତା 3/8"\_ 12-MIN. 9 6½" МIN 11½" 11½" 6½" MIÑ MĨN MIN 36" MIN.

FRONT VIEW THROUGH ACCESS OPENING WHEN FLAT OF BUS FACES OPENING. BUS MAY BE TURNED SO BUS EDGE FACES FRONT 1 C.T. SHOWN, 3 C.T.'S TYPICAL

- 7. PROVIDE 1/4 INCH BY 20 TAPPED HOLE AND SCREW FOR METER WIRING CONNECTION.
- 8. 400 TO 4000 A CURRENT TRANSFORMER.
- 9. FULLY INSULATED BARRIER. 10. CUSTOMER FURNISHES BUS FILLERS.

SKETCH #23

SHEET 2 of 2

NOT TO SCALE

- 11. MINIMUM CLEAR VERTICLE DISTANCE BETWEEN BOTTOM OF BUS BAR AND BOTTOM AT THE CABINET IS 48 INCHES.
- 12. MAXIMUM CONDUIT HEIGHT IS 3 INCHES.

\*REFERENCE CRS 6-19-100; SKETCH #50 REMSI\_S023P2\_R1.dwg RULES FOR ELECTRIC METER AND SERVICE **Rules:** 5, 15 Date: 3/7/14 Engr: JCC

INSTALLATIONS PPL ELECTRIC UTILITIES **CORPORATION** 



## REMSI Sketches 1-25 Sketch #25 6-50

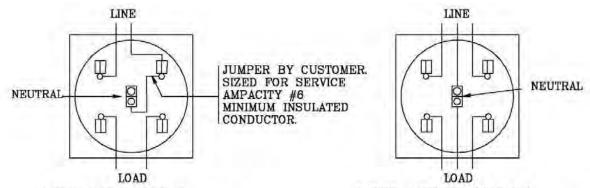
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Revision: 01

Effective Date: 09/19/2016

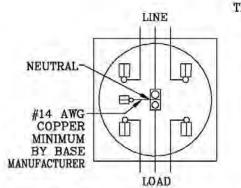
Page 64 of 69

# Sketch #25 Secondary service meter base connections for self-contained meters, overhead service, 100 and 200 ampere

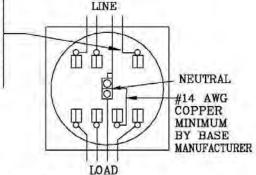


2 WIRE, 1 PHASE, 120 V
TABLE 1 - APPROVED METER SERVICE DEVICES

3 WIRE, 1 PHASE, 120/240 V
TABLE 1 - APPROVED METER SERVICE DEVICES%u

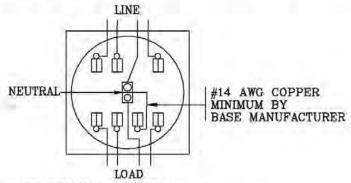


THE CONDUCTOR WITH HIGHER VOLTAGE TO GROUND MUST BE INSTALLED IN RIGHT HAND POSITION OF THE METER BASE AND MUST BE IDENTIFIED.



3 WIRE NETWORK, 208/120 V
TABLE 1 - APPROVED METER SERVICE DEVICES
WITH 5th TERMINAL ACCESSORY

4 WIRE, 3 PHASE, DELTA 240/120 V TABLE 3 — APPROVED METER SERVICE DEVICES



4 WIRE, 3 PHASE, 208Y/120 V TABLE 3 - APPROVED METER SERVICE DEVICES

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION Rules: 5, 10, 12, 13, 14, 16, 20

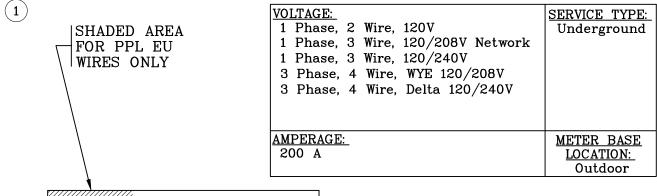
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SKETCH #25A SHEET 1 of 2

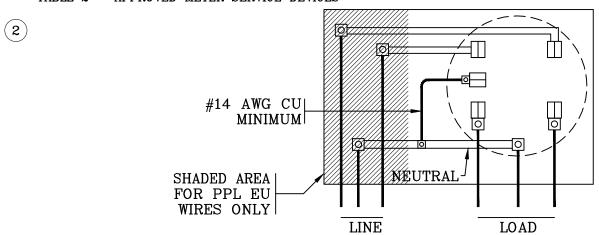
### Secondary Service Meter Base Connections for Self-Contained Meters Underground Service 200A

SKETCH #25A SHEET 1 of 2



LINE LOAD

3 WIRE, 1 PHASE, 120/240 V TABLE 2 - APPROVED METER SERVICE DEVICES



3 WIRE NETWORK, 208/120 V
TABLE 2 - APPROVED METER SERVICE DEVICES
WITH 5th TERMINAL ACCESSORY

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

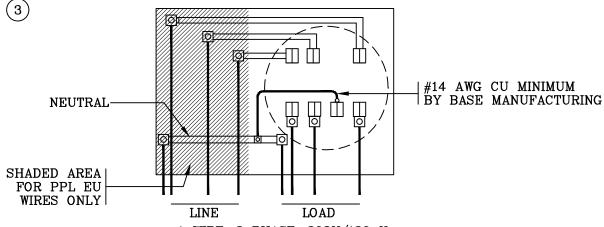
**Rules:** 5, 10, 12, 13, 14, 16, 20

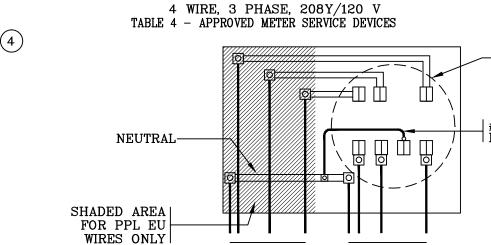
**Date:** 6/7/13 **Engr:** JPM

SKETCH #25A SHEET 2 OF 2

#### Secondary Service Meter Base Connections for Self-Contained Meters Underground Service 200A

SKETCH #25A SHEET 2 OF 2





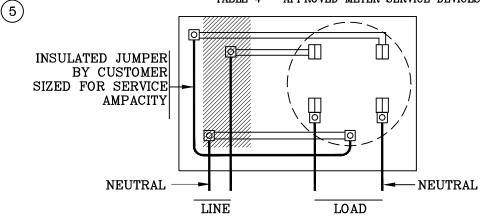
LINE

THE CONDUCTOR WITH
HIGHER VOLTAGE TO
GROUND MUST BE
INSTALLED IN RIGHT
HAND POSITION OF
THE METER BASE
AND MUST BE IDENTIFIED

|#14 AWG CU MINIMUM |BY BASE MANUFACTURING

4 WIRE, 3 PHASE, DELTA 240/120 V TABLE 4 - APPROVED METER SERVICE DEVICES

LOAD



2 WIRE, 1 PHASE, 120 V
TABLE 2 - APPROVED METER SERVICE DEVICES

RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

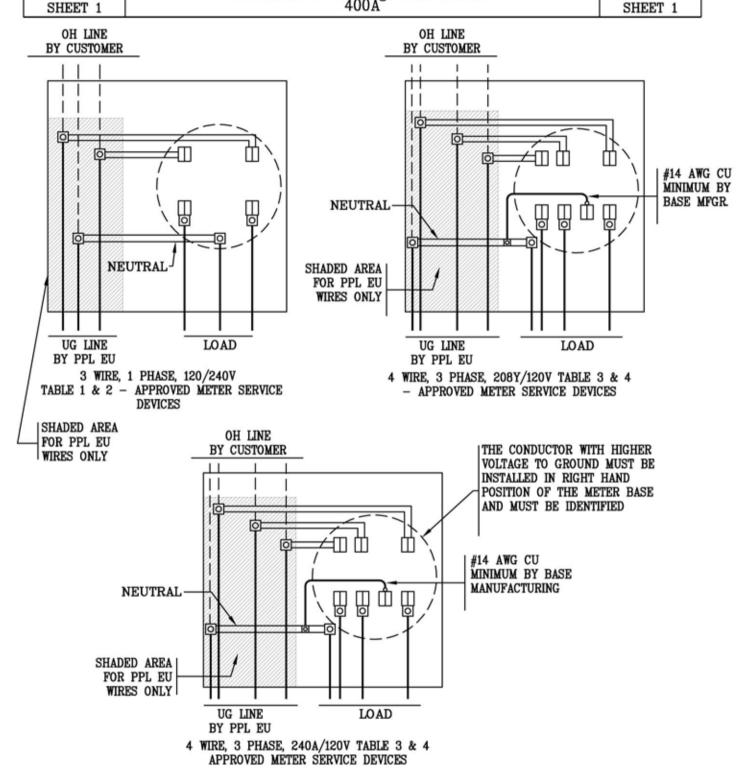
**Rules:** 5, 10, 12, 13, 14, 16, 20

**Date:** 6/7/13 **Engr:** JPM

SKETCH #25B

#### Secondary Service Meter Base Connections for Self-Contained Meters Overhead or Underground Service 400A

SKETCH #25B



RULES FOR ELECTRIC METER AND SERVICE INSTALLATIONS

PPL ELECTRIC UTILITIES CORPORATION

Rules: 5, 10, 12, 13, 14, 16, 20

**Date:** 9/17/08 **Engr:** MDB